## Sustainability Skills for Growth

Research report





July 2013

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### **Executive Summary**

The Sustainability Skills for Growth research was completed by staff employed in all parts of the learning and skills sector and related sectors (Appendix 1). This report has been developed using a two stage process. An initial draft report was developed which presented the survey findings and outlined a number of recommendations. These recommendations were then consulted on, and any feedback taken into account. The recommendations in this final report represent the culmination of this process.

Our thanks go to all of those who took the time to provide such valuable and thoughtful input during both phases of the research.

A detailed list of recommendations, based on the research findings and consultation feedback, is provided later in this report. A summary of the key points includes:

- A clear and consistent message should be given to the FE and Skills sector about what is meant by sustainability and what it means for the Sector and its stakeholders.
- Sustainability should be made an integral part of FE and skills learning providers' policy, strategy, curriculum and operations.
- Generic skills (often called transferable skills) are as important as industry-specific skills in transition to a sustainable economy.
- A strong sustainability focus should be developed and embedded into the internal and external quality monitoring processes and related guidance.
- Awarding bodies should review the qualifications' content and expected delivery methods in order to place a greater emphasis on environmental and social developments.
- A representative body should be identified or created to guide and support sustainability-related activity across the sector.

### **Key Findings**

- The research title was interpreted by many respondents as skills for economic growth rather than sustainability. This is evident in the 48% of respondents defining Sustainability Skills for Growth as 'Skills that stimulate rapid economic growth' and only 7% agreeing with the 'Skills that support economic growth and social developments within environmental boundaries' option.
- Responsible energy and resource utilisation and caring and protecting employees were seen as the two most important characteristics that define a sustainable business. The financial strength option was rated lowest amongst the five options. This suggests that although the importance of financial well-being is recognised, it is not seen as the most important aspect of a sustainable business within the wider social and environmental contexts.
- Effective energy and resource utilisation; contribution to sustainable business developments; and contributing to sustainable approaches, technologies, products and services were identified as the most important skills to support the UK in transition to a sustainable economy.
- Respondents demonstrated a clear appreciation of the relevance and importance of the listed generic skills for the UK's transition to a sustainable economy. These included critical thinking, problem solving, change management, project management, motivation and engaging stakeholders and appreciating diversity.
- Further suggestions given by respondents as generic skills important for transition to a sustainable economy included, amongst others, technical, communication, leadership, financial and entrepreneurship skills. Respondents also highlighted the importance of a global focus and lifecycle assessment.
- The scores range from 91 to 100% suggesting that respondents understand the relevance
  of sustainability skills to all of the listed sectors. The higher scores received by the
  Engineering and Construction sectors may be due to the national focus on Green Deal and
  related initiatives, resulting in a perception that sustainability is more relevant to these
  sectors.
- All agreed that the FE and Skills sector has an important role to play in developing skills for transition to a sustainable economy, with 99% agreeing that skills for transition to a sustainable economy must be embedded in teaching and learning programmes. Only 31% agreed that existing teaching and learning programmes already incorporate skills for transition to a sustainable economy.
- Respondents agreed overwhelmingly that sustainability skills can stimulate economic growth through cost cutting, business efficiencies, innovation and collaboration opportunities. Other suggestions included stimulating growth in new markets and strengthening local supply chains.
- The importance of inclusion by opening up new economic opportunities to a diverse range of new or previously excluded people was highlighted by one respondent. Two other

- respondents stated that economic growth is not necessarily the best indicator of progress towards sustainability.
- Capacity building, awareness raising, developing a common understanding of sustainability, top-level support and funding are all seen as key challenges faced by FE and skills learning providers. For 79% of the respondents 'not having management support' was a key issue of concern.
- Other challenges identified by respondents included:
  - Getting the message right
  - Government policy
  - Qualification specifications
  - A perceived lack of available time to focus on sustainability
  - Access to sustainable technologies
  - Capital funding
  - Industry, local authority type support/engagement
  - Encouraging Ofsted to prioritise it as a key agenda item
- Respondents agreed that the sustainability agenda presents many new opportunities for the FE and Skills sector, including opportunities for funding, collaboration, curriculum enhancement and up-skilling of the workforce.
- 75% of the respondents indicated that sustainability is a key strategic priority in their organisations. 67% stated that effective resource management processes are in place and 32% said their organisations embedded sustainability into all curriculum areas.
- This may suggest that a majority of organisations seeing sustainability as a key priority only focus on the estates and operational aspects with relatively few of them focusing on curriculum developments.
- All five economic sectors listed in the survey were rated highly by respondents as potential growth areas.

#### Introduction

This LSIS project led by ESD Consulting Ltd and Bedford College aims to explore sustainability skills, their relevance to employment, employers and business, and the opportunities challenges and barriers to the FE and skills sector in leading the development of those skills.





This is one of two research projects that LSIS has recently commissioned on the topic of sustainability. Together they are intended to develop our understanding of the relevance of sustainability to learning and skills development, and identify effective approaches that can be shared and embedded. The other project, led for LSIS by Change That Matters and Action for Sustainability, approaches the topic from another perspective in order to explore how sustainability can be effectively embedded into teaching, learning and curriculum, and the specific skills and knowledge that teaching staff require to do this. Although they are separate projects, the project teams worked closely together.

Survey participants were members of numerous regional and national organisations and networks, including LSIS Regional Sustainability network members, AOC regional and national networks, representatives of organisations that participated in LSIS sustainability projects, EAUC members, and members of organisations represented on SDALS (Sustainable Development Alliance for Learning and Skills). 111 surveys were completed by respondents with wide-ranging roles and responsibilities within the FE, skills and related sectors. An outline of the respondents' profile is given below:

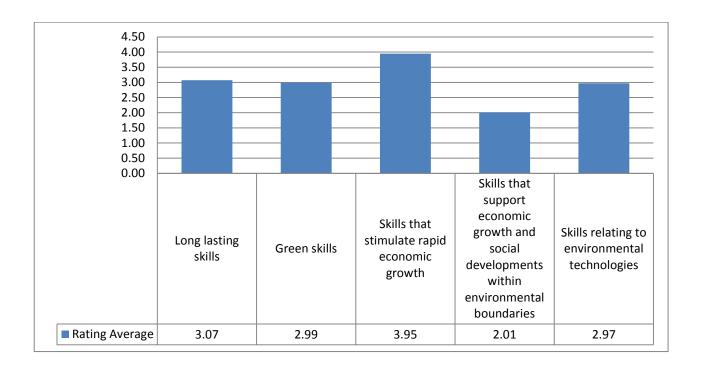
Further Education	56%
Higher Education	11 %
Adult & Community Learning	9 %
Other	24%

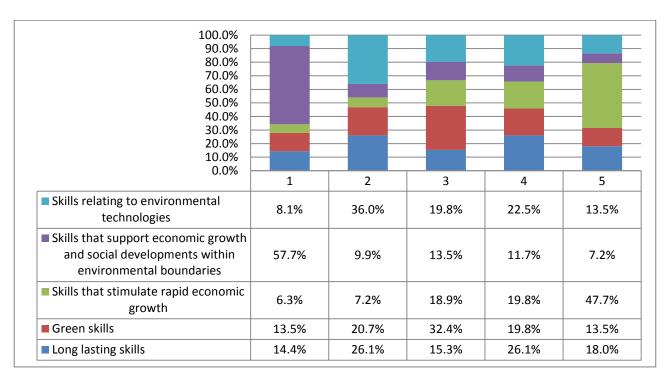
Executive / Directorate	23 %
Estates / Operations	41 %
Teaching	25 %
Other	10 %

<sup>(</sup>figures rounded to nearest whole number)

## **Survey Responses**

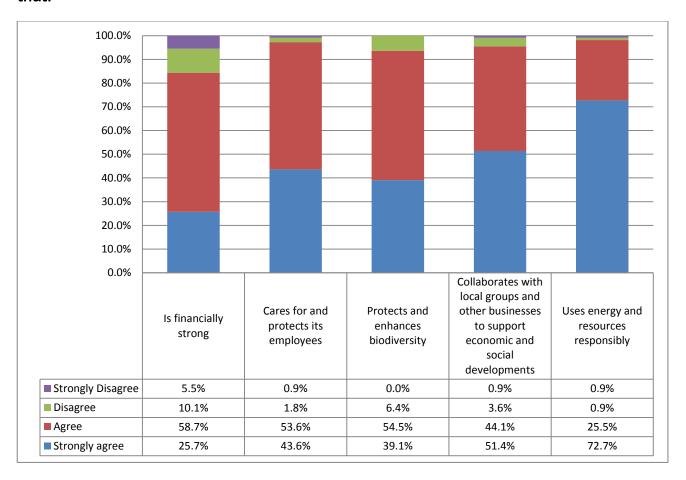
Question 1: How well do these phrases describe 'Sustainability Skills for Growth'? Rate the following five statements in order of priority. (1= Very well; 5= Very poorly)





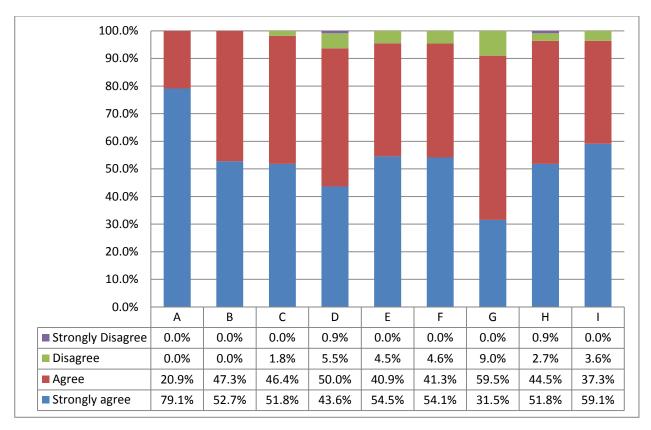
'Skills that stimulate rapid economic growth' was given the highest average rating of 3.95 with about 68% of respondents stating that it is not an accurate description of Sustainability Skills for Growth and only about 14% identifying it as an accurate description. 'Skills that support economic growth and social developments within environmental boundaries' scored the lowest average rating of 2.01 with about 68% of respondents selecting it as an accurate description of sustainability skills for growth, 19% as a poor description, and about 13% non-committal. This may be because 32% of respondents perceived the 'Skills for Growth' in the research title as simply economic growth rather than sustainable development.

Question 2: Do you agree with the following statement? A sustainable business is one that:



With scores ranging from 84% to 98%, a high percentage of the respondents agreed that all five statements describe a sustainable business. The lowest rating of 84% was for economic sustainability and highest rating of 98% for energy and resource efficiency. 97% of respondents identified caring and protecting employees as a key element of a sustainable business.

Question 3: Do you agree with the following statement? These are important skills to support the UK in the transition to a sustainable economy:



#### Key:

Α	Using energy and resources effectively to minimise waste
В	Contributing to sustainable business developments
С	The ability to contribute to sustainable approaches, technologies, products and services
D	The ability to identify commercial risks and opportunities presented by sustainability
Е	The ability to inspire change in a broad range of people within and outside of the organisation
F	The ability to motivate and engage a diverse range of people within the organisation to make sustainable business decisions
G	The ability to work collaboratively with different economic sectors
Н	Effective and persuasive communication on sustainability issues
1	The ability to consistently work towards a longer term vision

An overwhelming majority of respondents, ranging between 100% and 91% agreed with all these statements. All respondents agreed that skills relating to effective use of energy and resources and contributing to sustainable business developments are important.

The second highest percentage was 98 % agreeing that skills relating to contributing to sustainable approaches, technologies, products and services are important. However, at the same time less than a third agree strongly about the important of working collaboratively with different economic sectors.

100.0% 90.0% 80.0% 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% Motivating Critical Problem Change Project **Appreciating** and engaging management Thinking Solving management diversity stakeholders

Question 4: Do you agree with the following statement? These are important skills to support the UK in the transition to a sustainable economy:

A high majority of respondents agreed on the importance of all these generic skills. The highest level of disagreement of about 5% relates to 'appreciating diversity' and 'change management'. Notably, less than 50% agreed strongly about the importance of 'project management and 'appreciating diversity' to the transition to a sustainable economy.

0.0%

4.6%

36.7%

58.7%

0.0%

1.8%

56.9%

41.3%

0.0%

1.8%

39.1%

59.1%

0.0%

5.5%

46.4%

48.2%

0.0%

0.9%

35.8%

63.3%

0.0%

2.8%

45.0%

52.3%

■ Strongly Disagree

■ Strongly agree

Disagree

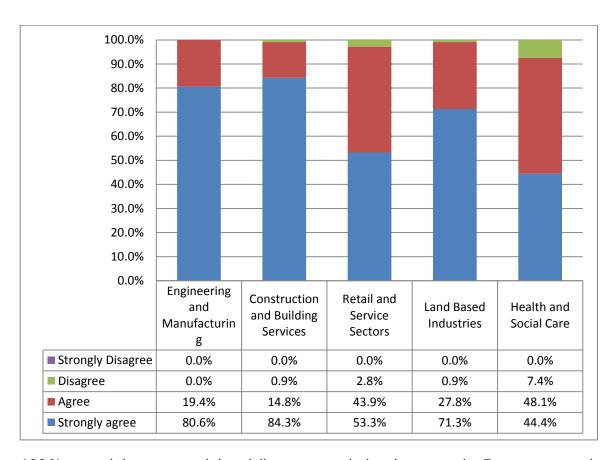
Agree

## Question 5: Are there any other skills you would see as being important to support the UK in the transition to a sustainable economy?

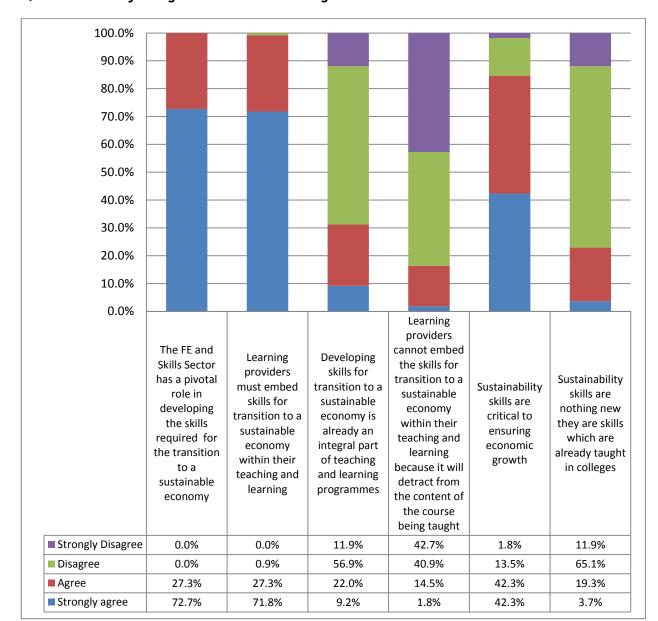
This question generated a range of responses identifying skills such as systems thinking, long term planning and financial planning. However of the 35 skills suggested by those who responded, 20% suggested that communication skills were critical in the transition to a sustainable economy.

Other common themes included the need to collaborate and share best practice at a national and international level. Knowledge management and entrepreneurship were also well represented in the feedback. Those who responded clearly highlighted a need to marry up new technical knowledge with a practical application of this new thinking and new approaches. A full list of the skills suggested by respondents can be found in Appendix 2.

## Question 6: Sustainability skills are particularly relevant to these sectors of the UK economy:



100% agreed that sustainability skills are particularly relevant to the Engineering and Manufacturing sectors and 99% chose Construction, Building Services and Land Based industries. The lowest rating of 92% was given for Health & Social Care, where less than 50% agreed strongly. This is likely to be partly due to the strong national focus on stimulating growth in the Construction and Technology sectors, including investment in environmental technologies and energy efficient buildings. Some may see sustainability relating only to technical disciplines and do not see its relevance to sectors such as Health and Social Care.



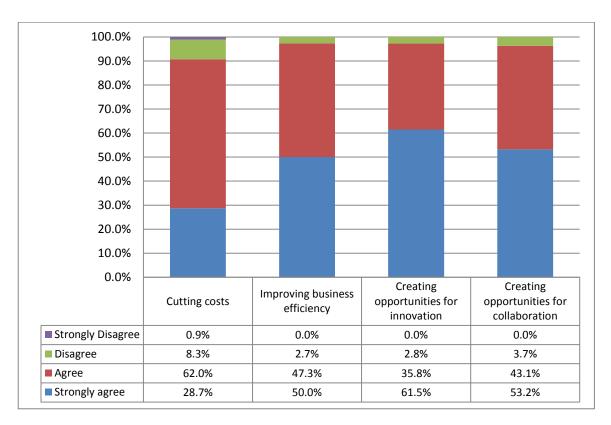
Question 7: Do you agree with the following statements?

100% of respondents recognise the important role of the FE and Skills sector in developing skills for transition to a sustainable economy. 99% agree that skills for transition to a sustainable economy must be embedded in teaching and learning programmes.

Only 31% agreed that existing teaching and learning programmes already incorporate skills for transition to a sustainable economy.

17% agreed that embedding sustainable economy related skills into an existing course would detract from the content of the course being taught while 31% agreed that such skills are already a part of teaching and learning programmes.

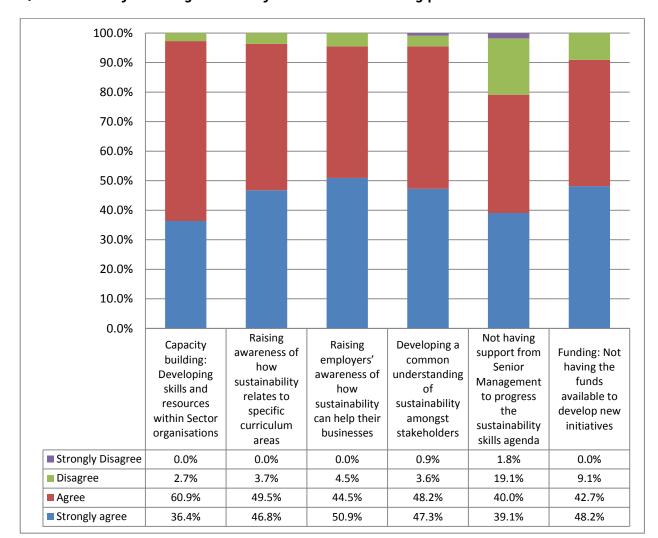
#### Question 8: Sustainability skills can stimulate economic growth by:



91 %-97 % of respondents agreed that sustainability skills can stimulate economic growth through cost-cutting, business efficiencies, innovation opportunities and collaboration opportunities.

#### Other suggestions included:

- Improving individual skills and competitiveness
- Stimulating growth in new markets
- Creating Green Jobs
- Enterprise
- Strengthening local supply chains
- Changing business culture & markets
- Inclusive by definition, a positive approach to sustainability skills growth will open up
  economic opportunities to a diverse range of new or previously excluded people, whose
  ideas and energy will improve the opportunities that flow from a real programme of skills
  development in this field
- A truly sustainable economy will be steady state. Economic growth, by definition is unsustainable on a planet of limited resources
- Economic growth is not necessarily best indicator of progress towards sustainability
- Creating alternative jobs e.g. in solar panels rather than straight plumbing/elect. Protecting resources which will be needed in the future
- Creating awareness both internal and external

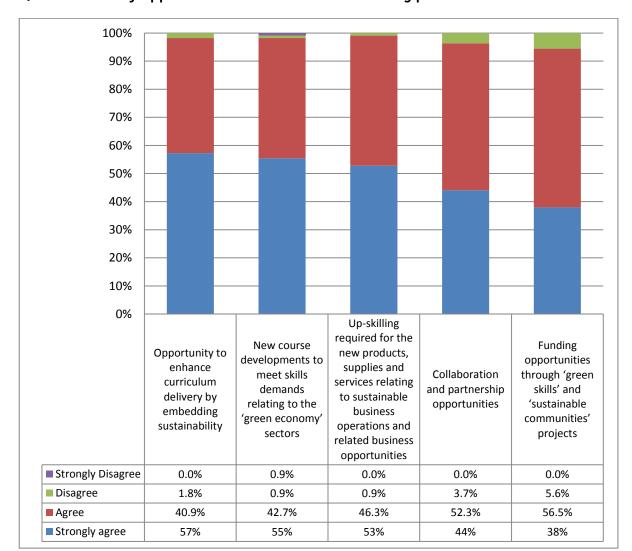


Question 9: Key challenges faced by FE and Skills learning providers include:

Capacity building, awareness raising, developing a common understanding of sustainability, top-level support and funding are all seen as key challenges faced by learning providers. 79 % agreed that 'not having management support' is a key issue of concern. Interestingly, over a fifth do not agree that a lack of senior management support is a challenge.

#### Other suggestions included:

- To get the message right
- Government policy
- Specifications of qualifications need changing
- A perceived lack of available time to focus on the topic
- Access to sustainable technologies
- Capital investment
- Industry, local authority type support/engagement
- Encouraging Ofsted to prioritise it as a key agenda item



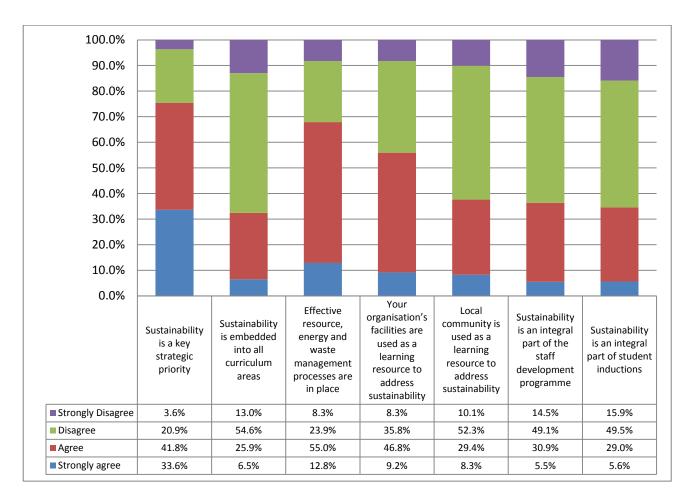
Question 10: Key opportunities for FE and Skills learning providers include:

The listed opportunities all scored very highly with 94% for funding, 96% for collaboration, 98% for curriculum enhancement and new course developments and 99% for up-skilling of the workforce.

#### Other suggestions included:

- Government involvement with the progress
- Outdoor education sense of place. John Muir Award
- Improvements in student progression to employment
- Funding opportunity is becoming tighter, needs further coordination

Question 11: To what extent do these statements apply to your organisation?



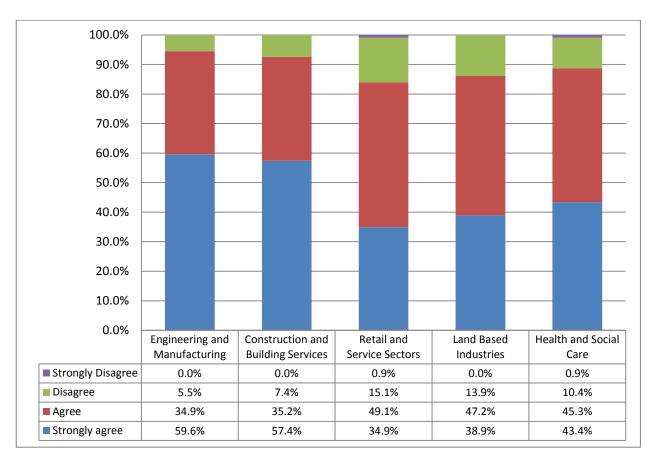
About 75% of respondents stated that sustainability is a key strategic priority in their organisations with:

- 32% having embedded sustainability into all curriculum areas
- 67% with effective resource, waste and energy management processes in place
- 56% utilising facilities as a learning resource
- 37% using the community as a learning resource
- 36 % embedding sustainability into CPD programmes
- 35% embedding sustainability into student inductions

These responses illustrate the strong and growing focus on energy and resource efficiencies. They also illustrate the limited sustainability focus in curriculum content, community links, and staff development or student inductions. In response to Question 3, 100% of respondents had indicated that energy and resource efficiency is an important skill to support the UK in the transition to a sustainable economy. Cost benefits of energy and resource efficiencies tend to be a key incentive for all learning providers. Many organisations that have identified sustainability as a strategic priority perceive energy and resource management as their sustainability goal and have not yet developed a curriculum focus.

Other: None suggested.

Question 12: These are the potential growth areas within the UK economy:



All five sectors were rated highly as potential growth areas with about 95% for Engineering and Manufacturing and 93% for Construction and Building Services. 84% of respondents agreed that Retail and Service Sectors are potential growth areas.

### Recommendations

**R1:** A clear and consistent message should be given to the FE and Skills sector about what is meant by sustainability and what it means for the Sector and its stakeholders.

**R2:** It is important to present a balanced and holistic view of sustainability, including a strong people focus, in order to develop a greater appreciation of the wider sustainability issues.

**R3:** Generic skills (often called transferable skills) are as important as industry-specific skills in transition to a sustainable economy. These will help achieve and maintain sustainable economic development. There should be an expectation for training programmes and learning providers to develop these important skills regardless of the topic of study.

**R4:** There must be a concerted effort within the FE and skills sector to embed sustainability into all curriculum disciplines, and to emphasise the relevance and importance of sustainability to all sectors of the economy.

**R5:** When communicating sustainability there is a need to ensure that the holistic nature of the concept is used. Sustainability must be seen and understood as achieving and maintaining economic well-being within environmental and social boundaries.

**R6:** Sustainability to be made an integral part of FE and skills learning providers' policy, strategy and longer term plans.

**R7:** Awarding bodies should review the qualifications' content and expected delivery methods in order to place a greater emphasis on environmental and social developments, not focusing purely on economic developments.

**R8:** A strong sustainability focus should be developed and embedded into internal and external quality monitoring processes and related guidance.

**R9:** There should be an expectation from learning providers to work collaboratively with external stakeholders on sustainable community development initiatives.

**R10**: There is a need to change many learning providers' perceptions that offering a training programme on a new environmental technology makes them sustainable. Sustainability is only possible through a whole institution approach focusing on all curricula and operations.

**R11:** A representative body to be identified or created to guide and support sustainable development related activity across the Sector. Such a body would have a clear appreciation of the wider strategic sustainability issues as well as operational issues such as those relating to investment priorities, capital developments, travel, procurement, energy, waste, partnership opportunities and others.

**R12**: Organisations to develop strategies for embedding sustainability into the curriculum by taking forward the following suggestions (this is not an exhaustive list):

- Using the organisation as a learning resource
- Supporting sustainability through curriculum delivery

- Embedding sustainability into staff and student inductions
- Embedding sustainability into CPD programmes
- Sharing best practice.

# Appendix 1 – Sustainability Skills for Growth Survey questionnaire

Sustainable Development is about strengthening economic well-being by equipping individuals with the right skills and values to help build strong communities, while protecting and enhancing the environment. This is the primary role of the FE and skills sector.

This LSIS project led by ESD Consulting Ltd and Bedford College aims to explore sustainability skills, their relevance to employment, employers and business, and the opportunities challenges and barriers to the FE and skills sector in leading the development of those skills.

This is one of two research projects that LSIS has recently commissioned on the topic of sustainability, which together are intended to develop our understanding of the relevance of sustainability to learning and skills development, and identify effective approaches that can be shared and embedded. The other project, led for LSIS by Change That Matters and Action for Sustainability, is exploring the relationship and relevance of sustainability and sustainable development to further education, to identify the specific skills and knowledge that teaching staff require to effectively embed sustainability in teaching, learning and the curriculum, and to determine key ingredients, opportunities and strategies. Although they are separate projects, the project teams are working closely together. You may well be invited to participate in both of these projects, and if so we hope you can do so.

Completing this survey will take no more than 10 minutes of your time. The information you provide will be invaluable in helping us define and shape the FE and skills sector's role in developing sustainability skills.

Name		
Surname		
Organisation		
Role		
Telephone		
E-mail		
1. How well do these phro Growth'?	ases describe 'Sustainability Skills for	Insert each number 1 to 5 only once
Rate the following five sto	tements in order of priority.	
1=Describes it very well; 5	= Describes it very poorly	

Long lasting skills				
Green skills				
Skills that stimulate rapid economic growth				
Skills that support economic growth and social developmential boundaries	nents withi	n		
Skills relating to environmental technologies				
Do you agree with the following statements?				
2. A sustainable business is one that:	Strongly agree	Agree	Disagree	Strongly Disagree
Is financially strong				
Cares for and protects its employees				
Protects and enhances biodiversity				
Collaborates with local groups and other businesses to support economic and social developments				
Uses energy and resources responsibly				
3. These are important skills to support the UK in the transition to a sustainable economy	Strongly agree	Agree	Disagree	Strongly Disagree
Using energy and resources effectively to minimise waste				
Contributing to sustainable business developments				
The ability to contribute to sustainable approaches, technologies, products and services				
The ability to identify commercial risks and opportunities presented by sustainability				

The ability to inspire change in a broad range of people within and outside of the organisation				
The ability to motivate and engage a diverse range of people within the organisation to make sustainable business decisions				
The ability to work collaboratively with different economic sectors				
Effective and persuasive communication on sustainability issues				
The ability to consistently work towards a longer term vision				
4. These are important skills to support the UK in the transition to a sustainable economy	Strongly agree	Agree	Disagree	Strongly Disagree
Critical Thinking				
Problem Solving				
Change management				
Project management				
Motivating and engaging stakeholders				
Appreciating diversity				
5. Are there any other skills you would see as being important to support the UK in the transition to a sustainable economy?				
6. Sustainability skills particularly relevant to these sectors of the UK economy:	Strongly agree	Agree	Disagree	Strongly Disagree
Engineering and Manufacturing				
Construction and Building Services				

Retail and Service Sectors				
Land Based Industries				
Health and Social Care				
	l			l
7. Do you agree with the following statements?	Strongly agree	Agree	Disagree	Strongly Disagree
The FE and Skills Sector has a pivotal role in developing the skills required for the transition to a sustainable economy				
Learning providers must embed skills for transition to a sustainable economy within their teaching and learning				
Developing skills for transition to a sustainable economy is already an integral part of teaching and learning programmes				
Learning providers cannot embed the skills for transition to a sustainable economy within their teaching and learning because it will detract from the content of the course being taught.				
Sustainability skills are critical to ensuring economic growth				
Sustainability skills are nothing new they are skills which are already taught in colleges				
8. Sustainability skills can stimulate economic growth by:	Strongly agree	Agree	Disagree	Strongly Disagree
Cutting costs				
Improving business efficiency				
Creating opportunities for innovation				

Creating opportunities for collaboration				
Other (please state)				
9. Key challenges faced by FE and Skills learning providers include:	Strongly agree	Agree	Disagree	Strongly Disagree
Capacity building: Developing skills and resources within the organisation				
Raising awareness of how sustainability relates to specific curriculum areas				
Raising employers' awareness of how sustainability can help their businesses				
Developing a common understanding of sustainability amongst stakeholders				
Not having support from Senior Management to progress the sustainable skills agenda				
Funding: Not having the funds available to develop new initiatives				
Other (please state)				
10. Key opportunities for FE and Skills learning providers include:	Strongly agree	Agree	Disagree	Strongly Disagree
Opportunity to enhance curriculum delivery by embedding sustainability				
New course developments to meet skills demands relating to the 'green economy' sectors				
Up-skilling required for the new products, supplies and services relating to sustainable business operations and related business opportunities				
Collaboration and partnership opportunities				

Funding opportunities through 'green skills' and 'sustainable communities' projects				
Other (please state)				
11. To what extent do these statements apply to your organisation?	Strongly agree	Agree	Disagree	Strongly Disagree
Sustainability is a key strategic priority				
Sustainability is embedded into all curriculum areas				
Effective resource, energy and waste management processes are in place				
Your organisation's facilities are used as a learning resource to address sustainability				
Local community is used as a learning resource to address sustainability				
Sustainability is an integral part of the staff development programme				
Sustainability is an integral part of student inductions				
Other (please state)				
12. These are the potential growth areas within the UK economy:	Strongly agree	Agree	Disagree	Strongly Disagree
Engineering and Manufacturing				
Construction and Building Services				
Retail and Service Sectors				
Land Based Industries				
Health and Social Care				

## Appendix 2 – Detailed responses to Question 5

#### Question 5:

Are there any other skills you would see as being important to support the UK in the transition to a sustainable economy?

- 1. Collaboration and co-operation, and the ability to work together
- 2. Systems thinking and seeing the bigger/wider picture, including:
  - Giving value to criteria that are not normally economically valued e.g. quality of life
  - Equality and diversity, fairness and awareness of the practicalities and impact of change
  - Long term planning and forecasting future needs and issues, eg a whole-life approach to education, environmental scanning
- 3. Creativity, flexibility and adaptability
- 4. Clear and transparent awareness raising, engagement, communication and dialogue through a variety of media
- 5. Leadership & management, including strategic decision making and the ability to reflect
- 6. A global approach that takes in international best practice and global economic factors
- 7. Financial skills, including financial risk assessment
- 8. Technical skills, including knowledge of environmental issues and technologies, life cycle cost analysis, acquisition and deployment of resources
- 9. Entrepreneurship and enterprise

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