



Petroleum  
Human Resources  
Council of Canada

Conseil canadien des  
ressources humaines  
de l'industrie du pétrole

## **NATIONAL ALIGNMENT STRATEGY AND RECOMMENDED ACTIONS**

**From the project entitled:**

***“Strategy to Align Training Programs with Industry’s Needs”***

**Date: June 2005**

**Canada**

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- Everyone who participated in the surveys, interviews and the strategy workshop.



MEYERS NORRIS PENNY LLP



## Table of Contents

<b>EXECUTIVE SUMMARY</b> .....	4
<i>BACKGROUND &amp; METHODOLOGY</i> .....	4
<i>GAP ANALYSIS</i> .....	4
<i>NATIONAL ALIGNMENT STRATEGY AND RECOMMENDED ACTIONS</i> .....	5
<b>BACKGROUND</b> .....	7
<i>METHODOLOGY</i> .....	9
<b>NATIONAL ALIGNMENT STRATEGY AND RECOMMENDED ACTIONS</b> .....	10
<i>STRATEGY FRAMEWORK</i> .....	12
<b>STRATEGY #1: RAISE AWARENESS AND PROMOTE CAREERS IN THE INDUSTRY</b> .....	13
<i>STRATEGY STATEMENT</i> .....	13
<i>CRITICAL SUCCESS FACTORS</i> .....	14
<i>RESOURCE REQUIREMENTS FOR CAREER AWARENESS AND PROMOTION STRATEGY</i> .....	15
<i>BARRIERS TO IMPLEMENTATION</i> .....	16
<i>OWNERSHIP MODEL</i> .....	16
<i>PERFORMANCE MEASURES</i> .....	17
<i>RECOMMENDED ACTIONS</i> .....	18
<b>STRATEGY #2: CREATE STAKEHOLDER COLLABORATION THROUGH COMMUNICATION AND PARTNERSHIPS</b> .....	19
<i>STRATEGY STATEMENT</i> .....	19
<i>CRITICAL SUCCESS FACTORS</i> .....	20
<i>RESOURCE REQUIREMENTS FOR COMMUNICATION AND PARTNERSHIP FRAMEWORK</i> .....	21
<i>BARRIERS TO IMPLEMENTATION</i> .....	22
<i>OWNERSHIP MODEL</i> .....	22
<i>PERFORMANCE MEASURES</i> .....	23
<i>RECOMMENDED ACTIONS</i> .....	24
<b>STRATEGY #3: FORECAST INDUSTRY LABOUR MARKET SUPPLY AND DEMAND</b> .....	25
<i>STRATEGY STATEMENT</i> .....	25
<i>CRITICAL SUCCESS FACTORS</i> .....	26
<i>RESOURCE REQUIREMENTS FOR SUPPLY AND DEMAND FORECAST STRATEGY</i> .....	27
<i>BARRIERS TO IMPLEMENTATION</i> .....	28
<i>OWNERSHIP MODEL</i> .....	28
<i>PERFORMANCE MEASURES</i> .....	29
<i>RECOMMENDED ACTIONS</i> .....	30
<b>APPENDIX A: STEERING AND ADVISORY COMMITTEE MEMBERS</b> .....	31
<b>APPENDIX B: GLOSSARY OF TERMS</b> .....	33
<b>APPENDIX C: PETROLEUM HR COUNCIL’S STRATEGIES &amp; KEY ISSUES TO BE ADDRESSED</b> 34	
<b>APPENDIX D: PETROLEUM HR COUNCIL’S STRATEGY SUMMARY</b> .....	35

## EXECUTIVE SUMMARY

The National Alignment Strategy and Recommended Actions outline the strategies and recommended actions developed by a volunteer Steering Committee and Advisory Committee led by the Petroleum Human Resources Council of Canada (Petroleum HR Council). This report outlines the strategy background; research objectives and process overview; identified gaps; and the strategies and recommended actions to address those gaps.

### **BACKGROUND & METHODOLOGY**

*The Strategy to Align Training Programs with Industry Needs* project is one of five multi-year initiatives designed to address human resources issues in the upstream petroleum industry. Led by the Petroleum Human Resources Council of Canada, this project was designed to identify issues, strategies and recommended actions that could be adopted to improve industry's ability to meet its increasing labour market demands.

Established in 2001, the Petroleum HR Council is a national, collaborative forum that addresses human resources issues within the upstream petroleum industry.

The Petroleum HR Council was established through the Sectoral Partnerships Initiative of Human Resources and Skills Development Canada (HRSDC). Sector councils are permanent organizations made up of many stakeholders of a particular industry, including individuals, company owners, corporate leaders, employees, government, educators and industry associations. HRSDC partners with, and facilitates communication among, key industry stakeholders so they may strategically address issues and concerns within the industry. The Petroleum HR Council is currently funded by the Government of Canada Sector Council Program. More information about the Petroleum HR Council can be found at [www.petrohrsc.ca](http://www.petrohrsc.ca).

A volunteer, national Steering Committee comprised of representatives from industry, training providers, community groups and government involved with the upstream petroleum industry (both onshore and offshore) was set up to guide the project. In addition, an Advisory Committee provided input on research, National Alignment Strategy and Recommended Actions development, etc. Project Consultants from Meyers Norris Penny LLP (MNP) completed the research and Gap Analysis for this project.

*The main objectives of this project are to produce a **Gap Analysis** of issues affecting the supply and demand of personnel in the upstream petroleum industry and to develop a **National Alignment Strategy and Recommended Actions** to address the identified gaps.*

### **GAP ANALYSIS**

The Gap Analysis report was developed from synthesized data collected from three sources:

- a search and review of existing data and research on human resources supply and demand in the industry;
- an online survey of industry and training provider stakeholders; and

- telephone and face-to-face interviews with selected industry and training provider stakeholders.

The main purpose of the Gap Analysis was to:

- examine supply and demand issues between industry and training providers;
- identify industry-driven activities that support the hiring of new entrants; and
- identify gaps in current communication and information-sharing mechanisms.

The analysis of the information collected through the survey and interviews revealed gaps in the alignment of training programs with industry needs. The gaps were grouped into four distinct areas of focus. They included:

- The image and perception of the upstream petroleum industry is a barrier to student enrolment and prospective employee recruitment.
- Communication mechanisms between industry and training providers regarding program development and delivery are infrequent and inconsistent.
- Formal partnerships between industry and training providers are required to enhance training program development and delivery.
- Training providers require statistical staffing and skill forecasts to direct educational program development and delivery.

The four areas of focus identified in the Gap Analysis served as the foundation for the National Alignment Strategy development process. (*The Gap Analysis Report is available by contacting the Petroleum Human Resources Council of Canada at [info@petrohrsc.ca](mailto:info@petrohrsc.ca)*).

### **NATIONAL ALIGNMENT STRATEGY AND RECOMMENDED ACTIONS**

The objective of the National Alignment Strategy and Recommended Actions is to more closely align Canada's training programs with the knowledge needs of the upstream petroleum industry. Using the results of the Gap Analysis, a national strategy development workshop was conducted. This workshop was conducted over two days and participants included training providers and key stakeholders from industry, government and industry associations. Names, titles and organizations of Steering Committee and Advisory Committee members who were workshop participants can be found in Appendix A. The process for the strategy development workshop included the following activities:

- review research findings from the Gap Analysis;
- validate areas of focus for strategy development from the Gap Analysis Report;
- develop draft strategies to address the areas of focus;
- finalize the key strategies; and
- develop recommended actions to implement the strategies.

Through the workshop process, strategies were developed to address the four areas of focus. As a result of the discussion and analysis conducted during the workshop, three strategies were developed to address the identified gaps.

The three strategies follow:

**STRATEGY #1:**

Raise awareness and promote careers in the industry.

**STRATEGY STATEMENT:**

Attract new entrants by mitigating the barriers that have resulted from the image, public perception and the employment realities of the upstream petroleum industry.

**STRATEGY #2:**

Create stakeholder collaboration through communication and partnerships.

**STRATEGY STATEMENT:**

Promote collaboration through communication and partnerships amongst industry, government and training providers regarding program development and delivery.

**STRATEGY #3:**

Forecast industry labour market supply and demand.

**STRATEGY STATEMENT:**

Provide key stakeholders with accurate and up-to-date forecasts of labour market demand and supply information.

The final step of the strategy process was the development of the recommended actions for the implementation of the three strategies. During the strategy development workshop, initial drafts of the recommended actions were developed and then further refined by the project steering committee. Each recommended action includes the key tasks, a timeline for each task and assignment of an owner responsible for facilitating the completion of the task.

## BACKGROUND

The Petroleum Human Resources Council of Canada (Petroleum HR Council) is a sector council resulting from the partnership of industry and government to ensure skilled human resources are available to meet current and future competency requirements for the upstream petroleum industry. The Petroleum HR Council is a national entity, supported by 11 oil and gas industry organizations, including one union, and representing the primary sectors of the upstream and midstream petroleum industry in Canada. The Board of Directors of the Petroleum HR Council has identified the need to broaden their representation through added membership or participation from national professional associations representing employee groups, and national education associations representing educational providers.

The mandate of the Petroleum HR Council is to support the petroleum industry in its need to ensure the availability of skilled human resources to meet current and future competency requirements. The long-term objective of the Petroleum HR Council is to establish and implement a human resource strategy for the upstream petroleum industry.

Globalization, continentalization, and the rapid growth of royalty trusts contributed to the restructuring of the upstream petroleum industry. This has had profound effects on human resources. *The Strategic Human Resources Study of the Upstream Petroleum Industry: The Decade Ahead* report (October 2003) considered the role of Canada's upstream industry within the global marketplace, analyzed current and future market challenges, and determined their impact on the domestic industry and its workforce.

Through the research, the Petroleum HR Council identified seven key human resource issues that need to be addressed. These key issues are:

- Promoting careers in the industry;
- Access to a non-traditional workforce;
- Skills shortages;
- Labour market information gaps;
- Shifting skill requirements;
- Mobility of workforce; and
- Creative human resources practices.

The Petroleum HR Council is well-positioned to foster national collaboration and stakeholder involvement because of broad industry and union support. A consultation process executed immediately following the release of *The Decade Ahead* is evidence of this support. The Petroleum HR Council held a series of events, including regional consultation meetings and member organization meetings, across the country to provide industry and other stakeholders with an opportunity to learn more about the study findings and to provide input on priorities for implementation. In total, the Petroleum HR Council consulted with more than 400 stakeholders from industry, government, education and diversity groups. The process enabled the Petroleum HR Council to seek feedback on 21 project concepts and to identify five key priorities from a national and regional perspective.

The five key priorities, which form the national human resources strategy, are as follows:

1. Develop a strategy to better align training providers' programming with industry's needs.
2. Develop an outreach strategy to increase the understanding of the industry and its career opportunities amongst traditional and non-traditional pools of labour.
3. Define job requirements for entry-level positions and create pre-employment assessment tools.
4. Develop occupational standards and assessment tools for targeted positions.
5. Develop resources to enhance attraction, development and retention of employees for hard-to-recruit locations.

The table in Appendix C links the projects to the seven key issues discussed above. Appendix D outlines each strategy and its associated project objectives.

*The Decade Ahead* identified occupational supply and demands, shifting skill requirements, and labour market information gaps as key issues for the industry. The "Training and Human Resource Development" module of the study involved an examination of the education, training, and development framework in Canada that provides skilled workers to the upstream oil and gas industry. This helped the Petroleum HR Council better understand the specific concerns of the stakeholders, in particular the training providers and the companies that hire and train workers within the industry. The responsiveness of the education, training and development system varies significantly. Private training facilities report that they can respond very quickly to industry requests for training programs. Accredited programs, colleges and training providers report that a one-year planning cycle is required to implement major changes. Universities require a planning cycle of more than one year. The ever-challenging requirement for training providers is to harmonize with regulation, while focusing on the specific skill shortages. This requirement must be balanced against individuals' and employers' needs to rationalize expensive training costs and to ensure quality control in their learning environments.

To address these concerns and challenges, the Petroleum HR Council developed a national project with the following objectives:

- produce a Gap Analysis of issues affecting the supply and demand of personnel in the upstream petroleum industry; and
- develop a National Alignment Strategy and Recommended Actions to more closely align Canada's learning system with industry's knowledge needs.

In attaining its objectives, the Petroleum HR Council will better understand:

- today's industry knowledge needs in light of shifting job requirements;
- the post-secondary learning system and increase the Petroleum HR Council's connection to it;
- gaps that create barriers in aligning the post-secondary learning system to today's industry knowledge needs;
- gaps in post-secondary training that lead to supply issues for the industry;
- mechanisms used for industry to communicate with the post-secondary learning system (i.e. best practices, what doesn't work, etc.); and
- barriers facing the post-secondary learning system.

For the purposes of this project, the upstream industry is defined to include activities related to exploration, development, production, service industries (geophysical services, drilling and completions, and well services), pipeline transmission, gas processing, and upgrading, mining and extraction of heavy oil and bitumen.

Based on the Petroleum HR Council's research, Canada's upstream petroleum industry is divided into four geographic areas: Western Canada Sedimentary Basin (WCSB), Oil Sands, East Coast and the North. Each of these areas is unique and their differences need to be acknowledged throughout the project.

The Petroleum HR Council is currently funded by The Government of Canada Sector Council Program. More information about the Petroleum HR Council can be found at [www.petrohrsc.ca](http://www.petrohrsc.ca).

### ***METHODOLOGY***

A volunteer, national Steering Committee comprised of representatives from industry, training providers, community groups and government involved with the upstream petroleum industry (both onshore and offshore) was set up to guide the project. In addition, an Advisory Committee provided input. Project Consultants from Meyers Norris Penny LLP (MNP) completed the research and Gap Analysis report for this project.

MNP began its Gap Analysis by examining the interaction between industry and training providers offering petroleum industry-related training. The training providers of focus for the project are those defined as "key" by the Advisory Committee and the Steering Committee. The inventory of training providers were identified as "key" if they offered petroleum industry-specific training that results in a skill set that is generally not transferable to another industry.

MNP used the inventory of key training providers to scope their research. The research for the Gap Analysis considered:

- supply and demand of new entrants from the learning system;
- communication mechanisms used by industry and training providers to share their expectations of a skilled workforce; and
- training program requirements.

The Gap Analysis report was developed from synthesized data collected from three sources:

- a search and review of existing data and research on human resources supply and demand in the industry;
- an online survey of industry and training provider stakeholders; and
- telephone and face-to-face interviews with selected industry and training provider stakeholders.

Once the Gap Analysis was complete, MNP extracted findings, observations and learnings to use as the basis for the development of the National Alignment Strategy. The Steering Committee and Advisory Committee developed the National Alignment

Strategy and Recommended Actions, April 2005, with the help of the Project Consultants from MNP and the Petroleum HR Council Alignment Strategy Project Manager. The strategies and recommended actions developed by the Steering Committee and Advisory Committee are contained within this report.

## **NATIONAL ALIGNMENT STRATEGY AND RECOMMENDED ACTIONS**

The objective of the National Alignment Strategy and Recommended Actions is to more closely align Canada's training program development and delivery with the knowledge needs of the upstream petroleum industry. Using the results of the Gap Analysis, a national strategy development workshop was conducted with key stakeholders from industry, training providers, government, and industry associations. Names, titles and organizations of Steering Committee and Advisory Committee members who were workshop participants can be found in Appendix A. The process for the strategy development workshop included the following activities:

- a review of the research findings from the Gap Analysis;
- validation of the areas of focus for strategy development from the Gap Analysis Report;
- development of draft strategies to address the areas of focus;
- evaluation and finalization of the key strategies; and
- development of recommended actions to implement the strategies.

Through the workshop process, three strategies were developed to address the four identified gaps. These strategies are as follows:

**GAP 1:** The image and perception of the upstream petroleum industry is a barrier to student enrolment and prospective employee recruitment.

**STRATEGY #1:**  
Raise awareness and promote careers in the industry.

**STRATEGY STATEMENT:**  
Attract new entrants by mitigating the barriers that have resulted from the image, public perception and the employment realities of the upstream petroleum industry. This will be accomplished by:

- raising awareness of career opportunities in the industry through a multi-level marketing campaign;
- addressing the positive and negative realities of working in the upstream oil and gas industry through clear communication and by providing compelling reasons to pursue careers in the upstream oil & gas industry; and
- identifying and addressing the transferable nature of skills to demonstrate to new entrants that the upstream petroleum industry offers long-term career potential.

**GAPS 2 & 3:** Communication mechanisms between industry and training providers regarding program development are infrequent and inconsistent; and

formalize partnerships between industry and training providers to enhance training program development.

**STRATEGY #2:**

Create stakeholder collaboration through communication and partnerships.

**STRATEGY STATEMENT:**

Promote collaboration through communication and partnerships amongst industry, government and training providers regarding program development and delivery. This will be accomplished by defining the communication and information requirements of all key stakeholders and developing:

- a national framework for creating partnerships;
- the business case for improved communications and partnerships;
- the mechanisms to facilitate communication and the formation of partnerships; and
- best practices in training program development and delivery.

**GAP 4:**

Training providers require staffing and skill forecasting information to direct educational program development.

**STRATEGY #3:**

Forecast industry labour market supply and demand.

**STRATEGY STATEMENT:**

Provide key stakeholders with accurate and up-to-date forecasts of labour market demand and supply information. This information will:

- be based on occupational classifications that reflect specific industry needs;
- provide supply and demand forecasts that are specific to regions, showing current and future-oriented supply and demand;
- include a prediction model that takes into account the cyclical nature of the industry; and
- be supported by a business case that provides a value proposition to support participation in defining a more accurate labour demand forecast.

The final step of the strategy process was the development of the recommended actions for the implementation of the three strategies. Each recommended action includes the key tasks, a timeline for each task and the assignment of an owner responsible for facilitating the completion of tasks.

## **STRATEGY FRAMEWORK**

Each strategy has been documented within the following framework:

- **Strategic Statement** – a high level description of the strategy and the key elements.
- **Critical Success Factors** – the key factors required for successful implementation.
- **Resource Requirements** – the various resources that will be required for design, implementation and long-term sustainability.
- **Barriers to Implementation** – the potential factors that may impede successful implementation.
- **Proposed Ownership Model** – the individuals or groups responsible for implementation.
- **Performance Measures** – the performance measures to gauge the success of the strategy and to provide valuable input into the adjustment of each strategy to obtain the desired results.
- **Recommended Actions** – a listing of the high level action plans to deliver the strategy.



## **STRATEGY #1: RAISE AWARENESS AND PROMOTE CAREERS IN THE INDUSTRY**

The overall objective of the “Strategy to Align Training Programs to Industry Needs” project is to close the gap between the supply and demand for the human resources needs of the industry. There are two critical elements to successfully closing the gap:

1. developing the right training programs to fill the industry’s demand for skills; and
2. attracting a sufficient number of new entrants into those programs to meet the volume demand of the industry.

Two major factors affecting the supply of new entrants to the upstream oil and gas industry identified in the research were:

- the image and perception of the industry held by potential new entrants; and
- the overall awareness of long-term career opportunities in the industry.

The survey and interview participants indicated that the general perception of the industry was negative due to factors such as the seasonality of the work, remote or harsh working conditions, safety hazards and environmental impact. In addition, it was felt that there were a large percentage of potential new entrants who were unaware of the long-term career potential of the industry, seeing it as more of a place to get a job as opposed to an industry where a career could be developed. The following strategy was developed to address the issues related to the image of the industry as well as raising awareness of the career potential for new entrants.

### **STRATEGY STATEMENT**

***Attract new entrants by mitigating the barriers that have resulted from the image, public perception and the employment realities of the upstream petroleum industry.***

Although there was general consensus that the upstream petroleum industry has a negative image, and that there is a lack of awareness of career opportunities, there is little evidence of any coordinated and proactive actions to address either issue. To mitigate barriers to attracting new entrants, it is important to dispel myths, promote compelling reasons for joining the industry and acknowledge the realities of working in the industry. The following initiatives were developed:

***Raise Awareness of Career Opportunities:*** Given the broad scope of career opportunities within various regions and sectors in the industry, raising awareness will involve a diverse group of stakeholders. In order to involve and to reach these stakeholders, a multi-level marketing campaign will be developed with the objective of promoting career opportunities in the industry. It will have multiple messages designed and targeted to reach audiences with different levels of interest and understanding of the industry.

***Address the Realities of Industry:*** Clear communication with potential new entrants regarding the realities of working in the industry and the compelling reasons to join it, is key to this strategy. By clearly communicating the industry’s career opportunities and advantages, potential new entrants will have an

opportunity to make informed decisions based on fact, versus preconceived perceptions.

**Address the Transferable Nature of Skills:** To close the supply and demand gap, it is critical to demonstrate the long-term career possibilities of the industry to potential new entrants. This can be accomplished by demonstrating the ability to transfer skills from other industries into the upstream petroleum industry and by creating a well-defined career map that shows the various career options once an individual has entered the industry. The success of this strategy is highly dependent on the industry providing the flexibility for growth and transfer, both into and within the industry.

### **CRITICAL SUCCESS FACTORS**

Integrating the activities described above will be critical to the execution of this strategy. The objective is to create a realistic view of the industry that highlights the compelling reasons to join and provides an accurate picture of all aspects of industry work. It will be equally important to demonstrate the career paths available to those considering moving over from another industry, as well as the variety of opportunities available once an individual has entered the industry. Critical success factors for this strategy include:

- aligning this strategy with the outcomes from the Petroleum HR Council's priority entitled "develop an outreach strategy to increase the understanding of the industry and its career opportunities amongst traditional and non-traditional pools of labour."
- involving training providers, industry, and government;
- developing a coordinated plan to develop the objectives, message(s), delivery mechanisms, targeted audiences and feedback mechanisms;
- gaining the support of industry to play the lead role in the funding, development and delivery of the message;
- garnering interest from the media to help promote the industry;
- designing specific messages to appeal to the cultural diversity and gender in potential labour pools;
- developing strategies to reduce the impact of the industry's cyclical nature on the workforce;
- recognizing the need to change company policy and practices to address the needs of a more diverse workforce – gender and ethnicity;
- creating buy-in from industry to support new entrants with transferable skills;
- promoting the transferability of skills from other industries into the upstream petroleum industry;
- promoting career mobility and advancement within the upstream petroleum industry; and
- mapping career pathways and geographic mobility available to oil and gas from other industries (e.g. pulp and paper, mining, and forestry).



**RESOURCE REQUIREMENTS FOR CAREER AWARENESS AND PROMOTION STRATEGY**

The resources required for this strategy have been broken down by the following activities:

- raising awareness;
- addressing the realities of the industry; and
- addressing the transferable nature of skills.

The table below details identified resources for each activity.

RAISING AWARENESS	ADDRESSING THE REALITIES OF THE INDUSTRY	TRANSFERABLE NATURE OF SKILLS
<ul style="list-style-type: none"> <li>▪ Petroleum HR Council as owner and sponsor of the strategy.</li> <li>▪ Industry resources to provide representation/involvement in the campaign development and delivery (from small, medium, large organizations).</li> <li>▪ Government involvement at all levels (federal, provincial, territorial, local).</li> <li>▪ Joint funding from industry and government for the multi-level campaign.</li> <li>▪ Professional communications resources to develop a plan (materials, tools, tactics) based on market research.</li> <li>▪ Guidance and career counselors and parent involvement in the delivery of the message as identified by the steering committee.</li> <li>▪ Media resources for the delivery of the message.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Petroleum HR Council as owner and sponsor of the strategy.</li> <li>▪ Industry and government funding for the resources to develop communication plans.</li> <li>▪ Lead resources from industry to participate in the development and execution of the communication plan.</li> <li>▪ Industry executives to acknowledge the need to communicate the realities of the industry and provide for long-term career potential within the industry.</li> <li>▪ Industry resources to facilitate and deliver communications.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Petroleum HR Council as owner and sponsor of the strategy.</li> <li>▪ Human resource professionals/subject matter experts to map and articulate skill transferability.</li> <li>▪ Guidance and career counselors to communicate to prospective new entrants.</li> <li>▪ Industry resources to facilitate and deliver communications.</li> </ul>

### ***BARRIERS TO IMPLEMENTATION***

Research from the Gap Analysis indicated that demand for human resources will continue to grow and will be a long-term challenge. To meet this ongoing demand, the industry must implement an awareness campaign promoting opportunities within the industry as well as initiate changes in the work environment to make the industry more attractive to new entrants. As part of the strategy development process, the following potential barriers to implementing this strategy were identified:

- the challenge of obtaining national, provincial and regional collaboration on the campaign development;
- difficulty in creating “awareness” communications to reach different regions and culturally diverse labour pools;
- availability and willingness of industry and government to provide funding and resources for the development and delivery of the campaign;
- lack of corporate leadership in facilitating change to mitigate the negative perceptions of working in the industry;
- internal resistance to changing the work environment to make the industry more attractive to non-traditional labour pools and to allow for individuals with transferable skills to exercise their options for career development; and
- potential difficulty in maintaining the campaign over a period of time.

### ***OWNERSHIP MODEL***

The Petroleum HR Council should play the lead role in the implementation of this strategy as it integrates with similar initiatives currently underway. Resources from industry, training providers and government will be required to participate in the development and delivery of the campaign as well as to provide leadership in facilitating change and raising awareness among the targeted audience.

**Proposed Owner or Sponsor:** Petroleum Human Resources Council of Canada

**Key Stakeholders:** Industry representatives, training providers, government (e.g. local, provincial, territorial, federal).

**Support Resources:** Communications professionals (and possible marketing support), the media, guidance counsellors and parents.

### ***PERFORMANCE MEASURES***

Implementing this strategy will require a significant investment of time and money from the key stakeholders and from the Petroleum HR Council. It is critical that the objectives and outcomes of the strategy are clearly defined and that measurable performance metrics are developed to provide feedback to gauge the success and indicate where improvements may be required. An initial list of performance measures to be tracked throughout the development and execution of this strategy are as follows:

- statistics related to employment vacancy rates;
- education funding and enrolment capacity--identify key indicator programs to track and to establish baselines of provincial and national levels over time;
- wait lists at schools or other expressions of interest--establish a baseline and track wait lists for key indicator programs;
- industry-wide tracking system to monitor entry level/co-op placements in industry;
- positive media interest--increase in positive and accurate media coverage;
- industry involvement in educational areas--for example, by becoming sessional instructors, conducting classroom presentations and site tours, offering facility use for students, providing mentoring;
- high school response/request for related courses/teachers;
- requests for information (talks, electronic, field trips);
- statistics related to cultural diversity and gender in the workforce;
- measure for level of employment (do we have full employment?);
- measure retention rates, specifically, how long people stay in the industry after they are hired;
- number of new entrants migrating from other industries; and
- indicators of trends in geographic mobility and on-the-job advancement.



**RECOMMENDED ACTIONS**

The following table outlines a recommended high-level action plan for the future. This action plan will serve as the basis for a detailed work plan and resource plan to be developed by the Petroleum HR Council and representatives from the key stakeholder groups:

RECOMMENDED ACTIONS TO IMPLEMENT CAREER AWARENESS AND PROMOTION STRATEGY	TIMEFRAME FOR COMPLETION	OWNER
<p><b>Raising Awareness</b></p> <ul style="list-style-type: none"> <li>▪ Identify lead resources from industry, training providers and government for the development and implementation of the multi-level marketing campaign.</li> <li>▪ Identify professional marketing resources for the development and execution of the campaign.</li> <li>▪ Identify market segments and develop messages for the targeted audiences.</li> <li>▪ Execute marketing campaign.</li> </ul>	12 months	Petro HR Council & Identified Lead Resources
<p><b>Addressing the Realities of Working in the Industry</b></p> <ul style="list-style-type: none"> <li>▪ Find and share best practices for changing corporate practices in regards to the realities of working in the upstream oil and gas industry.</li> <li>▪ Create an inventory of compelling reasons to join the industry as well as disadvantages of working in the industry.</li> <li>▪ Develop a communication plan that clearly communicates the compelling reasons in contrast to the disadvantages of working in the industry.</li> <li>▪ Execute the communication plan.</li> </ul>	12 months	Petro HR Council & Identified Lead Resources
<p><b>Identify and Address Transferable Nature of Skills</b></p> <ul style="list-style-type: none"> <li>▪ Define transferable skills and competencies in the upstream oil and gas industry, including both technical skills and employability skills.</li> <li>▪ Map career paths that show mobility within the industry.</li> <li>▪ Develop and execute a communications plan to promote transferable skills and competencies.</li> </ul>	24 months	Petro HR Council, Identified Lead Resources, Conference Board of Canada
<ul style="list-style-type: none"> <li>▪ Develop a task force to address elementary and secondary student awareness of oil and gas careers. Share existing best practices. (e.g. Energy Educators Group). This action must be aligned and integrated with the outcomes from the Petroleum HR Council's priority entitled <i>“develop an outreach strategy to increase the understanding of the industry and its career opportunities amongst traditional and non-traditional pools of labour.”</i></li> </ul>	Six months	

## **STRATEGY #2: CREATE STAKEHOLDER COLLABORATION THROUGH COMMUNICATION AND PARTNERSHIPS**

The results of the Gap Analysis revealed a significant gap in the level of communication between industry and training providers and an inconsistency in the mechanisms utilized to facilitate communication. As well, a significant gap exists between the current level of industry participation in training program development and delivery compared to the required level. The research revealed a need for a common framework that defines communication goals and objectives, communication requirements, and the roles and responsibilities of the key stakeholders. With the overall goal of developing programs that meet the needs of industry, the following strategy was developed to address the identified gaps in communication and industry participation in program development and delivery.

### **STRATEGY STATEMENT**

***Promote collaboration through communication and partnerships between industry, government and training providers regarding program development and delivery.***

Through the strategy development process, it was recognized that collaboration between industry, government and training providers was critical to the program development process. This strategy focuses on the development of communication and partnerships as a means of facilitating collaboration between the three key stakeholder groups. The key elements of the strategy are as follows:

***Define Communication Requirements:*** Define the short-term and long-term communication and information requirements of the key stakeholders. The short-term requirements include the immediate or current information needs of local companies, institutions and governments. The long-term requirements identify major trends occurring in the industry and learning sector that will have an influence on program development, delivery and demand.

***Develop the Business Case for Communication:*** The success of this strategy is heavily dependent on consistent and meaningful participation from industry, government and training providers. In order to garner this support, it is necessary to develop the business case for communication. The business case must define the goals and objectives and identify the costs of necessary resources including time and funding. It must also clearly demonstrate the value of participating in communication through partnership for each of the stakeholders and encourage collaborative rather than competitive behavior.

***Develop a Framework for Communication and Partnership:*** Create a common framework for communication and partnership development that has both a regional and industry sector focus. The building blocks of the framework must be regional organizations with delegates nominated to a national organization. The national organization will provide the framework for the development of partnerships at the regional working group level and consolidate the output of each group at the national level.



**Develop Communication Mechanisms:** Facilitate effective communication between the stakeholders by developing common mechanisms to accommodate the short-term and long-term communication requirements. It is anticipated that existing stakeholder organizations can be utilized for both the development and execution of communication activities. Examples of these groups include the Petroleum Human Resource Council of Canada, Canadian Association of Petroleum Producers (CAPP), Petroleum Services Association of Canada (PSAC), Canadian Association of Geophysical Contractors (CAGC), Canadian Association of Oil Well Drilling Contractors (CAODC), Association of Canadian Community Colleges (ACCC), Association of Universities and Colleges of Canada (AUCC), and the appropriate federal, provincial and territorial government departments.

**Develop a collaborative process for Training Program Development and Delivery:** Achieve active and consistent participation of the stakeholders in the development of training programs. Utilizing best practices, a process for program development that actively solicits the participation of industry and training providers with the support of government (e.g. approval and funding) will be developed. The process will be embedded into the partnership framework, detailing the participation requirements and expectations for participation.

**Develop a Training Program Assessment Mechanism:** This strategy must address the development of new programs as well as the continuous review and improvement of existing programs. To that end, the framework must include a mechanism that will allow industry to assess the quality of current programs as well as provide ongoing information to assist training providers in keeping programs current with the needs of the industry.

### CRITICAL SUCCESS FACTORS

The scope and diverse nature of the organizations within the stakeholder groups present significant challenges for the implementation of this strategy. These challenges include: developing a framework that addresses the needs of the diverse stakeholders; achieving the required commitment and participation; and achieving consistent and sustainable participation and commitment to achieve the value proposition developed in the business case. To be successful, the strategy must:

- align and integrate the outcomes from the Petroleum HR Council's two priorities entitled "*develop an outreach strategy to increase the understanding of the industry and its career opportunities amongst traditional and non-traditional pools of labour*" and "*define job requirements for entry-level positions and create pre-employment assessment tools.*"
- develop a communication framework that addresses the needs of the diverse stakeholder groups;
- define the objectives, expectations, content, roles and responsibilities of each participant in the communications framework;
- develop communication mechanisms to ensure ongoing, consistent and productive activity;
- gain consistent and meaningful participation from the stakeholder groups;
- maintain consistent and regular communication given potential changes in stakeholder representation;

- coordinate and gain funding support from government to facilitate communication between industry and training providers at the national and regional levels;
- utilize existing best practices and stakeholder organizations in the development and implementation of the communication and partnership framework (e.g., Oil Sands – Regional Interest Working Group - RIWG model); and
- ensure that the framework promotes communication between and among the stakeholder groups. For example, it is equally important that training providers communicate and develop partnerships amongst themselves as well as with industry and government.

**RESOURCE REQUIREMENTS FOR COMMUNICATION AND PARTNERSHIP FRAMEWORK**

The resources required to implement the strategy can be broken into three categories: communication framework development, communication framework maintenance, and support resources. The following table details the identified resources for each category.

COMMUNICATION AND PARTNERSHIP FRAMEWORK DEVELOPMENT	COMMUNICATION AND PARTNERSHIP FRAMEWORK IMPLEMENTATION AND MAINTENANCE	SUPPORT RESOURCES
<ul style="list-style-type: none"> <li>▪ Petroleum HR Council.</li> <li>▪ Committee of representatives from industry and training provider organizations and associations.</li> <li>▪ Industry funding.</li> <li>▪ Government representation and funding.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Permanent operational committee of representatives from industry and training provider organizations and associations, with the guidance of the Petroleum HR Council. The committee will maintain and oversee the ongoing development and involvement in to the communication framework.</li> <li>▪ Industry and training provider resources at the regional and national level to participate in communication and partnership for program development and delivery.</li> <li>▪ Long-term funding to support ongoing development and execution of the communication framework.</li> <li>▪ Support staff from various key stakeholder groups to handle administration and logistics.</li> <li>▪ Physical space, telephone conference and /or video conferencing capability to support national and regional representation.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Petroleum HR Council.</li> <li>▪ Government representatives at the local, provincial, territorial and federal level to facilitate communication.</li> <li>▪ Government funding for the program development and enhancement identified through the communication framework.</li> </ul>

### ***BARRIERS TO IMPLEMENTATION***

The goal of this strategy is relatively straightforward - the creation of an environment for the development of training programs that meets the current and long-term needs of the industry. Barriers, exist or will develop at the organizational or regional level during the communication framework development and implementation. As we progress, strategies will have to be created to mitigate the following expected barriers:

- lack of cooperation and participation from industry (e.g. companies and associations), government, and training providers;
- inability to reach consensus/agreement on an effective communication and partnership framework for a diverse stakeholder group;
- lack of commitment on the part of senior decision makers to allocate the necessary resources (e.g. industry, training providers and government) and ensure their consistent and meaningful participation;
- inconsistent representation from industry, government and training provider representatives;
- failure of the key stakeholders to see the value of communication and partnership - tied to the business case; and
- unwillingness of stakeholders to share information critical to the execution of the strategy.

### ***OWNERSHIP MODEL***

The Petroleum Human Resources Council of Canada will play a lead role in the formation and leadership of the committee that will develop the communication framework and initiate implementation. Once the communication framework has been developed and implemented, the committee will evolve into an operational role and will operate with the guidance of the Petroleum HR Council. In addition to the governing committee, a network of stakeholder representatives will be put in place to participate in communications and partnerships as developed through the framework.

The following is a summary of the proposed ownership model:

**Proposed Initial Owner and Sponsor:** Petroleum HR Council

**Long-term Owner and Sponsor:** Governance structure led by industry and supported by the Petroleum HR Council

**Key Stakeholders:** Industry and professional organizations (such as CAPP, PSAC, CAODC), post-secondary organizations (ACCC, AUCC, OPAS or others related to training) government (Federal–HRSDC, Territorial and Provincial).

**Support Resources:** It is anticipated that support staff will be required for administration and logistical activities (executive and administrative position). This cost should be borne by industry through industry associations. A value proposition needs to be constructed to warrant this proposal.

### ***PERFORMANCE MEASURES***

As part of the business case, performance measures will be developed to track and report progress against the goal of developing training programs to meet industry needs. The performance measures must be designed to establish a baseline, then to measure short-term and long-term success. Short-term success will be measured by progress of the implementation of the communication framework. Long-term success will be measured the overall achievement of the goal to develop educational programs to meet industry needs. The following are the suggested measures for this strategy:

- implementation of an industry-led governance structure for communication as a sub-committee of the Petroleum HR Council;
- evidence that the framework is being utilized;
- participation and buy-in to the framework on a national and regional basis;
- evidence of formalized partnerships; and
- appropriate training programs developed in partnership (e.g. industry, training providers, government) that address the human resource requirements in the upstream petroleum industry.



**RECOMMENDED ACTIONS**

The following table outlines the high-level action plan and timetable for the implementation of the strategy. This action plan will serve as the basis for a detailed work plan and resource plan to be developed by the committee formed to implement and manage the ongoing communications.

RECOMMENDED ACTIONS TO IMPLEMENT <i>COMMUNICATION AND PARTNERSHIP FRAMEWORK</i>	TIMEFRAME FOR COMPLETION	OWNER
<ul style="list-style-type: none"> <li>▪ Identify the initial list of participants to develop the communication and partnership framework.</li> </ul>	One month	Petro HR Council
<ul style="list-style-type: none"> <li>▪ Develop a formal “Value Proposition” and business case for communication and partnership. (preliminary)</li> </ul>	One month	Petro HR Council & Initial Participants
<ul style="list-style-type: none"> <li>▪ Develop the Communication and Partnership Framework/Model – a clear definition of the objectives, value and the required resources and action plan to achieve them. (regional)</li> </ul>	Six month	Petro HR Council & Initial Participants
<ul style="list-style-type: none"> <li>▪ Define the roles and responsibilities of industry, training providers and government. Assign accountability and gain commitment from senior levels within those groups.</li> </ul>	One month	Petro HR Council & Initial Participants
<ul style="list-style-type: none"> <li>▪ Recruit resources to participate in the tactical implementation of the communication and partnership protocol.</li> </ul>	Two months	Petro HR Council & Initial Participants
<ul style="list-style-type: none"> <li>▪ Select and execute a pilot initiative with a defined scope of communication. (specific)</li> </ul>	Three months	Petro HR Council & Initial Participants
<ul style="list-style-type: none"> <li>▪ Establish a national committee and governance model as a sub-committee of the Petroleum HR Council.</li> </ul>	Six months	National Committee
<ul style="list-style-type: none"> <li>▪ Expand communication and partnership beyond initial pilot utilizing lessons learned.</li> </ul>	Three months	National Committee

### STRATEGY #3: FORECAST INDUSTRY LABOUR MARKET SUPPLY AND DEMAND

A common theme that emerged in the research and analysis was the lack of comprehensive and accurate labour market data upon which to base training program development decisions. Where labour demand forecasts were being shared, it was primarily at the local level and confined to a small geographic region and/or industry sector. Furthermore, when industry representatives were queried on their labour demand forecasting timeframes, less than 30% developed forecasts greater than four years into the future. The lack of data and industry forecasting was recognized as a significant gap in the ability of training providers to develop programs that are consistent with current and future industry needs. The following strategy was developed to address the gap in labour demand and supply information for the upstream oil and gas industry.

#### **STRATEGY STATEMENT**

***Provide key stakeholders with accurate and up-to-date forecasts of labour market demand and supply information.***

A key criteria for program development specified by training providers was industry's demand for skilled workers. This highlights the importance of labour market demand and supply information as input into program development decisions and the business case to secure government funding for new programs. This strategy focuses on the development of a process and mechanism to provide key stakeholders (industry, training providers, communities, and government) with accurate and up-to-date forecasts of labour demand and supply information to assist in the development of training programs to meet the needs of the industry. In addition, this data will be useful in other ways, such as a planning tool for communities and governments to consider infrastructure and social and recreational needs. Key elements of the strategy are as follows:

***Enhance the Occupational Classification Framework:*** It is imperative that the forecast is based on an occupational classification mechanism that reflects the industry on a national basis. The current National Occupation Classification system does not have the level of detail to fully represent the upstream petroleum industry. Enhancing the occupational classification framework with the appropriate level of detail will provide a basis for the forecast and allow for the breakdown and analysis of the data to satisfy the regional and industry sector requirements. A occupational classification framework is being created under the mandate of the Petroleum HR Council's priority entitled "*define job requirements for entry-level positions and create pre-employment assessment tools.*"

***Develop Business Case for Forecast:*** The success of this strategy is heavily dependent on consistent and meaningful participation from industry and training providers. In order to gain the support of the key stakeholders, it is necessary to develop the business case for the development and implementation of the forecasting process and mechanism. The business case must define the goals and objectives, identify the costs in resource time and funding and clearly demonstrate the value of providing a demand and supply forecast to assist in program development decisions.

***Design Forecast Process and Mechanism:*** For the forecast to serve as a meaningful tool, it must meet the needs of a diverse group of stakeholders from a

regional as well as industry sector perspective. In addition, it should incorporate data from other industries that have demands for similarly skilled resources such as trades. The forecast must provide data on short-term or current requirements as well as being forward-looking to capture future requirements and the emergence of new skills. In addition to the demand information, supply data on current capacity and current planned capacity increases will be required to plan for and to develop mitigation strategies for areas where supply shortfalls are expected. Equally important will be the process for the collection and reporting of data. This will require the buy-in and participation of the sources of the data, specifically industry and training providers. A governing body and user-friendly mechanism for data collection will have to be developed that allows for the accurate and complete collection of data on a timely basis and at the required intervals. It is imperative that this process be sustainable and carried out on an annual basis.

***Develop Prediction Model:*** The development of a prediction model will enable a labour forecast that takes into account the cyclical nature of the industry and the complexities of industry and regional variation. This will significantly enhance the value of the data. The labour forecast model should have the ability to develop scenarios that reflect fluctuations in the price of oil and gas. This will assist in determining a risk factor for program development plans and strategies to mitigate or minimize the effect of the identified risks.

### **CRITICAL SUCCESS FACTORS**

The development of a comprehensive demand and supply forecast that covers the regions and sectors of the upstream petroleum industry is a daunting task. This is especially true given the current state of the forecasting practices within the industry as evidenced by the research in the Gap Analysis. It is imperative that this initiative is seen as an evolutionary process that focuses initially on high demand occupations and expands its reach over time to include all occupations in all regions and sectors. The factors to be considered to ensure the success of this strategy include the following:

- continue to develop a occupational classification framework under the mandate of the Petroleum HR Council's priority entitled "*define job requirements for entry-level positions and create pre-employment assessment too;*"
- start small in terms of the scope of supply and demand information and then expand and build on success;
- recognize regional differences and competing industry demands in the forecasting methodology;
- identify drivers of demand in some depth within the labour forecast model (e.g., price, well depth, project size, etc. that affect numbers and length of demand) to build in flexibility;
- access to the database of information must be widely available, relevant and credible;
- involve industry (e.g. include contractors and sub-contractors of exploration and production companies), training providers, provincial government and federal government;
- government and industry funding to support the development and implementation of the forecasting framework;



- ensure demonstrated buy-in of industry associations for the sustainability of this initiative; and
- ensure demonstrated leadership/ownership of industry as the overall champion and major beneficiary of improved labour supply.

**RESOURCE REQUIREMENTS FOR SUPPLY AND DEMAND FORECAST STRATEGY**

The resources required to implement the strategy can be broken down into three categories: forecast design, forecast maintenance and forecast support. The following table details the identified resources for each category:

FORECAST DESIGN	FORECAST SUSTAINABILITY	FORECAST SUPPORT
<ul style="list-style-type: none"> <li>▪ Petroleum HR Council to provide overall ownership and leadership in the formation and management of the development steering committee.</li> <li>▪ Steering Committee of representatives from industry, government, training providers and associations to:                             <ul style="list-style-type: none"> <li>i) develop the business case; and</li> <li>ii) oversee the design and development of the forecasting process and mechanism that encompasses supply and demand.</li> </ul> </li> <li>▪ Industry and training provider funding.</li> <li>▪ Government representation and funding.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Petroleum HR Council to provide overall ownership and leadership of sub-committee that will manage and support the on-going forecasting and reporting.</li> <li>▪ Permanent operational sub-committee of representatives from industry and training provider organizations and associations. The committee will manage the resources designated for supply and demand data collection, forecast development and distribution to the stakeholder group.</li> <li>▪ Long-term funding to support on-going development and execution of the forecast.</li> <li>▪ Support staff to handle administration and logistics of data collection and reporting.</li> <li>▪ Physical space and technology for the collection of data and report creation and distribution.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Government assistance in funding the forecasting mechanism as well as the collection of data from other industries that compete for similar resources.</li> <li>▪ Participation of unions and other stakeholders (to be determined) in planning and implementation activities.</li> </ul>

### ***BARRIERS TO IMPLEMENTATION***

The research from the Gap Analysis revealed the lack of accurate labour demand and supply forecast. In order for this strategy to be successful, an effective and efficient process for data collection and reporting will have to be designed with a high level of participation from industry, training providers and government stakeholders. To accomplish this, a number of expected barriers must be overcome given the current state of data availability and the history of unwillingness among the stakeholders to share data that is perceived to be strategically competitive. The following is the initial list of potential barriers to implementing this strategy:

- inability to gain consensus on the occupational classification framework, the content of the forecast and the process for data collection and reporting;
- inability to collect data to the required level of detail due to a perception of loss of competitive advantage among companies and training institutes;
- the amount of uncertainty in real planning horizons for the industry;
- lack of capacity and experience in the collection and reporting of this type of data to this magnitude and range of stakeholders;
- current lack of availability of job demand data (short-term and long-term);
- ability to maintain the forecasting process to ensure adequate time intervals between demand projections and actions to effect labour supply;
- differences in data collection needs for measuring both supply and demand; and
- government funding is required for program expansion.

### ***OWNERSHIP MODEL***

The Petroleum Human Resources Council of Canada will sponsor the development and on-going operation of the forecasting process and mechanism. A steering committee of representatives from industry, training providers and government will be formed to oversee:

- the development of the business case for the forecast;
- the development of the initial forecasting process and mechanism and create the plan for further expansion and development;
- the recruiting of regional and industry sector sub-groups for data collection and reporting; and
- the implementation of the data collection and forecasting process.

An occupational classification framework is being created under the mandate of the Petroleum HR Council's priority entitled *"define job requirements for entry-level positions and create pre-employment assessment tools."*

Once the initial process and mechanism for the forecast has been developed and implemented, the steering committee will disband. The responsibility for continuing to develop and refine the process/mechanism and for expanding the regional and industry sector sub-groups will be assigned to an oversight body. The Petroleum HR Council will continue in a management capacity, assisting in maintaining the support and participation by key stakeholders in the maintenance and on-going development of the forecast.

**Proposed Owner or Sponsor:** Build and establish a representative management structure as a sub-committee of the Petroleum HR Council to implement the strategy and sustain support and participation from all stakeholder groups including industry, training providers and appropriate government representation.

**Key Stakeholders:** To meet the specific needs of the different regions, sub-groups will be established to consider local conditions in the collection and reporting of data. These sub-groups could be existing organizations that already represent the stakeholders in the area.

**Support Resources:** It is anticipated that permanent staff will be required to support the day-to-day activity (e.g. executive and administrative position). This cost should be borne by industry through industry associations and government. The business case will include the value proposition to support the need and justification for industry and government funding.

### ***PERFORMANCE MEASURES***

The business case for the development of the labour demand and supply forecast will include performance measures to track and to report progress against the goal of developing the quality and quantity of human resources to meet industry needs. Short-term performance measures must be designed to measure progress on the implementation of the forecast model. Long-term measures must be designed to measure the impact of demand and supply data to the overall goal of developing training programs to meet industry needs. The following are the suggested measures for this strategy:

- monitor the on-going (annual) forecast and the utilization rate of the forecast by stakeholders as a tool to provide input into program development decisions;
- analyze the balance between labour demand and supply and determine if the gap is closing;
- monitor the level of participation of the stakeholder group from a human resource and funding perspective;
- evaluate accuracy of forecast against actual market demand – evidenced by a reduction in the gap between supply and demand across the industry;
- solicit feedback from training providers about whether or not provincial governments are making better funding decisions for educational programs that satisfy industry needs; and
- measure the quality and quantity of graduates coming out of the training provider programs.

**RECOMMENDED ACTIONS**

The following table outlines the high-level action plans and proposed timetable for implementing the strategy. This action plan will serve as the basis for the development of a detailed work plan and resource plan. These will be developed by the sub-committee formed to implement and manage the ongoing forecasting process.

RECOMMENDED ACTIONS TO IMPLEMENT <i>SUPPLY AND DEMAND FORECAST STRATEGY</i>	TIMEFRAME FOR COMPLETION	OWNER
<ul style="list-style-type: none"> <li>▪ Develop value proposition and business case that clearly communicates the issue and the value added benefits, costs and resource requirements for key stakeholders/beneficiaries of the information.</li> <li>▪ Market the business case.</li> </ul>	<p>Two months prior to engagement sessions</p> <p>As part of the engagement sessions</p>	<p>Petro HR Council with Industry, Government &amp; Training Provider Leads</p>
<ul style="list-style-type: none"> <li>▪ Define the scope and projection timeframe for the initial forecast e.g. high demand occupations.</li> <li>▪ Establish existing sources of Labour Market Information (LMI).</li> <li>▪ Research existing LMI models.</li> <li>▪ Build appropriate methodology for forecasting labour market demand to reflect complexity of industry sector, availability of data and regional variation.</li> </ul>	<p>Six months</p>	
<ul style="list-style-type: none"> <li>▪ Define and secure resources and staffing for the on-going activities required to establish and maintain the collection and reporting of the data.</li> </ul>	<p>One month</p>	
<ul style="list-style-type: none"> <li>▪ Define the layout and data requirements for the forecasting mechanism.</li> </ul>	<p>Two months</p>	<p>Petro HR Council with Industry &amp; Training Provider Leads</p>
<ul style="list-style-type: none"> <li>▪ Develop, test, evaluate and modify a pilot forecast mechanism.</li> </ul>	<p>Three to six months</p>	
<ul style="list-style-type: none"> <li>▪ Collect data nationally.</li> </ul>	<p>Three to six months</p>	
<ul style="list-style-type: none"> <li>▪ Distribute data to stakeholders.</li> </ul>	<p>One month</p>	
<ul style="list-style-type: none"> <li>▪ Convert project structure into an ongoing business model to continue the development of the mechanism and ensure the sustainability of the forecast going forward.</li> </ul>	<p>Three months</p>	
<ul style="list-style-type: none"> <li>▪ Conduct an evaluation of the forecast accuracy and expected benefits.</li> </ul>	<p>Two months</p>	

## APPENDIX A: STEERING AND ADVISORY COMMITTEE MEMBERS

The following individuals from the Steering and Advisor Committees of *The Strategy to Align Training Programs with Industry Needs Project* participated in the strategy workshop:

### INDUSTRY REPRESENTATIVES

NAME	TITLE	ORGANIZATION	PROVINCE
Heather Culbert	Sr. VP, Corporate Services	Enerplus Resources Fund	Alberta
Barry Durant	Manager HR Projects	Nexen Inc.	Alberta
David Fulton	General Manager, Human Resources	Shell	Alberta
Murray Lambkin	Training Coordinator	Sanjel	Alberta
Patricia Piironen	Director of International Business Development	Kos International Inc.	Alberta
Victoria Sedqwick	Senior HR Consultant Aboriginal Consultant	TransCanada Pipelines Ltd.	Alberta
Scott Tuttle	Manager, Recruitment and Global Services	Nexen Inc.	Alberta
Barbara Young	Director HR and Administration	Dominion Exploration Canada Ltd.	Alberta

### TRAINING PROVIDER REPRESENTATIVES

NAME	TITLE	ORGANIZATION	PROVINCE
Linda Ball	Regional Director	Community Careers Cooperative	Alberta
George Douglas	Dean, Trades Development	BCIT	BC
Paul Doyle	Chair, Academic Programs	Aurora College	NWT
Catherine Dutton	Head, School of Maritime Studies	Marine Institute	Newfoundland
Vanessa Everett	Manager, Aboriginal Programs	SAIT	Alberta
Morven Gentleman	Director, Global Information Networking Institute	Dalhousie University	Nova Scotia
Andrew Henry		Dalhousie University	Nova Scotia
Marg Jablonski	Senior Administrator, Safety Dept.	PITS	Alberta
Marylea Jarvis,	VP Instruction	Keyano College	Alberta
Jeff Lekstrom	Manager of Trades & Apprenticeship	Northern Lights College	NWT
Reg MacDonald	President & CEO	Maritime Drilling Schools Ltd.	Nova Scotia
Paul Myshaniuk	Business Consultant	Lakeland College	Alberta
Wayne Patton	Director, Program Development	University of Calgary	Alberta
Barbara Riley	Manager, Energy Group	Nova Scotia Community College	Nova Scotia

NAME	TITLE	ORGANIZATION	PROVINCE
Jeff Sundquist	Dean, Business Development International Continuing Education	NAIT	Alberta
Doug Van Eden	Manager, Safety Training (substitute sent)	PITS	Alberta
Wayne Wetmore	Senior Vice President (substitute sent)	PITS	Alberta
Catherine Wishart	Director, Community & Continuing Education	College of New Caledonia	BC

**GOVERNMENT REPRESENTATIVES**

NAME	TITLE	ORGANIZATION	PROVINCE
Lyn Bilida	Industry Development Officer, Oil and Gas	Industry Canada	Alberta
John R. Dickie	Training and Promotion Department of Energy	Government of Nova Scotia	Nova Scotia
Darrell Mottershead	Manager, Industry Programs and Standards	Alberta Learning	Alberta
Ken Smith	Director of Training	Yukon Government	Yukon
Deborah Shaman	Senior Analyst, Human Resources Partnerships	HRSDC	Ontario

**ASSOCIATIONS \NSTITUTES \NDEPENDENTS**

NAME	TITLE	ORGANIZATION	PROVINCE
Paul Brennan	Director	Association of Canadian Community Colleges	Ontario
Chris Heath	Independent Consultant	Independent Consultant	BC
Doug MacRae	Executive Director	Alberta Association of Colleges and Technical Institutes	Alberta
Lynn Merrithew	Program Coordinator, Engineering & Technology Upgrading Program	Calgary Catholic Immigration Society	Alberta
Carey Ryan	Project Director and Treasurer	Petroleum Research Atlantic Canada	Nova Scotia
Joe Van Overberghe	Executive Director	Ontario Petroleum Institute	Ontario

**OBSERVERS AND FACILITATORS**

NAME	TITLE	ORGANIZATION	PROVINCE
Deanna Almdal	Project Coordinator	Petroleum HR Council	Alberta
Lisa Bernar	Project Manager	Petroleum HR Council	Alberta
Trent Bester	Consultant	Meyers Norris Penny	BC
Roberta Clement	Consultant	Meyers Norris Penny	Alberta
Cheryl Knight	Executive Director/CEO	Petroleum HR Council	Alberta

## APPENDIX B: GLOSSARY OF TERMS

**New Entrants:** a worker who is joining the upstream petroleum industry for the first time including, but not limited to, entry-level positions.

**Training Providers:** includes post secondary training institutions including both colleges and universities, unions, private training organizations and associations.

**Upstream Petroleum Industry:** the upstream industry is defined to include activities related to exploration, development, production, service industries (geophysical services, drilling and completions, and well services), pipeline transmission, gas processing and upgrading, mining and extraction of heavy oil and bitumen.



**APPENDIX C: PETROLEUM HR COUNCIL’S STRATEGIES & KEY ISSUES TO BE ADDRESSED**

STRATEGIES	STRATEGY TO ALIGN TRAINING PROVIDERS’ DEVELOPMENT AND DELIVERY WITH INDUSTRY’S NEEDS	OUTREACH STRATEGY TO INCREASE UNDERSTANDING OF INDUSTRY AND ITS OPPORTUNITIES AMONG TRADITIONAL AND NON-TRADITIONAL POOLS OF LABOUR	DEFINE JOB REQUIREMENTS AND ENTRY-LEVEL POSITIONS AND CREATE PRE-EMPLOYMENT ASSESSMENT TOOLS	DEVELOP OCCUPATIONAL STANDARDS FOR IN-DEMAND OCCUPATIONS	DEVELOP RESOURCES TO ENHANCE ATTRACTION, DEVELOPMENT AND RETENTION OF EMPLOYEES FOR HARD-TO-RECRUIT-TO LOCATIONS
<b>ISSUES</b>					
1. Promoting careers in the industry		✓	✓		
2. Access to non-traditional workforce		✓			✓
3. Skills shortages	✓	✓	✓	✓	✓
4. Labour market information gaps	✓				
5. Shifting skill requirements	✓			✓	
6. Mobility of workforce				✓	✓
7. Creative human resource practices					✓

**APPENDIX D: PETROLEUM HR COUNCIL’S STRATEGY SUMMARY**

STRATEGIC INITIATIVE	OBJECTIVES
Strategy to align training institutions’ programming with industry’s needs	The main objectives of this project are to: <ul style="list-style-type: none"> <li>▪ produce a Gap Analysis of issues affecting the supply and demand of personnel in the upstream petroleum industry; and</li> <li>▪ develop a national alignment strategy and action plan to more closely align Canada’s learning system with industry’s knowledge needs.</li> </ul>
Outreach strategy to increase the understanding of the industry and its opportunities among traditional and non-traditional pools of labour	The main objectives of this project are to: <ul style="list-style-type: none"> <li>▪ document existing upstream industry outreach activities directed at the traditional and non-traditional workforce;</li> <li>▪ identify the mechanisms and/or tools for effective communication about careers with the traditional and non-traditional workforce; and</li> <li>▪ develop an outreach strategy that raises the profile of the oil and gas industry’s various career opportunities among the traditional and non-traditional workforce.</li> </ul>
Define the job requirements and entry-level positions and create pre-employment assessment tools	The main objectives of this project are to: <ul style="list-style-type: none"> <li>▪ document the key job families and occupations in Canada’s upstream petroleum industry;</li> <li>▪ conduct a Gap Analysis of relevant existing job profile information and tools, and stakeholders’ needs; and</li> <li>▪ identify priorities and recommendations related to the development of sector-specific job profiles for entry-level and other priority employment positions.</li> </ul>
Develop occupational standards for in-demand occupations	The main objectives of this project are to: <ul style="list-style-type: none"> <li>▪ update competency standards for select well-service sector occupations;</li> <li>▪ hold industry stakeholder meetings to obtain service sector input on the future operation of and strategy for the project;</li> <li>▪ prepare a competency standards management plan, including systems and procedures; (REVISED)</li> <li>▪ establish a business plan for the project; and</li> <li>▪ establish a national steering committee to evaluate the focus of any expansions to the program.</li> </ul>
Develop resources to enhance attraction, development and retention of employees for hard-to-recruit-to locations	The main objectives of this project are to: <ul style="list-style-type: none"> <li>▪ develop a model to assist with the assessment of attraction and retention challenges and risks for hard-to-recruit locations; and</li> <li>▪ identify best practices and existing tools and resources to assist the Canadian upstream petroleum industry in attracting, retaining and developing a local workforce to meet the demands for skilled labour.</li> </ul>