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**People, Transport and Hydrogen Fuel**  
**Guidelines for Local Community Engagement when Implementing Hydrogen Powered Transport**

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## 1 Purpose of this Guide

The purpose of this guide is to help Companies manage engagement with local community stakeholders when introducing Hydrogen (H<sub>2</sub>) powered public transport Infrastructure and Operations. It provides guidance on:

- Why it is necessary to engage
- When and who to engage
- How to plan and conduct engagement
- How to organize internally for engagement
- How to incorporate community stakeholder views
- How to implement and monitor progress

Engaging with community stakeholders when planning the construction of a Hydrogen refueling station is a critical mechanism for achieving business objectives, in particular for gaining and maintaining the license to operate. It involves identifying and consulting stakeholders in order to build external understanding and trust.

A robust engagement process ensures transparency and openness outside the company. It provides a conduit for the community stakeholders to express concerns and creates a platform for company and stakeholders to identify, debate and resolve issues. In essence, effective stakeholder engagement is the art of thinking and problem solving together.

Engagement is important in all stages of the life cycle (planning & design, construction, operations and decommissioning). Engagement is necessary to establish and maintain relationships, learn about concerns before they escalate, and to act as a good neighbor. Traditionally the main emphasis has been to consult with national and local governments, but local communities have strong social organization, which will also impact on the operations of the project.

Local communities are an extremely important stakeholder group with respect to hydrogen for transport activities. Public understanding of hydrogen as a fuel is limited. Prior knowledge of H<sub>2</sub> often centres on safety with references for example to the Hindenburg airship disaster. This concern has regularly been raised in media coverage, which can have a lasting impact on public perception.

However, if a hydrogen economy is to develop, infrastructure (specifically refueling stations) is required. Some of this infrastructure can be located on industrial land with minimal risk for, and exposure to, local communities. However, some refueling stations have already been placed within communities and opportunities exist to build these facilities at existing public service stations. Placing H<sub>2</sub> infrastructure within communities provides important learning about what it takes to install this equipment within existing facilities and an opportunity to raise public awareness of the clean, renewable fuel option presented by Hydrogen.

These guidelines give insight into the lessons learned from the experiences of the 10 HyFleet:CUTE demonstration sites between 2004 – 2007, some of which went through a public enquiry process in order to get approvals for building up Infrastructure.

The general conclusion from these experiences is that the criteria for acceptability are different for the petrol station and the hydrogen facility. Specifically, one fulfils a very well understood role within the local area while the other does not, and one has well understood risk profile while the other does not.

## **2 Engagement Process**

Engagement is an on-going process of dialogue that starts with community stakeholder identification and mapping and is integrated into every phase of the project from planning and designs through to decommissioning.

### ***2.1 Identification and Mapping of Stakeholders***

The first action in the process is to identify the ‘Infrastructure’ community stakeholders. These include members of local communities, of national and local governments, local and national NGOs and specific interest groups (environmental etc).

Mapping of these stakeholders involves looking at their particular objectives as well as areas of interest.

A hydrogen demonstration programme brings us into contact with a wide variety of stakeholders in the community. Sections 2.2.1 & 2.2.3 identify and map these community groups.

### ***2.2 Bus Operations Community stakeholder identification and Mapping***

Bus operations stakeholders need to be identified and mapped in the same way as the infrastructure stakeholders. Section 2.2.3 identifies and maps these community groups. Some bus operations stakeholders may overlap with the infrastructure stakeholders.

### 2.2.1 Working with Community Groups - Elected Officials & Bureaucrats

It is the consensus opinion that the various groups need to be worked with concurrently but with different intensity at different times. The numbers of individuals/groups to be engaged with will vary according to context.

General Group	Who	When	What	Where/ Material
Bureaucrats/ Officials	1. Local Authority Planning Officials	Before submission of plans (if possible)	Basic Technical Information	1. Prepare a list of required regulations that must be met and ask for feedback from relevant regulators. ( see HyApproval)  2. Prepare a time schedule for applying for and receiving approvals  3. Gather technical data required by regulators.
	2. Govt. Regulators	As soon as H2 Bus System is in planning stage. Even if detailed information is not available it is important to ‘start a conversation’	2. Prepare a list of required regulations that must be met and ask for feed-back from relevant regulators. (see HyApproval)  4. Prepare a time schedule for applying for and receiving approvals  5. Gather technical data required by regulators.	

General Group	Who	When	What	Where/ Material
	3. Emergency response officials: <ul style="list-style-type: none"> <li>• Fire Officers</li> <li>• Police</li> <li>• Emergency services</li> </ul>	This may be required for submission of plans – so again – as early as possible to explain intentions. Keep informed and arrange ‘training’ for all involved: <ul style="list-style-type: none"> <li>• First response groups,</li> <li>• Staff of bus companies (drivers/ refueller’s/ maintenance)</li> </ul>		
Elected Officials (Politicians)	1. Key Elected Officials in Local and regional Governments (includes Local Councils)	Concept stage and all the way through to completion and decommissioning.	1. ‘Big picture’ information stressing benefits to the community (their electors) ; 2. Media like ‘grabs’; 3. Detailed information on potential public concerns in ‘lay’ terms (so they can answer questions intelligently)	1. Sample ‘Ministerial’ i.e. Sample of a case for H2 powered transport; 2. Sample press releases; 3. Q & A Sheets addressing community concerns and stressing benefits. (See: <a href="http://www.global-hydrogen-bus-platform.com/InformationCentre/FAQ">http://www.global-hydrogen-bus-platform.com/InformationCentre/FAQ</a> ) 4. Official visits to Depot etc
	2. Ministers (National) for Environment, Transport; Energy	Particular relevance to concept and planning stage where they may be responsible for: <ul style="list-style-type: none"> <li>• Funding</li> <li>• Influencing the community positively</li> </ul>		

Table 1: Working with Community Groups – Elected Officials & Bureaucrats



### 2.2.2 Working with Community Groups – Neighbours and Lobby Groups

N.B. Groups are NOT in order of priority. It is the consensus opinion that the groups need to be worked with concurrently but with different intensity at different times. The numbers of individuals/groups to be engaged with will vary according to context.

General Group	Who	When	What	Where/ Materials
Neighbours to Re-Fuelling and Bus Parking Depot	<u>Near</u> Neighbours	<p><b>Initial:</b> Very early in the planning Stage (well BEFORE application for permits)</p> <p>then: <b>Continuous</b> scheduled updates throughout the project</p>	<p>Basic, ‘user friendly’ information addressing ‘lay’ person concerns &amp; stressing benefits of H2 (e.g. H2 volatility; noise; increased traffic etc)</p> <p>Develop check list with following :</p> <ol style="list-style-type: none"> <li>1. Easy to understand Information,</li> <li>2. Links to a website plus where to source more detailed documents if of interest</li> <li>3. List of FAQs with detailed info on whom, how to answer and support materials.</li> </ol>	<p>For concerns see:</p> <ol style="list-style-type: none"> <li>1. HfC survey Questions (Tech Uni Berlin)</li> <li>2. John Mumford Thesis</li> </ol> <p>Arrange visits to depot for Q &amp; A</p>

General Group	Who	When	What	Where/ Materials
Community Lobby Groups	<ol style="list-style-type: none"> <li>1. Key groups in context e.g. local environmental groups; residents action groups; individual local spokespeople / community leaders.</li> <li>2. Get support of umbrella environmental organisations: e.g. Greenpeace; WWW etc</li> </ol>	<p><b>Initial:</b> Very early in the Planning Stage (well BEFORE application for permits)</p> <p>then: <b>Continuous</b> scheduled updates throughout the project</p>	Information on the effect of the H2 Infrastructure on the environment generally and locally (stress benefits as well as potential concerns)	<p>Range of materials from rigorous research information on H2 (environmentalists are often keen on hard science) through to more easily digested material (see Neighbours above)</p> <p>Arrange visits to depot for Q &amp; A</p>

*Table 2: Working with Community Groups – Neighbours and Lobby Groups*

### 2.2.3 Working with Community Groups – Bus Operations

N.B. Groups are NOT in order of priority. It is the consensus opinion that the groups need to be worked with concurrently but with different intensity at different times. The numbers of individuals/groups to be engaged with will vary according to context.

General Group	Who	When	What	Where/ Materials
Bus Operations Stakeholders	Neighbours to Bus Parking Depot, Bus passengers	<b>Initial:</b> Early in the planning  then: <b>Continuous</b> scheduled updates throughout the project	Basic, ‘user friendly’ information addressing ‘lay’ person concerns & stressing benefits of H2 (e.g. H2 volatility; noise; increased traffic etc)  Develop check list with following : 4. Easy to understand Information, 5. Links to a website plus where to source more detailed documents if of interest 6. List of FAQs with detailed info on whom, how to answer and support materials.	For concerns see: 1. HfC survey Questions (Tech Uni Berlin) 2. John Mumford Thesis  Arrange visits to depot for Q & A  Have handout material on buses for passengers
	Bus Operator, Bus drivers	<b>Initial:</b> Very early in the Planning Stage (well BEFORE application for permits)  then: <b>Continuous</b> scheduled updates throughout the project	1. Detailed information on potential public concerns in ‘lay’ terms (so they can answer questions intelligently)	1. Q & A Sheets addressing community concerns and stressing benefits.

Table 3: Working with Community Groups – Bus Operations

### 2.2.4 Dealing with the Media

N.B. Groups are NOT in order of priority. It is the consensus opinion that the groups need to be worked with concurrently but with different intensity at different times. The numbers of individuals/groups to be engaged with will vary according to context.

General Group	Who	When	What	Where/
Media	Local newspapers; Regional daily newspapers; Television; Trade Magazines (automotive; energy) Environmental magazines ; Technology Magazines	<b>Initial:</b> Concurrently with submission of plans for infrastructure and contacting community groups.  then: <b>Continuous</b> scheduled updates throughout the project	Media Pack: Needs to be prepared by professional with accompanying good quality photos.  e.g. Basic, ‘user friendly’ information addressing ‘lay’ person concerns & stressing benefits of H2 (e.g. H2 volatility; noise; increased traffic etc)  List of FAQs	FAQ’s on HfC Website at: <a href="http://www.global-hydrogen-bus-platform.com/InformationCentre/FAQ">http://www.global-hydrogen-bus-platform.com/InformationCentre/FAQ</a>  Arrange visits to depot for Q & A; use photo opportunity for appropriate people  <b>NOTE:</b> Contact with the media needs to be a proactive exercise using any contacts and levers possible to create interest.

Table 4: Dealing with the Media

### 2.3 Stakeholder Prioritization

Ranking Community stakeholders helps to focus engagement, with particular attention to those who will be highly influential and highly impacted.

The prioritization is done by mapping the stakeholders on a prioritization matrix as shown in section 4.

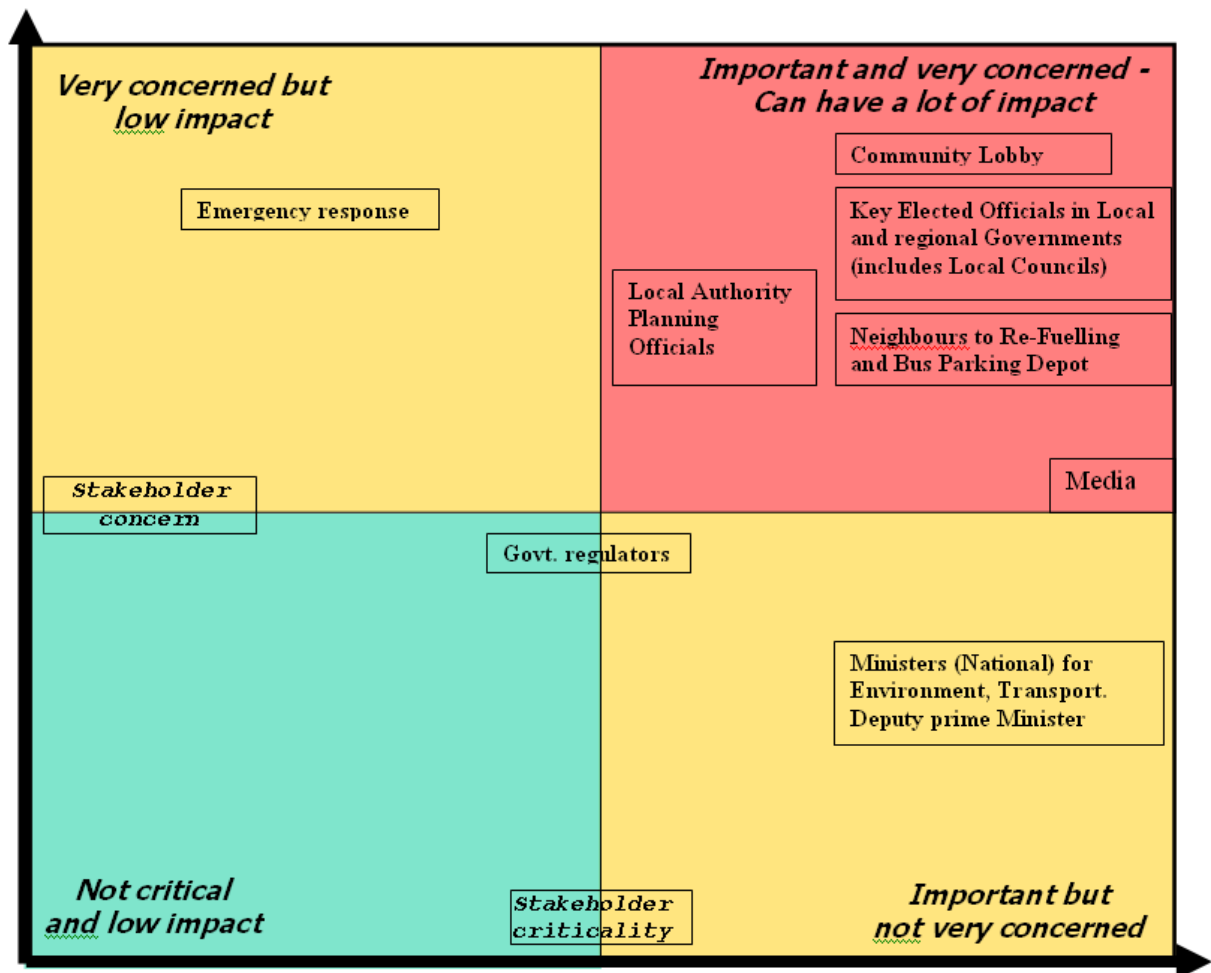


Table 5: Community Stakeholder Prioritisation Mapping

## **2.4 Engagement strategy**

### **2.4.1 The approach**

There is no single approach. Methodologies are different for different types of community stakeholders and approaches will depend on the social context, community stakeholder understanding as well as the stage of the engagement process.

Types of engagement processes that might be used include:

- One to one meetings for introducing the Hydrogen operations
- Thematic workshops based on Hydrogen operations
- Town hall meetings, these are better to be preceded by one to one meetings or workshops.

### **2.4.2 The materials**

As described in previous sections, materials should be ready to use and relevant to the purpose. It is important that the materials fit the social context. Information materials needs to be updated when necessary and be translated into the local language.

(See: <http://www.global-hydrogen-bus-platform.com/InformationCentre> )

## **2.5 Feedback, Monitoring, Continue**

Infrastructure developers should always feedback to the community stakeholders, once the dialogue has started. It is important to keep this dialogue alive by providing feedback on meetings and updates on important milestones of the project that are relevant the community stakeholders. When there is significant local opposition, dialogue that is more intensive is required and consideration may have to be given to techniques such as mediation.

The key factors for the success of engagement are the following:

- Engagement is:
  - broad in stakeholder scope,
  - comprehensive in content,
  - starts at the feasibility study stage of the Hydrogen project, and
  - continues throughout the whole lifecycle of the project.
- Commitments to stakeholders are implemented and feedback is supplied

### 3 Do's and Don'ts of Engagement in Hydrogen Projects

<b>DO</b>	<b>DON'T</b>
<b>Recognize that stakeholder perceptions are important and must be addressed</b>	Engage if you are not going to listen
<b>Spend at least as much time listening as talking</b>	Try and develop all the answers before starting engagement
<b>Engage in a way that allows all stakeholders to be heard</b>	Base engagement on pre-existing personal contacts instead of a systematic process to identify issues and stakeholders
<b>Develop mutually-agreed processes for engagement</b>	Assume silence means consent
<b>Give time for social, informal contact before and after consultation to enable trust to develop</b>	Assume that one engagement approach works with all
<b>Recognize the time stakeholders give up to participate in consultation</b>	Assume stakeholders have your timelines
<b>Follow-up with stakeholders after meetings rather than waiting for them to follow up with you</b>	Rely on technology to substitute for face to face communication
<b>Maintain records</b>	Use external consultants to manage the process
<b>Provide clear boundaries of what is and is not possible</b>	Engage only with friendly stakeholders

*Table 6: Do's and Don'ts of Engagement in Hydrogen Projects*

## 4 Case Studies

### 4.1 Hornchurch London

In 2004 the H2 team was involved in a public enquiry process after planning application for the London site was initially turned down. The planning process had been complex and focused on technicalities. As a result not enough time was spent early on talking directly with the local community, explaining what we were doing and listening to their concerns. The community chose to raise those concerns through local media and government instead and our application was rejected because of concern over the use of green belt land. An appeal was placed and permission eventually granted. At this point we initiated a community engagement plan to ensure better links with the community. This involved a series of public meetings and specific communications materials designed to keep the community up-to-date on our work. The site was eventually opened in May 2005.

Below is a list of the specific lessons the H2 team learned during that process.

#### Lesson 1

Had a very informal site selection process, almost all of which was not documented  
Keep notes on justification for choosing site so that it can stand up in court

#### Lesson 2

Know the history of your location (both internal and external if necessary) very well before you start

#### Lesson 3

All strategic reasons for why you might choose a site and project might be completely contrary to the external perspective. Need to consider that external outlook as well

#### Lesson 4

Using a planning consultant did not work. They were one step removed from the process and talking to the wrong people.

#### Lesson 5

Figure out who are your key decision makers so you can engage them early on

#### Lesson 6

First message should have come from the company in charge of the project/site. In this case it came from the council

#### Lesson 7

It's important to have a gated decision-making process: you need to understand clearly how important your project is strategically if pushed

#### Lesson 8

Face to face dialogue is critical. It was important to have the owner of the project in front of the residents. You need to set aside time as an expert to give that face to face time to the community.

## ***4.2 Perth, Western Australia***

The Perth Fuel Cell Bus Project was generally extremely well received by the Perth, Western Australian, and Australian communities. The initiative received bi-partisan support in Parliament, and widespread support from people in the general community, ranging from pedestrians to motoring organisations to industry. Nearly two years after the buses have ceased operation, there are still many calls for them to be recommenced.

This reaction was, at least in part, the result of a well planned and well executed broad scale community relations plan. There were also particular initiatives which targeted school-children and specific occupational groups such as vehicle mechanics.

However, while the plan existed right from the commencement of the project, it was not implemented until after some significant community concerns were raised by an extremely small but vocal group. This meant that the Perth project was faced with trying to change community perceptions, rather than being able to provide information into a neutral atmosphere.



The hydrogen refuelling infrastructure for the Project was located on a public transport bus depot which housed some 120 public transport buses. The depot operated approximately 20 hours per day and there were refuelling facilities for petrol, diesel, and natural gas. The depot is located in an industrial area and the site is zoned for public transport uses. On one side of the depot is a concrete works, and on the other is a truck sales and repair business.

Initial meetings were conducted with all immediate neighbours to inform them of the development. No objections were raised. Subsequently, one neighbour commenced circulating material to neighbours containing inaccurate information about the plans, and factually incorrect material about hydrogen designed to promote fear and opposition. This included statements that the hydrogen would percolate into the ground water and pollute bores in the neighbourhood, and that the hydrogen tanks on the buses could explode and they would then be propelled like missiles several hundred metres into near businesses.

The Project was then faced with having to provide information aimed at rebutting the misinformation. Despite face to face meetings with the single major opponent, the Project was unable to gain his trust or get him to understand, let alone agree with, studies which counteracted his information.

The situation deteriorated further following neighbour representations to Opposition Parliamentarians and to the local Council which was considering planning approval. Consideration of the application was delayed considerably due to the political heat. It was only resolved by the applications being reviewed and approvals granted by the highest Planning and Environmental bodies in Western Australia. Subsequently the neighbour appealed to the Minister who was prepared to rule in favour of the project.

This lengthy and quite bitter experience highlighted one very significant (and sadly self-evident) lesson. Planning to consult is not enough. Consultation with all stakeholders must be implemented right at the beginning of the project and there must be real and fruitful two way dialogue between the stakeholders. Failure to follow this path meant that the Project was forced to try to undo mis-information, rather than provide the first information to the community. It also delayed the start of the project by many months