Canadian Transportation Fuel Cell Alliance (CTFCA)
Evaluation Criteria for Demonstration Projects

I. Introduction

These criteria and their weights have been developed as a result of discussions with various members of the Canadian Transportation Fuel Cell Alliance and within Natural Resources Canada. They are intended to provide a common and fair means of comparing the relative attributes of proposals for the demonstration of different routes for the production and delivery of hydrogen to fuel cell vehicles at a fuelling station. As well, they are intended to provide guidance to project proponents as they prepare their proposals.

As will become readily apparent, most of the total scoring points of 100 are allocated to the Technical Merit (46) and the Capabilities of the Project Team (34), as the focus of these first demonstrations is to demonstrate technical viability while at the same time advancing the technology.

There are, of course, other aspects of the proposals that require examination for the purpose of completeness, and these have been described. Some of these have been allocated weights, some have not, some are descriptive, and some are mandatory in that they describe minimum requirements.

This form has been arranged such that all minimum requirements are considered in a logical sequence.

II. Mandatory Considerations (Not Scored)

1. First of its Kind in Canada

Is there another identical or similar installation currently planned, installed or operating in Canada? **(If the answer is "Yes" the proposed project is not eligible for CTFCA funding.)**

Reviewers Comments.

2. Communications Plan

It is generally agreed within the CTFCA that clear communication to the public, and to regulators and other stakeholders, is an important activity given the early stage of development of hydrogen fuelling systems. There needs to be a description of how this proposed project is amenable to public outreach efforts, and how it is linked to the Strategic Communications Plan of the CTFCA.

Reviewers Comments.

3. Proponent's Strategic Plan

These early CTFCA demonstrations of hydrogen fuelling systems are intended as a first step towards the long term wide spread installation of a hydrogen fuelling infrastructure servicing fuel

cell vehicles. Consequently, it is important that the proponent describe how the demonstration project fits with their overall long range plans for the commercialization of their system.

Reviewers Comments.

4. Location and Regional Balance

It is intended that the CTFCA will support several different demonstrations of fuelling systems in different locations across Canada. Therefore it is necessary that there not be a preponderance of demonstrations in one location or region. The proponent should report on the existence of other hydrogen fuelling systems in the same immediate area and in the same province or territory.

Reviewers Comments.

III. Criteria and Scoring

	Points	Score

1. Canadian Content and Leverage

A. Percentage of Canadian Content in Project

What is the percentage of the Canadian content of the costs of the project? **(Note that the % must exceed 50% for the project to be eligible for funding unless there are extenuating circumstances, such as equipment not being available in Canada).**
The higher the % the higher the score.

Total 4

B. Leverage on Government Funds

What is the percentage of all levels of government funding to the total cost (including real and in-kind) of the project?
(Note that the <u>Federal Government</u> % must be less than 50% for the project to be eligible for CTFCA funding.)

The lower the % the higher the score.
Total gov. funding

greater than 50%	score 1
40 to 50%	score 2

30 to 40%	score 3	
less than 30%	score 4	
	Total	4
	Section Total	8

2. Technical Merit

A. Approach, Methodology and Feasibility

Is the work plan logically developed and complete?	5
Are the activities detailed enough?	5
Does the project have a good chance of technical success?	5
Total	15

B. Recognition of Technical Barriers and Solutions Proposed

What are the technical advances of the project? Have the technical challenges and the proposed solutions been addressed in a logical and complete manner?	
Total	15

C. Greenhouse Gas Reduction and other Environmental Benefits

What are the estimated "well to tank" GHG emissions associated with this project, in terms of "grams of CO_2 equivalent per million BTUs of fuel delivered?" **(NRCan will calculate this value using its "GHGENIUS" model and agreed upon input values).**	
(High number scores 4 and low number scores 8)	
	8
What are the other potential environmental benefits (e.g. reduction of other air pollutants)?	2
Total	10

D. Monitoring and Reporting

Is the monitoring and reporting work plan comprehensive?	
Total	6
Section Total	46

(Minimum Acceptable Score is 37)

3. Management and Technical Capabilities of Project Team

A. Qualifications and experience of key personnel

Do the resumes reflect the necessary expertise?

Total 14

B. Adequacy of Facilities and Equipment for Construction

Are the facilities to be used for construction/assembly of the components of the demonstration appropriate?

Total 6

C. Schedule

Is the schedule logical, comprehensive and reasonable?

Total 6

D. Engagement of Strategic Industries

Are all of the key players involved-if not who is missing?

Total 8

Section Total 34

(Minimum Acceptable Score is 27)

4. Economic Considerations

A. Benefits to Canada

Estimate of the jobs created and money invested for:
(i) this project; and 2
(ii) potential commercialization. 2

Total 4

B. Barriers to Commercialization

How does the project address market barriers? For example will it lead to reduced system costs and/or assist in codes and standards development for hydrogen fuelling systems?

Total 4

Section Total 8

5. Community Impacts

How will the project impact positively on the community (e.g. synergy with existing fuel cell/hydrogen infrastructure) or negatively (e.g. aesthetics, wildlife habitant, etc.)

Total 4

Total Project Score:
(Maximum 100 Minimum Acceptable 75)

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