**DTI ‘Strategy for Sustainable Construction’ - consultation events**

**SKILLS**

1. **SUMMARY**

If the targets and visions in the DTI’s Review of Sustainable Construction 2006 are to be met, the skills base of the construction industry’s supply chains needs to be improved. Construction-Skills is the industry’s Sector Skills Council.

The recently published Leitch Review of Skills\(^1\) notes that ‘skills are a derived demand’. This means that in order to define them we need to understand the present/future market and industry’s/companies’ engagement and to develop strategies to meet the demand.

The CITB’s ‘Build to Last’ study showed that the industry does not yet accept the need for change to sustainable solutions, nor is it clear what that change should be. The pressure from clients to be sustainable is increasing but from a low base. The subject has a wide scope and is difficult to define. It is therefore not a pass/fail condition. Overall, the reasons to adopt sustainable construction are not sufficiently known or sufficiently compelling to persuade most companies to change.

**Understanding** – emerging

The concept of sustainability is only slowly entering the industry. It is difficult to grasp and some issues which are well understood, eg prefabrication, are not ‘badged’ as sustainability.

**Practice** – emerging

Some clients are asking for, or being persuaded of, the case for sustainable solutions, but they are few. In the SME market, lowest first price still dominates with attendant focus on traditional skills.

**Measurement** – basic metrics set, but measurement limited

The breadth and fragmentation of the industry makes the collection of data difficult

**Controls** – some regulation in place with good enforcement; elsewhere few signals to encourage learning

Trade schemes such as JIB and CORGI are well regulated and effective, as is the CSCS scheme, but many activities are uncontrolled, especially in the SME sector. None of the schemes has sustainability at its heart.

2. **VISION, TARGETS AND METRICS**

2.1. **Industry vision**

2.1.1. **Published provisional/initial targets and metrics**

The vision for sustainable construction has not been developed to a great extent in skills and training. The difficulty is that there is nothing specific for skills provision in this area as it relies on either the identification of ‘gaps’ in current training in order to identify groundbreaking cross-occupational working, or the development of stand-alone training. In the absence of strong drivers, neither is happening to any great degree.

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\(^1\) Leitch Review of Skills: Prosperity for all in the global economy – world class skills. HMSO 2006

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This paper was produced with the help of comments and contributions from DTI, CITB, Willmott Dixon and HBF. This does not imply that individuals or organisations necessarily endorse all views expressed in this paper.
Table 1

<table>
<thead>
<tr>
<th>Vision</th>
<th>Source of target</th>
<th>Associated metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero skills shortage (trades &amp; professions)</td>
<td>Review of sustainable construction 2006</td>
<td>Number of skilled shortfall; % trained annually; quality of life measurement</td>
</tr>
<tr>
<td>ConstructionSkills’ strategies that contribute to improved business performance in the industry</td>
<td>Review of sustainable construction 2006</td>
<td>None offered.</td>
</tr>
<tr>
<td>Half of occupational trades to have qualification</td>
<td>Review of sustainable construction 2006</td>
<td>Number of trades trained and retained</td>
</tr>
<tr>
<td>Increase number of apprenticeships</td>
<td>Labour Market trends 2004</td>
<td>Increase number of apprenticeships from 3000 to 13,000</td>
</tr>
<tr>
<td>Skills shortages are most acute in Professional markets</td>
<td>Labour Market trends 2004</td>
<td>Increase opportunities within SME sectors for training</td>
</tr>
</tbody>
</table>

WORKSHOP DISCUSSION POINTS

- Are the listed metrics appropriate and meaningful? Are any more significant than others?
- How much future change is going to be driven by regulations / enforced policy compared with market / voluntary measures?
- Which will constrain the industry more – a shortage of trade skills or professional skills?
- Should ‘sustainability’ skills be separate from traditional industry skills, or should ‘a sustainable industry’ be the underpinning motivation for all skills?
- What drivers/mechanisms are needed to increase demand for skills/training in sustainability? Are there specific actions that might be focused on?
- What are the linkages between sustainable construction, sustainable communities and sustainable training and work opportunities for those communities? What are the respective roles of industry, Government, etc. to address these linkages?

2.1.2. Metrics

The CITB’s Build to Last study showed that Government (policy, legislation and taxation, as well as its role as a client) was the dominant driver of change to sustainable construction, but none of the proposed metrics relate to Government drivers. Are these the right metrics?

There are no readily accessible reporting mechanisms that show progress with these metrics with the result that it will be difficult to judge success or failure.
Table 2 Assessment of current awareness and attainment

<table>
<thead>
<tr>
<th>Rating 0 – 5 (see Appendix 1 for guidance)</th>
<th>Zero skills shortage (trades &amp; professions)</th>
<th>Half of occupational trades to have qualification</th>
<th>Increase apprenticeships numbers from 3,000 to 13,000</th>
<th>Increase training opportunities within professional SME sector.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Established principles /sound science</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>2 Widely understood across industry</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3 (Technically) attainable with no risk and no skills shortage</td>
<td>-</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4 Cost-effective</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5 Compelling business case</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>6 Strong Market pull</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7 Established metrics and performance data</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8 Degree of regulation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

WORKSHOP DISCUSSION POINTS

- Are you aware of the performance of your organisation/its projects in the context of these targets?
- Does your organisation have data available on its own performance – if so, over how long?
- Do you agree with the assessments made in Table 2?

2.1.3. Current performance and interim targets

The industry’s variability in structure and size is vast and this is reflected in the current relationship between ‘industry’ and sustainable construction. At one end we have part of the industry and companies with detailed knowledge of and engagement with sustainability at the other end companies with little knowledge of or interest in this issue.

It is likely that different skills development activities will be needed both across the manufacturing/operational/professional markets and for different sizes of organisations, especially at the mini/micro SME end. A one-size-fits-all solution is unlikely to be appropriate.

Sufficient research has probably now been done; what is needed is development and implementation of appropriate strategies.

WORKSHOP DISCUSSION POINTS

- How attainable are the above targets?
• Given the vision and present position, what would be a reasonably achievable intermediate target?
• Which, if any, of the above initiatives are likely to have the greatest impact on this?

2.2. Published Government targets

2.2.1. UK targets

**Government target:** Developing sector skills councils that are valued, appropriately focused, and have viable strategies that are implemented effectively, and which contribute to improved business performance in the industry. [Source: Dti Review of sustainable construction 2006]

**Metric:** Capacity building; number of skilled shortfall; % trained annually; quality of life measurement

**Industry vision:** Zero skills shortage (trades and professions; existing workforce and trainees)

**Progress:** 25% of existing workforce trained; 100% of new trainees

**Achievement date:** Annual review

**Primary responsibility:** Government; CITB-ConstructionSkills; Summit-skills; professional organisations

**Mechanism for achievement:** Conscription; mandatory courses; CSR; awareness; mandatory SKILLCARD for access to sites

**Secondary responsibility:** Training organisations; clients; designers; contractors; CPD

2.2.2. Other published government/agency targets

**Labour Market Trends 2004**

**Target:** Increase number of apprenticeships

**Metric:** Increase from 3,000 to 13,000

**Target:** Skills shortages are most acute in professional markets.

**Metric:** Increase opportunities within SME sectors for training.

3. MECHANISMS

3.1. Policy and regulatory responsibility

The Government sets overall policies for national skills issues, but delegate’s implementation to the SSCs. There are more than 20 sector certification schemes for tradespeople, together with the more widely drawn CSCS scheme. Some schemes are regulated (eg CORGI), but many are voluntary. CITB is funded by an industry levy and should be responsive to industry’s demands.

3.2. Industry and market drivers

Skills training remains a largely voluntary activity for the industry. While the more technically advanced companies see the benefits of a sustainable approach and encourage the appropriate skills, the bulk of the industry is largely unaware and untrained. Trainers are also unclear how sustainability training should be marketed – should it stand alone or be integrated across the board?

It is likely that progress will be slow unless clients (including government clients) demand more sustainable solutions and/or regulation is introduced, particularly at the SME end.

**WORKSHOP DISCUSSION POINTS**

• Should sustainability become part of the on-site competence scheme (CSCS) like H&S? If so, how?
• What specific skills are needed in sustainability?
• Research suggests that many in the industry believe that they are advanced in the skills needed for sustainability. What is needed to put these skills into routine practice?
• Is the balance right between the needs of tradespeople and professionals?

Appendix 1
Guidelines for scoring Table 2

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles established and practice within reach of most companies</td>
<td>Widespread understanding of principles across most parts of the industry</td>
<td>Technically attainable with little or no risk</td>
<td>Cost effective to implement within present fiscal / regulatory regime</td>
<td>Compelling and well promoted business case</td>
<td>Strong market pull from both public sector and private sector</td>
<td>Published metrics on current performance / benchmarking</td>
<td>Highly regulated, clear signals of future policy / regs</td>
</tr>
<tr>
<td>SCORE 5</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Gaps in scientific / social / economic principles</td>
<td>Knowledge and understanding across most parts of the industry non-existent</td>
<td>Technical risks / serious skills shortages</td>
<td>Not presently cost effective in competitive market or using conventional business case justification</td>
<td>Little in the form of case studies and evidence of business case</td>
<td>Little market pull beyond regulatory minima</td>
<td>Little in the form of any currently openly available data</td>
<td>Largely unregulated and reliant on voluntary action</td>
</tr>
<tr>
<td>SCORE 0</td>
<td></td>
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