

LKC  
HD  
9660  
.H933  
C26  
2007

IC

Industrie  
Canada

## **Audit of the Hydrogen Early Adopters Program**

### **Final Audit Report**

### **Audit and Evaluation Branch**

**June 2006**

**Tabled and approved by DAEC  
on January 9, 2007**

**Canada** 



**Industry  
Canada**

**Industrie  
Canada**

## **Audit of the Hydrogen Early Adopters Program**

### **Final Audit Report**

### **Audit and Evaluation Branch**

**June 2006**

**Tabled and approved by DAEC  
on January 9, 2007**

**Canada**

## TABLE OF CONTENTS

<b>1.0</b>	<b>Executive Summary .....</b>	<b>1</b>
1.1	Introduction .....	1
1.2	Objectives and Scope.....	1
1.3	Audit Approach .....	2
1.4	Conclusion.....	2
1.5	Recommendations.....	2
<b>2.0</b>	<b>Introduction.....</b>	<b>3</b>
2.1	Background.....	3
2.2	Audit Objectives .....	3
2.3	Audit Scope .....	4
2.4	Audit Approach .....	4
2.5	Audit Criteria.....	5
2.6	Appreciation .....	5
<b>3.0</b>	<b>Detailed Audit Findings.....</b>	<b>6</b>
3.1	Selection and Approval of h <sub>2</sub> EA Applicants .....	6
3.1.1	Review of Applications .....	6
3.1.2	Review and Processing of Investment Outlines .....	7
3.2	Payment Control .....	8
3.2.1	Monitoring Financial Stability of Recipient.....	8
3.2.2	Monitoring Recipients for Compliance with Stacking Rules .....	9
3.2.3	Receipt of Annual Reports and Completion of Annual Visits.....	10
3.2.4	Compliance with Applicable Legislation .....	11
3.2.5	Claims Review .....	12
3.3	Program Operations.....	14
3.3.1	Performance Indicators .....	14
3.3.2	Annual Audit Risk Assessments.....	15
3.4	Program Delivery.....	15
3.4.1	Lapses in Program Budget.....	15
<b>4.0</b>	<b>Conclusion .....</b>	<b>17</b>
	<b>Appendix A: Management Response and Action Plan.....</b>	<b>18</b>

## **1.0 Executive Summary**

### **1.1 Introduction**

The Hydrogen Early Adopters (h<sub>2</sub>EA) program invests in showcasing Canadian industry using and applying hydrogen technologies, encouraging industry leaders and competitors to work together. The program encourages the awareness and acceptance of these groundbreaking technologies through their installation and demonstration in transportation, residential and commercial power generation applications.

Funding of \$60 million over five years (2003-04 through 2007-08 inclusive) was approved as part of the Technology and Innovation Initiative. The h<sub>2</sub>EA program is administered through Technology Partnerships Canada (TPC), a Special Operating Agency of Industry Canada.

To date the h<sub>2</sub>EA program has invested in four demonstration projects totaling over \$22 million. Related contribution agreements have been signed with four corporate consortia in order to demonstrate hydrogen technologies and showcase Canadian capabilities at locations across Canada. A fifth contribution agreement was approved by TPC; however, this project was terminated by the corporate consortium prior to any funding and was subsequently terminated.

### **1.2 Objectives and Scope**

The objectives of the audit, listed below, are described in the Risk Based Audit Framework (RBAF) developed for the program:

1. The adequacy of program and financial controls to identify and assess risks over selection, approval payment and review of eligible projects or activities and the program's operations;
2. The propriety of transactions;
3. The economy, efficiency and administrative effectiveness of program operations and delivery systems; and,
4. The compliance with the Terms and Conditions of the program and Treasury Board Secretariat policies and procedures.

The scope of this engagement covered program administrative and operating procedures in place within the h<sub>2</sub>EA program since its inception in 2003-04. Our testing included each of the four outstanding contribution agreements under the h<sub>2</sub>EA program; however, since all four projects are still ongoing, we were not able to assess the process of final payment or close-out procedures. In addition, re-payment issues were not addressed as no repayment is expected under the h<sub>2</sub>EA program.

### 1.3 Audit Approach

The methodology was consistent with the Treasury Board Guide on the Audit of Federal Contributions, relevant sections of the program's RBAF and Generally Accepted Auditing Standards. The approach was risk-based and tailored to the four audit objectives identified in the Section 2.2. Our audit methodology was comprised of three distinct phases: planning, audit and reporting. Each phase was designed to provide a flexible approach that is adaptable to the specific audit objectives of the engagement.

### 1.4 Conclusion

During the course of our audit we noted that specific controls were in place within the h<sub>2</sub>EA program. These controls ensure compliance with the terms and conditions of the program while allowing flexibility to accommodate the dynamics of the hydrogen industry. The program audit identified areas where improved documentation and formalization of processes could strengthen operational effectiveness and efficiency of the program. Specifically, we noted instances where procedures were not consistently carried out in accordance with the policies described in the RBAF, Results Based Management and Accountability Framework (RMAF) and TBS guidelines.

Outlined below is a summary of the administrative and operational recommendations related to the h<sub>2</sub>EA program for consideration by management.

### 1.5 Recommendations

Outlined below is a summary of the administrative and operational recommendations related to the h<sub>2</sub>EA program for consideration by management.

Technology Partnerships Canada should:

- Ensure that the proposal checklist is completed on a consistent basis and that they are maintained on file for each submitted investment outline; and the minutes of staff meetings related to the evaluation process are maintained;
- Continue to clarify and document the process related to Section 34 account verification and ensure that unit performing this verification has up-to-date signing authority cards;
- Continue to remind recipient of the requirement to submit claims no later than 45 days after the end of the claim period;
- Continue to formalize and document the risk assessment and recipient audit planning process; and
- Highlight and communicate lapses in approved funding and any identified barriers to the achievement of program strategic objectives to senior departmental management to ensure visibility and the development of an appropriate course of action.

## **2.0 Introduction**

### **2.1 Background**

The Hydrogen Early Adopters (h<sub>2</sub>EA) program invests in showcasing Canadian industry using and applying hydrogen technologies, encouraging industry leaders and competitors to work together. The program encourages the awareness and acceptance of these groundbreaking technologies through their installation and demonstration in transportation, residential and commercial power generation applications. The strategic objectives of the program are to achieve the following:

1. Create accelerated market acceptance of hydrogen (h<sub>2</sub>) technologies and h<sub>2</sub> compatible technologies;
2. World-class talent is attracted and retained;
3. Domestic and foreign investment in Canada is attracted; and
4. Make a contribution to the objective of Canada's Climate Change agenda.

Funding of \$60 million over five years from 2003-04 to 2007-08 was approved as part of the Technology and Innovation Initiative. The h<sub>2</sub>EA program is administered through Technology Partnerships Canada (TPC), a Special Operating Agency of Industry Canada (IC).

To date the h<sub>2</sub>EA program has invested in four demonstration projects totaling over \$22 million. Related contribution agreements have been signed with four corporate consortia in order to demonstrate hydrogen technologies and showcase Canadian capabilities at locations across Canada. A fifth contribution agreement was approved by TPC, however, this project was terminated by the corporate consortium prior to any funding and was subsequently terminated.

### **2.2 Audit Objectives**

TPC requires an audit of h<sub>2</sub>EA contribution program as it is part of the IC's Audit and Evaluation Branch 2005-06 Audit Plan. The objectives of the audit are described in the Risk Based Audit Framework (RBAF) developed for the program. More specifically, the audit assessed the following:

1. The adequacy of program and financial controls to identify and assess risks over selection, approval payment and review of eligible projects or activities and the program's operations;
2. The propriety of transactions;
3. The economy, efficiency and administrative effectiveness of program operations and delivery systems; and,
4. The compliance with the Terms and Conditions of the program and Treasury Board Secretariat policies and procedures.

### 2.3 Audit Scope

The audit was completed in March 2006 at the office of the h<sub>2</sub>EA program and covered h<sub>2</sub>EA program administrative and operational procedures in place since its inception in 2003-04. Our testing included each of the four outstanding contribution agreements under the h<sub>2</sub>EA program; however, since all four projects are still ongoing, we were not able to assess the process of final payment or close-out procedures. In addition, re-payment issues were not addressed because no repayment is expected under the h<sub>2</sub>EA program.

### 2.4 Audit Approach

The methodology was consistent with the Treasury Board Guide on the Audit of Federal Contributions, relevant sections of the program's RBAF and Generally Accepted Auditing Standards. The approach was risk-based and tailored to the four audit objectives identified in Section 2.2. Our audit methodology was comprised of three distinct phases, each of which was designed to provide a flexible approach that is adaptable to the specific audit objectives of the engagement. The three phases of the audit were:

- I) Planning/Kick off Meeting – The purpose of this phase was to ensure that all parties shared an understanding of project parameters and to gather relevant information regarding the h<sub>2</sub>EA program. The procedures completed during this stage were:
  - i. Review of program documentation;
  - ii. Interviews with key h<sub>2</sub>EA program representatives;
  - iii. Review of management control framework and identification of key program risks; and
  - iv. Development of audit criteria and identification of key controls to be tested during the audit phase of the program audit.
- II) Audit Phase – In this phase the audit team analyzed relevant documentation and formulated observations and recommendations regarding the audit objectives; and
- III) Reporting Phase – This phase summarized the findings and developed conclusions and related recommendations.

## **2.5 Audit Criteria**

Audit criteria used during this audit were consistent with the Treasury Board Guide on the Audit of Federal Contributions, relevant sections of the program's RBAF, Generally Accepted Auditing Standards and audit methodology.

## **2.6 Appreciation**

The auditors express their appreciation to the h<sub>2</sub>EA program managers and staff. They were available for interviews as required and provided requested documentation to the audit team in a timely manner.



### 3.0 Detailed Audit Findings

The observations detailed below have been summarized by related audit objective in the following table:

	Audit Objective	Observations
1.	Adequacy of program and financial controls to identify and assess risks over selection, approval payment and review of eligible projects or activities and the program's operations	Sections 3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.4.1
2.	Propriety of transactions	Section 3.2.5
3.	Economy, efficiency and administrative effectiveness of program operations and delivery systems	Sections 3.3.1, 3.3.2, 3.4.1
4.	Compliance with the Terms and Conditions of the program and Treasury Board Secretariat policies and procedures	Sections 3.2.5, 3.3.1

The details of each observation, conclusion and recommendation resulting from our audit procedures are outlined below:

#### 3.1 Selection and Approval of h<sub>2</sub>EA Applicants

##### 3.1.1 Review of Applications

###### *Observation*

Applicants seeking funding assistance from the h<sub>2</sub>EA program submit completed investment outlines to the program. A separate file is opened for each outline received by the program. These investment outlines are validated by a program Investment Officer or the Investment Manager for completeness of information and an initial screening of eligibility requirements. The tool used to ensure completeness of information is the 'Initial Proposal Checklist'. Once completed, the project is changed from "enquiry" to "outline" in the Contribution Management Information System (CMIS).

The investment outline is then forwarded to the Acting Program Director for redistribution of submitted outlines to program Investment Officers. After receiving a submitted investment outline, the Investment Officer or Investment Manager completes further follow-up and diligence work to ensure that any missing or incomplete information in the investment outline is obtained. The follow-up is completed via e-mail or telephone and additional information obtained is shared with other program officers to obtain a second opinion of eligibility at weekly staff meetings. The results of diligence work completed on submitted applications are discussed at the staff meetings attended by all program officers and the Acting Program Director.

The outline is returned by the Investment Officer to the Acting Program Director with one of the following recommendations:

1. Further diligence should be performed to prepare the proposal for submission to the Project Assessment Committee (PAC) for recommendation of funding, or
2. Inform the participant that the proposal submitted will not be processed further based on additional information gathered.

The Acting Program Director either verbally approves the Investment Officer/Investment Manager's recommendation to prepare the submission for presentation to the PAC; or if the proposal is rejected, a rejection letter is sent with an explanation of the reason why.

On average, this stage of the application review process should take between 1 and 3 months, however, it can take up to 6 months. The length of this phase of the process is due in part to the information and documentation gathering from the applicants.

### ***Conclusion***

Based on the work performed on the application process, documented assessment criteria, regarding the approval or rejection of applications, were being applied on a consistent basis.

#### ***3.1.2 Review and Processing of Investment Outlines***

##### ***Observation***

From our testing, we noted that the h<sub>2</sub>EA program does not formally document the application approval and rejection process prior to submission to PAC for consideration of funding approval. Although investment outlines submitted for approval by the PAC are discussed and agreed upon at the weekly program staff meetings, no minutes of these meetings are kept. Furthermore, during our audit testing we noted that the proposal checklist, which is required to accompany submitted outlines, was not always completed since four (4) of the eleven (11) samples tested did not have a completed proposal checklist.

Our testing indicated that the reasons for rejection were documented and in accordance with the assessment criteria. In addition, the reasons were appropriately communicated to the applicant.

##### ***Conclusion***

During our audit, we noted that the process of approving and signing each contribution agreement is in place, as each contribution agreement was on file with appropriate signatures. We noted that the preliminary approval process is not formally documented. Appropriate documentation of decisions is needed to properly reflect the due diligence performed by the h<sub>2</sub>EA program staff and the decision reached by the Acting Program Director to present each project to the PAC.

### ***Recommendation***

Technology Partnerships Canada should:

- Ensure that the proposal checklist is completed on a consistent basis and that they are maintained on file for each submitted outline. In order to demonstrate program recommendations of submissions to the PAC, the proposal checklist should include a sign-off by the Acting Program Director; and
- Maintain minutes of staff meetings related to the evaluation process and relevant recommendations.

## **3.2 Payment Control**

### ***3.2.1 Monitoring Financial Stability of Recipient***

#### ***Observation***

We noted during our audit that the following steps are performed to identify and monitor the financial stability of an applicant/recipient:

- During the application stage, the program examines the candidate's financial statements and a Financial Data Outline is prepared – the Financial Data Outline is updated when there is a substantive amendment to the contribution agreement;
- Financial statements are reviewed at the scheduled annual meeting with the recipients;
- The Claims Verification Officer reviews financial statements submitted with annual claims, noting any significant changes and follows up with the recipients for additional information required; and
- If the recipient is a public corporation, program staff members listen in on quarterly meetings with shareholders and they monitor public news releases.

We also noted during our audit that the Investment Officer does maintain continuous communication with the recipients and does enquire of financial questions that arise. We did not find any documentation of ongoing monitoring of the financial stability of the recipient being completed by program staff. Without formal and ongoing monitoring of the financial stability of recipients, the program may not be aware of financial risks developing with a recipient which could impact their ability to complete the h<sub>2</sub>EA project.

### ***Conclusion***

The procedures listed above demonstrate that the h<sub>2</sub>EA program is proactive in its approach to determining the financial stability of applicants and recipients of program funding. Since many recipients are start-up companies, the risk of financial instability is higher and monitoring of financial stability on a more regular basis during the year will allow the program to be more proactive in its actions should a recipient become financially unstable. In addition, this financial information could be used to assess claims submitted by the recipients.

### ***Recommendation***

Technology Partnerships Canada should continue to monitor the financial stability of each recipient on a more regular basis (i.e., at a minimum on an annual basis and more often if appropriate) in order to be able to effectively monitor the financial stability of each recipient. This proactive monitoring of the financial stability of the recipients would assist in the program's ability to effectively forecast any changes in disbursements of the contribution budget in the event that the recipient is unable to continue the funded project and will support the reasonability of claims submitted.

#### ***3.2.2 Monitoring Recipients for Compliance with Stacking Rules***

##### ***Observation***

We noted during our audit that the program reviews stacking limits through the following procedures:

- At the annual recipient review meeting and when progress reports are received;
- The recipient reports the amount of other governmental funding received with each claim submission;
- TPC reports funding of approved projects to TBS on an annual basis;
- Information about funded recipient projects is shared at the Interdepartmental Coordination – Hydrogen and Fuel Cell Committee meetings which are attended by the Acting Program Director; and
- Non-disclosure of other government funding is expected to be detected at the time of recipient audits performed at the individual project level.

Section 10 of the program's Terms and Conditions states that the total government assistance should not exceed 75% for any one project. This section also requires potential recipients to identify other sources of government funding at the time of the application and throughout the life of the project. We noted during our audit that the Investment Officer maintains continuous communication with the recipients and does verify other sources of funding.

Based on information gathered during the course of our audit, we noted that the stacking provisions are not proactively monitored since it is the obligation of the recipient to disclose any other government funding received. Accordingly, we did not find any documentation of regular

monitoring of the stacking provisions. Due to the nature of the industry in which recipients of contribution funding from the h<sub>2</sub>EA program operate and the possibility that they may receive funding from more than one government program, there is an increased risk that the stacking provisions may be violated.

### ***Conclusion***

While processes are in place to ensure that program staff are made aware of recipients' additional sources of funding, a process is required to monitor the status of each recipient to ensure they are in compliance with the stacking provisions outlined in the Terms and Conditions of the program.

### ***Recommendation***

Technology Partnerships Canada should conduct a stacking provision test as additional funding information is obtained for a particular recipient. This will allow the h<sub>2</sub>EA program to evaluate whether recipients are still in line with the stacking rules as required by the program's Terms and Conditions.

### ***3.2.3 Receipt of Annual Reports and Completion of Annual Visits***

#### ***Observation***

Section 5.0 of the program RBAF requires that funding recipients provide an annual report on progress achieved during that fiscal year within one hundred and twenty (120) days following the end of each fiscal year. For the four ongoing projects requiring the submission of annual reports for fiscal 2005-06, one recipient with an October 31, 2005 year-end was required to submit their annual report by February 28, 2006. As of the time of the fieldwork of this program audit, no annual report had been received, which was past the 120 day deadline. In response to the delay in receiving the annual report from the recipient, program staff have been in constant communication with the recipient to remind them of the deadline and to follow-up on the status of receipt.

Section 11.5 'Information Requirements and Reporting/Monitoring' of the program's Terms and Conditions states that TPC officials will meet contribution recipients, at a minimum, once annually to report on project progress. During our audit we examined the program's "Annual Visits" schedule and noted that for two recipients who required an annual visit to date, they had been scheduled and completed. We noted that the annual visit for Fuel Cell Technologies Ltd. was required to be completed by August 3, 2005; however, the actual annual visit was only completed by the program on February 22, 2006. We understand this delay was by design insofar as TPC was informed that the fuel cells would not be in place until early 2006.

### ***Conclusion***

The h<sub>2</sub>EA program's Terms and Conditions specify reporting requirements by the recipients and monitoring activities by program staff in order to ensure that project progress continues to be in line with the strategic objectives and Terms and Conditions of the program. Processes are in place to ensure monitoring and follow-up activities take place to ensure these program requirements are being met.

### ***Recommendation***

Technology Partnerships Canada should continue to ensure that reporting requirements are being met by recipients and that annual site visits are scheduled with recipients and completed within the required timeframe.

#### ***3.2.4 Compliance with Applicable Legislation***

### ***Observation***

The *Lobbyist Registration Act (LRA)* R.S., 1985, c.44 (4<sup>th</sup> Supp.) was assented on September 13, 1988. Depending on the type of lobbyist, the Act states that the applicant file a registration return no later than ten days or two months after undertaking to communicate with a public officer for the awarding of any grant, contribution or other financial benefit.

In response to amendments of the (*LRA*) in June 2005, TPC developed a process document entitled the "Lobbyist Registration and Contingency Fee Guidelines" dated September 8, 2005. This process document guides the program on TPC's processes and requirements related to lobbyists and contingency fees. In conjunction with this procedural update, in June 2005 the h<sub>2</sub>EA program began monitoring the registration of applicants with the Lobbyist Registration System and requesting certification letters stating that applicants are in compliance with *LRA* requirements.

We noted that contribution funding agreements were approved as early as August 3, 2004, while the monitoring of the registration of applicants and requesting certification letters did not start until June 2005. As the amendment came into effect in June 2005, TPC deemed it satisfactory that project proponents: (i) indicate lobbyist information in their project outlines and (ii) sign the Contribution Agreement in which article 6.10 of Schedule I General Conditions outlined their responsibilities as lobbyists.

### ***Conclusion***

Although the h<sub>2</sub>EA did not begin enforcing and monitoring applicants and recipients with the requirements of the *LRA*, once identified, the program addressed this area and designed appropriate procedures to monitor and communicate the requirements of the *LRA* to applicants and recipients on a proactive basis.

### ***Recommendation***

Technology Partnerships Canada should:

- In conjunction with the recently designed procedures, develop a process to ensure the operational effectiveness of the new guideline. This process should be documented and communicated to staff appropriately; and
- Continue to actively monitor the status of applicants' registration with the Lobbyist Registration System and continue to actively monitor changing requirements of the *LRA* to evaluate the impact of any changing requirements on program operations.

### ***3.2.5 Claims Review***

For testing purposes, we selected a sample of five paid expenditure claims (representing 63% of paid claims at the time of the audit fieldwork) submitted by recipients to obtain reasonable assurance that the claims were:

1. Appropriately approved under Sections 33 and 34 of the *Financial Administration Act (FAA)*;
2. Complete and contained the required supporting documentation to verify that expenditures above \$10,000 were incurred;
3. In compliance with the terms and conditions of the contribution agreements; and
4. Eligible in accordance with the signed contribution agreement based.

The results of our testing identified the following observations:

### ***Section 34 Signing Authority***

Each claim tested was approved by the Program Manager as the *FAA* Section 34 approval; however, it was discovered by TPC personnel on January 23, 2006, that the Program Manager did not have proper delegated *FAA* Section 34 signing authority.

Upon discovery of the inappropriate signing authority, TPC has taken appropriate actions to rectify the situation, as follows:

- The Director of Environment Technologies, who has *FAA* Section 34 authority, subsequently reviewed and approved each claim on January 30, 2006 to ensure appropriate use of public funds;
- TPC management performed follow-up procedures to assess the impact of the unauthorized Section 34 approval; and
- TPC management ensured appropriate communication to responsible parties on Section 34 authorized signatories.

### ***Receipt of Claim Submissions***

Three claims were received by h<sub>2</sub>EA later than 45 days after the end of the claim period, which represents a violation of the contribution agreements.

### ***Supporting Documentation for Labour Costs***

TPC's claim verification process is conducted consistent with departmental policy in terms of supporting documentation, which states that Program Managers need to determine the appropriate level of documentation required to support a claim. It was noted during testing that no source documentation was submitted to support labour costs included in the individual claims. The claim itself contains information on hours and rates per employee/subcontractor, however, time sheets and payroll reports are not required. Based on subsequent information gathering, it was noted that the Investment Officer will review the reasonability of the labour information presented on the claim and follow-up if necessary.

Since labour costs can be a significant percentage of any given claim submitted, without sufficient evidence to support the costs incurred, there is an increased risk that reimbursement will not be limited to eligible expenditures.

### ***Conclusion***

The h<sub>2</sub>EA program has an appropriate process in place to review invoices and supporting documentation prior to approval and payment of claims. From the testing performed, except for the items noted above, all claims paid contained the necessary supporting documentation and were in compliance with the requirements of the contribution agreements, to reimburse eligible expenses only.

### ***Recommendation***

Technology Partnerships Canada should:

- Continue to document the process related to Section 34 account verification and continue to ensure that the unit performing this verification has up-to-date signing authority cards;
- Continue to remind recipients of the requirements of their contribution agreements, including the requirement to submit claims no later than 45 days after the end of the claim period; and
- Continue to ensure that supporting documentation is provided where appropriate for labour costs. This could include timesheets or payroll reports from the recipient organizations.



### **3.3 Program Operations**

#### **3.3.1 Performance Indicators**

##### ***Observation***

Section 4.3 'Integrated Ongoing Performance Measurements and Evaluation Strategy' in the Results-Based Management and Accountability Framework (RMAF) details 45 Performance Indicators which should be measured by the program on an ongoing or periodic basis. Based on information provided, we noted the following:

- 9 of the 45 performance indicators were evaluated once since the start of the program;
- 2 of the 45 performance indicators were evaluated twice since the start of the program;
- 1 of the 45 performance indicators was evaluated on a periodic or ongoing basis since the start of the program; and
- 24 of the 45 performance indicators were evaluated once in the six month review completed by Performance Management Network Inc. on November 23, 2004.

In addition to the ongoing monitoring of performance indicators, the RMAF requires the completion of a Formative Evaluation currently scheduled for 2006-07. This evaluation is aimed at identifying the issues related to implementing early success and results-based management.

##### ***Conclusion***

While several of the performance indicators outlined in the program's RMAF have not been evaluated on an ongoing basis, we understand that this is due to a lack of data available to perform the necessary measurement and monitoring.

##### ***Recommendation***

Technology Partnership Canada should continue to put in place a process to monitor and measure required performance indicators as per the program's RMAF. This may include the introduction of a tool to support these monitoring activities such as an expanded utility function within the Contribution Management Information System (CMIS).

### **3.3.2 Annual Audit Risk Assessments**

#### **Observation**

Section 4.2.2 'Recipient Audit' in the RBAF states that the audit risk of each contribution agreement will be assessed annually. Two of the four approved projects have passed the one year anniversary date of their contribution agreement; however, no evidence was provided that the audit risk of the contribution agreements had been assessed. We learned that risk assessments are performed at the end of the fiscal year subsequent to the signing of the contribution agreement. As of March 31, 2006, those projects requiring a risk assessment had not been completed.

We learned that the Audit and Special Review function of TPC conducts annual risk-based planning exercises during which projects under the h<sub>2</sub>EA program are considered. Recently, this risk assessment process has become more formal and better documented.

#### **Conclusion**

As required by the program RBAF, a formal audit risk assessment of each contribution agreement does not appear to have taken place.

#### **Recommendation**

Technology Partnerships Canada should continue to develop its annual recipient risk assessment process and criteria to ensure that recipients with high audit risks are identified, monitored and appropriate actions taken. There should be a coordinated effort (between program operations and Audit & Special Review) to ensure a risk assessment for each contribution agreement is performed on a timely basis.

### **3.4 Program Delivery**

#### **3.4.1 Lapses in Program Budget**

During the course of the program audit, we identified that there has been lapses in funding which could negatively impact the successful achievement of the program strategic objectives. At the end of 2005-06, only \$7.32 million of the allocated \$14.05 million had been disbursed by the program (see Table 1 below). Interviews indicated that there have been fewer than expected approved projects and have identified the following constraints:

- Potential applicants are being detracted from participating in a consortium that requires them to be joint and severally liable as required in Section 5.2 of the Terms and Conditions of this Program; and

- The hydrogen industry in Canada is continuously developing. While the program seeks out participants who require funding to demonstrate hydrogen and fuel cell technologies, it is noted that all companies involved in the sector are still in the research stage. However, under the Terms and Conditions of the h<sub>2</sub>EA program, demonstrations focus on existing technologies only thereby minimizing the technological aspect of project risk.

**Table 1: Analysis of Lapses (as of March 31, 2006)**

Fiscal Year	Approved Contribution Budget	Committed Contributions	Contribution Funds Available for Commitment in Future Years	Lapses
2003-04	\$1.70M	-	-	\$1.70M
2004-05	\$4.52M	\$2.81M	-	\$1.71M
2005-06	\$7.83M*	\$4.51M	-	\$3.32M
2006-07 and 2007-08	\$29.95M	\$12.70M	\$17.25M**	-
Total	\$44.00M	\$20.02M	\$17.25M**	\$6.73M

\* Represents the net contribution budget that was available to the program after the transfer of \$10M to Natural Resources Canada

\*\* Represents funding available for future year investments

### **Conclusion**

While there is a process in place to identify, monitor and communicate the status of individual projects and the h<sub>2</sub>EA program overall, there continues to be lapses in funding. With the h<sub>2</sub>EA program approval ending March 31, 2008 delays in disbursing contribution budgets needs to be addressed by senior management.

### **Recommendation**

Technology Partnerships Canada should consider escalating the communication and impact of lapses in approved funding and any identified barriers to the achievement of program strategic objectives to senior departmental management to ensure visibility and the development of an appropriate course of action.

## 4.0 Conclusion

We conclude that the h<sub>2</sub>EA program has policies and procedures that adequately reflect the strategic objectives of the program. Processes are in place to achieve compliance with program requirements. During the course of our audit we noted that well designed controls were in place within the h<sub>2</sub>EA program. These controls ensure compliance with the terms and conditions of the program while allowing flexibility to accommodate the dynamics of the hydrogen industry.

The program audit identified areas where improved documentation of processes and monitoring practices could strengthen the program. Specifically, we noted instances where procedures were not consistently carried out in accordance with the policies described in the RBAF, RMAF and TBS guidelines.

This program audit was completed in accordance with Treasury Board Guide on the Audit of Federal Contributions, relevant sections of the RBAF and Generally Accepted Auditing Standards.

## Management Response and Action Plan

Recommendation	Management Response And Proposed Action	Responsible Official/Group	Action Completion Date/Timeline
<b>3.1 Selection and Approval of h2EA Applicants</b>			
<p><b>3.1.2 Review and Processing of Investment Outlines</b></p> <p>Technology Partnerships Canada should:</p> <p>(i) Ensure that the proposal checklist is completed on a consistent basis and that they are maintained on file for each submitted outline. In order to demonstrate program recommendations of submissions to the PAC, the proposal checklist should include a sign-off by the Acting Program Director; and</p> <p>(ii) Maintain minutes of staff meetings related to the evaluation process and relevant recommendations.</p>	<p>Project proposals are assessed against their relevance to the objectives of the program and the extent to which they demonstrate: contribution to the strategic objectives of the government; a comprehensive working complex of a hydrogen economy; technological feasibility, and that the group possesses the requisite technological/ managerial capabilities/ financial resources, to achieve the objectives of the project; a contribution is necessary to ensure that the project proceeds with the desired scope, timing or location; and, the eligible recipients have current and planned involvement in the Canadian economy.</p> <p>(i) From the onset of the program to about one year ago, checklists were prepared only for those proposals deemed ready to be presented to the PAC. Over the last year, a checklist is routinely prepared for all project proposals received by the program.</p> <p>Checklists will continue to be completed on a consistent basis and will be kept on file. In addition, and as recommended, the checklist template will be modified to include a sign-off by program management.</p> <p>(ii) The current practice is for the staff to meet and to review the documentation based on program criteria and objectives. In addition, and as recommended, the program will draft minutes of any staff meetings where decisions are made regarding proposal evaluation and recommendation.</p>	<p>Director, Environmental Technologies and Hydrogen Early Adopters Program</p>	<p>(i) Effective date: June 1, 2006</p> <p>(ii) Effective date: June 1, 2006</p>

Program Audit of the Hydrogen Early Adopters Program

Recommendation	Management Response And Proposed Action	Responsible Official/Group	Action Completion Date/Timeline
<b>Payment Control</b>			
<p><b>3.2.1 Monitoring Financial Stability of Recipient</b></p> <p>Technology Partnerships Canada should continue to monitor the financial stability of each recipient on a more regular basis (i.e. at a minimum on an annual basis and more often if appropriate). Proactive monitoring of the financial stability of the recipients would assist in the program's ability to effectively forecast any changes in disbursements of the contribution budget in the event that the recipient is unable to continue the funded project and will support the reasonability of claims submitted.</p>	<p>As part of the annual risk assessment process, risks of the h2EA projects are evaluated on a number of factors including: technological feasibility; technological capability; managerial capability; financial risk; compliance; and benefits to Canada.</p> <p>Risks are assessed annually, and if need be, more often. This practice will be maintained. The TPC Risk Analyst will ensure compliance with this particular activity on a more regular basis.</p>	Director, Economic and Business Case Analysis	Ongoing
<p><b>3.2.2 Monitoring Recipients for Compliance with Stacking Rules</b></p> <p>Technology Partnerships Canada should conduct a stacking provision test as additional funding information is obtained for a particular recipient. This will allow the h2EA program to evaluate whether recipients are still in line with the stacking rules as required by the program's Terms and Conditions.</p>	<p>Stacking issues and calculations will continue to be discussed in all investment decision documents (IDD) and specific stacking clauses are found in all contribution agreements. In the event that additional funding information is obtained, program staff will recalculate the stacking numbers as required. Mechanisms will remain in place, to allow the reduction or claw backs of investments if deemed necessary, and are found in each contribution agreement, as per the terms and conditions of the program.</p> <p>In conjunction, a question regarding stacking included on the claim report template.</p>	<p>Director, Economic and Business Case Analysis</p> <p>Director, Environmental Technologies and Hydrogen Early Adopters Program</p>	<p>Completed</p> <p>Completion date: June 1, 2007</p>

## Program Audit of the Hydrogen Early Adopters Program

[illegible]

**Program Audit of the Hydrogen Early Adopters Program**

Recommendation	Management Response And Proposed Action	Responsible Official/Group	Action Completion Date/Timeline
(ii) Continue to actively monitor the status of applicants' registration with the Lobbyist Registration System and continue to actively monitor changing requirements of the LRA to evaluate the impact of any changing requirements on program operations.	<p>Quality Assurance Unit and the monthly on-line newsletter sent to all staff. Note that investment decision document templates must include a paragraph to ensure that the company is in compliance with the lobbyist registration requirements. Mandatory training on the issue is provided to TPC staff.</p> <p>(ii) Officers will continue to actively monitor the status of applicants' registration by search the LRA database for evidence of registration, printing out the search parameters and search results, and including these documents as part of the file that is produced for approval by senior management. The Annual Information. Update will continue to contain certifications of compliance to which companies must attest annually.</p>	Director, Investment Management	Ongoing
<p><b>3.2.5 Claims Review</b> Technology Partnerships Canada should:</p> <p>(i) Continue to document the process related to Section 34 account verification and continue to ensure that unit performing this verification has up-to-date signing authority cards;</p> <p>(ii) Continue to remind recipients of the requirements of their contribution agreements, including the requirement to submit claims no later than 45 days after the end of the claim period; and</p>	<p>(i) TPC will continue to document the process related to Section 34 account verification and will continue to do so as needed. TPC management will continue to ensure appropriate communication to responsible parties on Section 34 – both to authorized signatories and to the unit performing the verification and maintaining the authority cards.</p> <p>(ii) Requirements are outlined in the contribution agreement. Program staff will continue to remind project proponents of this requirement on an ongoing basis.</p>	<p>Director, Finance, Management and Regional Partnerships</p> <p>Director, Environmental Technologies and Hydrogen Early Adopters</p>	<p>Ongoing</p> <p>Ongoing</p>



## Program Audit of the Hydrogen Early Adopters Program

Recommendation	Management Response And Proposed Action	Responsible Official/Group	Action Completion Date/Timeline
(iii) Continue to ensure that supporting documentation is provided where appropriate for labour costs. This could include timesheets or payroll reports from the recipient organizations.	(iii) TPC will continue to ensure that supporting documentation is provided where appropriate for labour costs. All claims are subject to a review process prior to payment. The objective of the process is to ensure that costs claimed are eligible, accurate and in conformity with TPC project cost principles and the statement of work; both of these are schedules to the contribution agreement. With regards to labour costs, TPC will continue to follow departmental policy by requesting information on hour and rates per employee/subcontractor. In addition, project proponents are required to provide at the time of their first claim, timesheets and payroll reports for a sampling of their employees. As well, recipient audits will continue to be conducted annually based on risk.	Program Director, Finance, Management and Regional Partnerships	Ongoing
<b>3.3 Program Operations</b>			
<b>3.3.1 Performance Indicators</b>  Technology Partnerships Canada should continue to put in place a process to monitor and measure required performance indicators as per the program's RMAF. This may include the introduction of a tool to support these monitoring activities such as an expanded utility function within the Contribution Management Information System (CMIS).	<p>The Terms and Conditions of the program outline the following outcomes: to foster the development and early introduction into the marketplace in Canada of technologies, such as fuel cells and those used to produce, store, and distribute hydrogen, that support the transition to a hydrogen economy.</p> <p>In order to measure its performance with regards to these outcomes, h2EA will continue to collect related data, from numerous internal and external sources. To this end, data will continue to be collected against a number of indicators outlined in the program RMAF.</p>	<p>Director, Environmental Technologies and Hydrogen Early Adopters Program</p> <p>Director, Finance, Management and Regional Partnerships</p>	Ongoing

**Program Audit of the Hydrogen Early Adopters Program**

Recommendation	Management Response And Proposed Action	Responsible Official/Group	Action Completion Date/Timeline
	<p>A formative review will be done this fiscal year and will help to further measure performance.</p> <p>As recommended, an appropriate tool to support these monitoring activities will be developed. Given the complex nature of developing systems which must be approved by a senior level IT Governance Committee of Industry Canada and then developed by the CIO of the Department, the completion of this could take a year.</p>	<p>Director, Economic and Business Case Analysis</p> <p>Chief Information Officer</p>	<p>Completion date: March 31, 2007</p> <p>Completion date: May 3, 2007</p>
<p><b>3.3.2 Annual Audit Risk Assessments</b></p> <p>Technology Partnerships Canada should continue to develop its annual recipient risk assessment process and criteria to ensure that recipients with high audit risks are identified, monitored and appropriate actions taken. There should be a coordinated effort (between program operations and Audit &amp; Special Review) to ensure a risk assessment for each contribution agreement is performed on a timely basis.</p>	<p>TPC will continue to use the investment decision document as the initial risk assessment, following which assessments are performed on a yearly basis.</p> <p>In addition, TPC the Agency will continue to conduct annual risk-based planning exercises (recipient audits). Only projects ranking high relative to the overall portfolio of projects being managed by the Agency will figure in these exercises.</p>	<p>Director, Economic and Business Case Analysis</p> <p>Director, Finance, Management and Regional Partnerships</p>	<p>Ongoing</p>
<b>3.4 Program Delivery</b>			
<p><b>3.4.1 Lapses in Program Budget</b></p> <p>Technology Partnerships Canada should consider escalating the communication and impact of lapses in approved funding and any identified barriers to the achievement of program strategic objectives to senior departmental management to ensure visibility</p>	<p>The program Risk Based Audit Framework (RBAF) outlines a number of strategic, technical, project and internal risks. It proposes response strategies in the event that barriers are encountered.</p>	<p>TPC Management Team</p>	

Program Audit of the Hydrogen Early Adopters Program

Recommendation	Management Response And Proposed Action	Responsible Official/Group	Action Completion Date/Timeline
and the development of an appropriate course of action.	<p>As noted in the RBAF, the program targets pre-commercial demonstrations. The RBAF observes that Canadian firms may not be ready for this advanced stage of demonstration and that as a result, program uptake may not be as strong in the early years of the program. As well, the program terms and conditions call for each eligible recipient to be jointly and severally liable with the other eligible recipients for executing the contribution agreement. It is believed that this has been a barrier to program uptake.</p> <p>Senior management will continue to be informed through the yearly budgetary exercises. Funds will continue to be transferred as required to minimize lapses.</p> <p>With regards to the achievement of program objectives, the management team will consider options, including the development of a response based on the program RBAF.</p> <p>Expected results will continue to be reviewed on a yearly basis and communicated to senior departmental management.</p>		<p>Ongoing</p> <p>Completion date: June 30, 2007</p> <p>Ongoing</p>

LKC  
HD 9660 .H933 C26 2007  
Canada. Industry Canada. Audit and  
Evaluation Branch, issuing body  
Final evaluation of the Hydrogen Early  
Adopters Program final report

[illegible]