

Delphi Process Summary

Survey of Obstacles to Successful Low Carbon School Design

Introduction

The object of this research is to identify **obstacles** to successful low carbon school design and then to survey design teams to rate these obstacles according to how difficult they are to overcome.

The research is intended to be useful to design teams who are involved in a low carbon school design in the future. It should highlight potential obstacles to the design and allow the team to either avoid or mitigate for the consequences of that obstacle.

The research has two major parts:

Stage 1

A literature review followed by a Delphi process to obtain a robust list of obstacles to low carbon school design. Research in the field of construction has been highlighted in the past as an area with insufficient funding. From this it can be assumed that the literature review will not necessarily capture all the obstacles that have occurred in low carbon building projects. The inclusion of the Delphi process, then, is in order to ensure the list is as accurate and complete as possible, as well as being tailored specifically to school builds.

Stage 2

A survey of key stakeholders in design teams who have constructed a low carbon school in the recent past or forthcoming year. The respondents will be asked to select those obstacles that were relevant to their project and then rate them by the level of difficulty presented.

The Delphi Process

The Delphi method has been described as a method “used to obtain the most reliable consensus of opinion of a group of experts by a series of intensive questionnaires interspersed with controlled feedback”. Essentially it is a questionnaire with group feedback at each round, the purpose of which is to obtain consensus on the results from the group of experts.

The first round of this Delphi will ask the respondents to rate a set of obstacles to successful low carbon building design for their relevance to low carbon school design. The results will be returned to me, items over which consensus has been reached will be verified and removed from the list, and all debated items with relevant comments will be returned for review by participants as part of the second round. This process continues until consensus has been reached on the inclusion (or otherwise) of each obstacle. Consensus is typically reached in 3 rounds.

A diagram of the Delphi process can be seen below, Figure 1.

Criteria for Expert Selection

The criteria for expert selection are shown below. At least one of the criteria from each section must apply to you for participation in the study. The first questionnaire will include a short section for provision of evidence relating to these criteria (for example, citation for a peer-reviewed paper or description of role on a low carbon school project).

Section A

- Member of a professional construction body (such as CIBSE or RIBA)
- Employed at a University as an academic in an architectural or building studies group

Section B

- Have participated in the design or construction of a low carbon school, either as a member of the design team or as another relevant stakeholder
- Author or co-author on at least one paper considering an aspect of low carbon school design and/or construction
- Have presented two or more presentations on relevant low carbon school design topics at national or international conferences

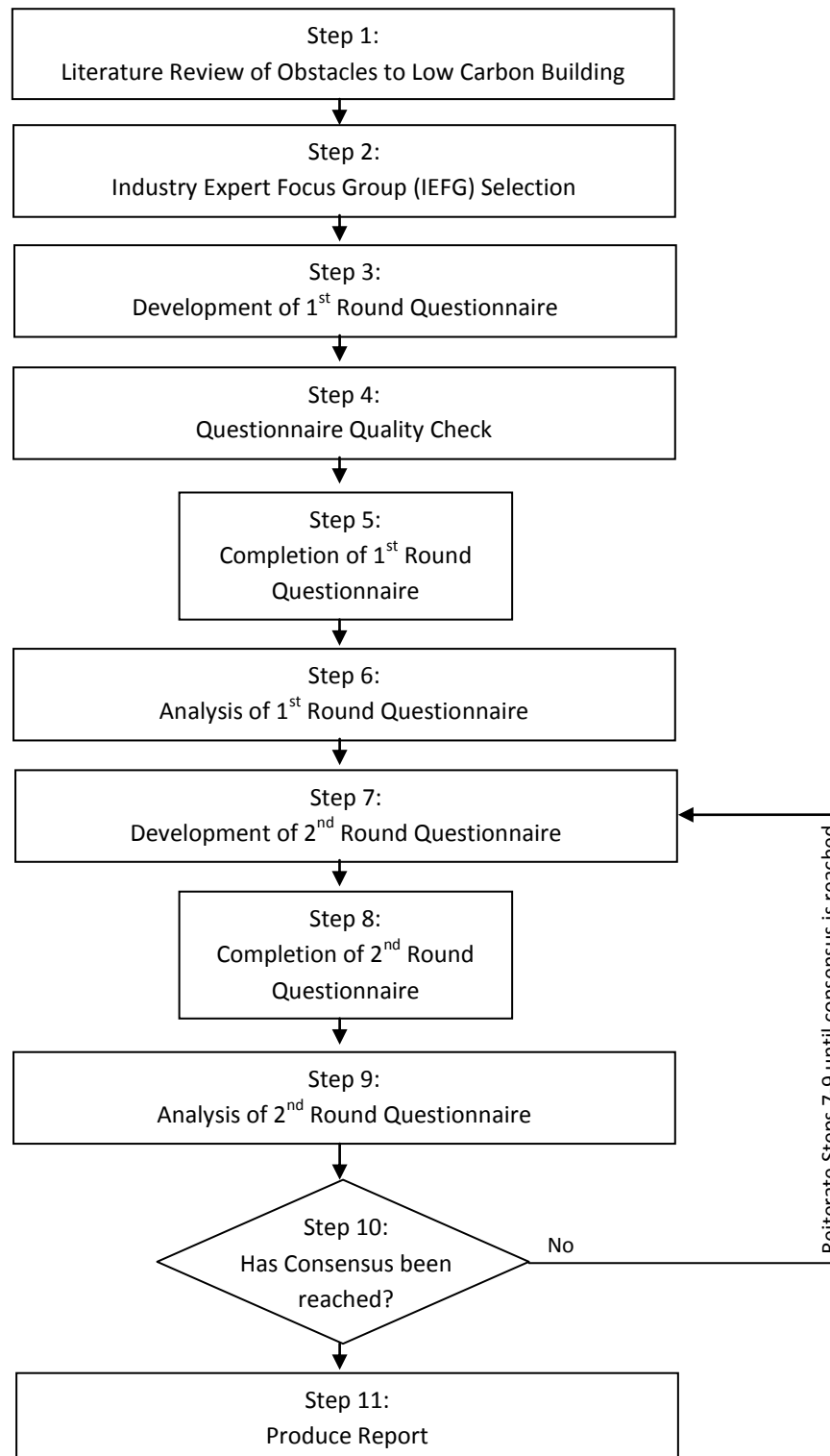


Figure 1. A diagram of the Delphi process