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Educating for Sustainability: Creating a Comprehensive, Coherent and Compelling Approach - Guidelines for Sustainability Standards and Resource Materials

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Educating for Sustainability: Creating a Comprehensive, Coherent and Compelling Approach

Guidelines for Sustainability Standards and Resource Materials

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On an international level, there were many institutions from around the world who were generous with both their time and resources and whose openness and willingness to share their expertise and practice contributed in a significant way to the research.

Executive Summary

- In 2007, Fáilte Ireland's Environment Unit, in collaboration with the Education Policy Section, commissioned a review of sustainability content in tourism¹ education and training programmes at NQAI² levels 4-8 throughout the State with a view to recommending improvements where necessary. The review, carried out on Fáilte Ireland's behalf by the Tourism Research Centre of the Dublin Institute of Technology, was - in terms of breadth and depth - the first of its kind to be undertaken at a national level, not only in Ireland but in any of the other countries surveyed during the course of the review.
- The review coincides with the preparation of a National Strategy for Education for Sustainable Development (ESD) by the Irish Government as part of the UN Decade for ESD 2005 - 2014. The goal of the UN Decade of ESD is to integrate the principles, values and practices of sustainable development into all aspects of education and learning.³
- The objectives of the research were to
 - evaluate current sustainability content in tourism-related education and training programmes throughout the State;
 - identify international best practice in relation to such content internationally;
 - address shortfalls or inconsistencies by developing guideline standards and learning outcomes for all tourism-related education programmes.
- Desk research was conducted including the compilation of a database of tourism-related programmes and content in Ireland. An extensive consultation process with national and international experts from education and industry was also conducted. The review also examined the sustainability content of tourism-related programmes in selected countries worldwide, including Canada, New Zealand, United States of America, France and the UK. Overall, almost 100 participants were involved in this review.
- The review found that sustainability is a poorly understood and inconsistently applied concept. Evidence suggests that there is little or no systematic treatment of sustainability issues in Irish validated tourism and hospitality related programmes. Incorporation of sustainability content is largely discretionary and tends to be driven by an interest in such issues on the part of individual lecturers. Irish resource materials are scarce, resulting in a heavy dependence on international (especially UK) resources.
- The Irish provision of sustainability content, when compared to overall international provision, does not appear to lag significantly behind. The review did, however, identify certain aspects of international provision which could complement the Irish provision, and these are reflected in the key recommendations highlighted in this report.

¹The review considered a broad range of tourism-related programmes within the disciplines of Hospitality, Culinary Arts, Leisure, Event Management and Tourism.

²National Qualifications Authority of Ireland

³While the guidelines and standards detailed in the report were formulated in advance of the publication of the initial national consultation discussion paper *Developing a National Strategy on Education for Sustainable Development in Ireland (2007)*, they are in line with emerging national policy in the area. The National Strategy for ESD is currently being finalised, but many of the issues raised in this review are reflected in the consultation process to date.

The key recommendations arising from the review are that:

- There should be an integrated, holistic approach to sustainability programme content.
- Sustainability should be treated as a philosophy, informing all aspects of a learner's life, rather than as a self-contained curriculum module.
- The principles of sustainability should be embedded in teaching and learning across all programmes and modules.
- Theoretical as well as practical elements should be incorporated, even at skills levels.
- Where institutions deliver dedicated sustainability modules, these modules should form part of the core programmatic requirements.
- There is a need to focus on 'sustainability', rather than 'sustainable tourism', 'sustainable kitchen management' or any other limiting definition.
- There should be recognition of the fact that sustainability is an ongoing debate, requiring the selection of appropriate teaching and learning strategies, and that lecturers themselves remain informed about trends and future developments.
- The 'triple bottom line' of sustainability (i.e. economic, environmental and socio-cultural elements - and their inter-relationship) should be addressed when considering sustainability issues.
- Institutions must look at their own practices in the context of sustainability (e.g. waste management, energy conservation and water use), as these unconsciously inform teaching and learning.

This report offers a range of creative teaching and learning guidelines. These are designed to be flexible: colleges, institutions and individual lecturers are encouraged to adapt - or add to - these guidelines, according to specific needs, requirements and resources. A useful 'toolkit' of recommended sustainability learning outcomes has been developed and illustrates how sustainability issues can be incorporated into learning outcomes for a range of tourism and hospitality-related programmes at each of the NQAI Award levels 4-8. A comprehensive range of guideline resource materials - both conventional and e-based - is also included in this report.

1. Introduction

Ireland's Appeal - No Room for Complacency

Natural, unspoilt environment, the relaxed pace of life in Ireland and the sense of safety and security: all of these aspects traditionally have been and continue to be the most highly rated features of an Irish holiday.

Visitor Attitudes Survey 2006, Fáilte Ireland.

Research⁴ has shown that the key advantages Ireland enjoys over competing tourism destinations are the friendliness and spontaneity of its people, and a beautiful and unspoiled environment. Between them, these “core values” constitute the very heart of the Irish tourism product.

Ireland's tourism industry is faced with the challenge of maintaining the credibility of Ireland's 'clean, green' image. Related challenges include the need to adapt to climate change and manage the quality of the cultural and natural resources upon which the tourism industry depends. While there has been significant success in recent years in decoupling economic development from negative environmental and social impacts, Ireland's environment, society and economy continue to change following the rapid economic growth of the past two decades. The success of the Irish tourism industry in the future will depend on its ability to remain competitive in a changing Ireland and a changing world. To ensure success, the principles of sustainability must pervade every aspect of the tourism industry, including, and perhaps most importantly, the education and training system.

Meeting the Challenge of Sustainable Tourism

As part of a long term strategy of educating toward sustainable management, Fáilte Ireland in 2007 commissioned a review of existing sustainability content in all tourism -related education and training programmes at NQAI (National Qualifications Authority of Ireland) Levels 4-8.

The research brief was to:

1. Assess the extent to which tourism-related education and training programmes at NQAI Levels 4-8 address the principles and practice of sustainable tourism.
2. Identify international best practice in relation to sustainability content in tourism education and training programmes.
3. Address identified shortfalls or inconsistencies in Irish education and training by developing:

⁴ OTMI 'Consumer Journeys' research Fáilte Ireland's Annual Visitor Attitudes Survey

- a. The standards and outcomes that should be achieved in relation to tourism-related education and training programmes
- b. Guidelines for resource materials
- c. Guidelines for methods of teaching / delivery
- d. Recommendations on up-skilling those working within the industry

Fáilte Ireland commissioned the Tourism Research Centre of the Dublin Institute of Technology (DIT) to conduct this pioneering survey - the first of its kind to be undertaken at a national level, not only in Ireland, but in any of the countries surveyed.⁵

This review coincided with the preparation of a National Strategy for Education for Sustainable Development (ESD) by the Irish Government as part of the UN Decade for ESD 2005 - 2014. The goal of the UN Decade of ESD - which also informed this review - is to integrate the principles, values and practices of sustainable development into all aspects of education and learning.

While the guidelines and standards detailed in the report were formulated in advance of the publication of the initial national consultation discussion paper *Developing a National Strategy on Education for Sustainable Development in Ireland (2007)*, they are in line with emerging national policy in the area. The National Strategy for ESD is currently being finalised, but many of the issues raised in this review are reflected in the consultation process to date.

Defining Sustainability

A particular challenge for the review was the confusion that surrounds the definition of sustainability and the many variants that exist. When the World Commission on Environment and Development (Brundtland Commission) placed the concept centre stage in its landmark 1987 report, it defined sustainable development as *“development that meets the needs of the present without compromising the ability of future generations to meet their own needs”*.

With specific reference to tourism, the United Nations World Tourism Organisation (UNWTO) defined sustainable tourism development as development that *“meets the needs of present tourists and host regions, while protecting and enhancing opportunities for the future”*.

In the Irish context, the Department of the Environment, Heritage and Local Government defines sustainable tourism as tourism that

... provides a high quality product based on, and in harmony with, a high quality natural environment. It minimises adverse impacts on local communities, our built heritage, landscapes, habitats and species while supporting social and economic prosperity

⁵ While discussion regarding the integration into education of sustainability principles and practices is not new, efforts in this regard to date have been limited in scope. The research conducted by Eber (2003) on behalf of Tourism Concern and the Association of Tourism in Higher Education, in conjunction with London Metropolitan University, helped to inform the review process. However, this UK based review was more limited in scope, focusing solely on the integration of sustainability into a standard three year tourism and leisure degree programme. A copy of the report is available on: http://www.athe.org.uk/publications/guidelines_10.pdf

This is the central definition which was used throughout the course of the research, when prompted by research participants to explain what was meant by 'sustainability' and 'sustainable tourism'. It was supported by the following principles of sustainable tourism, as defined by the World Tourism Organisation: Sustainable tourism should:

1. Make optimal use of environmental resources
2. Respect the socio-cultural authenticity of host communities
3. Provide socio-economic benefits to all stakeholders
4. Involve informed participation of all relevant stakeholders, as well as strong political leadership
5. Be a continuous process which requires constant monitoring of impacts
6. Maintain a high level of tourist satisfaction

Structure of the Report

The report is set out in 6 key parts:

Part 1: The Executive Summary and the Introduction [Section 1]

Part 2: Research Methodology including Phase I Assessment of Irish Tourism-related Programmes, Phase II International Best Practice Review and Phase III Development of Programme Content [Sections 2-5]

Part 3: Key Findings and Recommendations from Research Phases I and II which included the Assessment of Irish Tourism-related Programmes and International Best Practice Review [Section 6]

Part 4: Guidelines for the Development of Programmatic Content and Background to National Framework of Qualifications [Sections 7-8]

Part 5: Recommended Sustainability Learning Outcomes - Overview and Guideline Standards for Hospitality, Culinary Arts, Leisure, Event Management and Tourism Levels 4-8 [Sections 9-14]

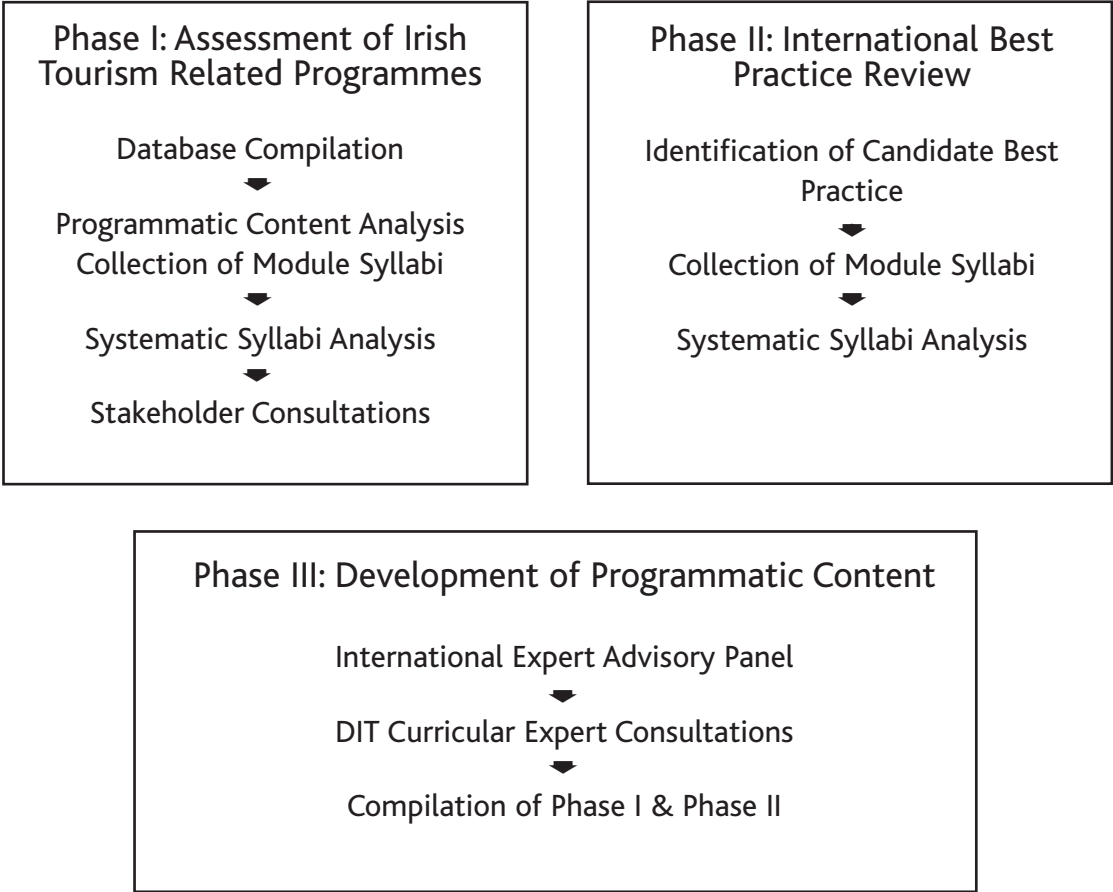
Part 6: Teaching and Learning Strategies and Guidelines Resource Materials [Sections 15-16]

A copy of the full research report can be accessed on the Fáilte Ireland website: www.failteireland.ie

2. Research Methodology

In order to conduct this review, a project team comprising tourism, sustainability and curricular experts was drawn together, and the research was conducted in three phases, using a mixed methodology approach. The diagram below outlines the three phases.

2.1 Phased Approach



2.2 Data Analysis Tool

As sustainability is such a diverse term, the research team developed a matrix outlining 'Dimensions of Sustainability'⁶ to facilitate the examination of sustainable tourism content in the identified modules. This matrix contains 12 themes which are the key issues/concepts identified as being central to sustainable tourism development and management. It provides a guiding framework to ensure consistency of approach across the phases of the project. It is employed in both the assessment of Irish tourism-related programmes and the review of international best practice. The sustainability themes are:

- Triple Bottom Line⁷
- Environmental Sustainability
- Socio-Cultural Sustainability
- Economic Sustainability
- Resource Management Issues
- Sustainable Practices
- Social Responsibility
- Community/ Resident Impacts
- Tourism Businesses/ Destination
- Visitor Characteristics and Perceptions
- Sustainable Management
- Health & Safety

⁶ Source: derived from Flanagan et al (2007) DIT-ACHIEV Model of Sustainable Tourism Management Indicators; UNEP/WTO (2005) Making Tourism More Sustainable: a Guide for Policy Makers; TMI (2003) 'VICE' model; DCMS (2001) UK National Sustainable Tourism Indicators; and UNWTO Sustainable Tourism Issues and Indicators.

⁷ The 'Triple Bottom Line' refers to the interrelated three pillars of sustainability - economic, social and environmental. The challenge is to strike the right balance between these three sometimes competing forces in order to ensure sustainable management and development.

3. Phase I Methodology: Assessment of Irish Tourism-related Programmes

The objective of the first phase of the review was to identify and assess Irish validated tourism-related programmes in order to identify the shortfalls and strengths in relation to sustainability issues within these programmes.

The review addressed programmes offered at the following levels: second level, further education, undergraduate and taught postgraduate level focusing on NQAI (National Qualifications Authority of Ireland) Levels 4-8.

The research approach for Phase I included the following elements:

- National industry stakeholders, including representatives of the Irish Hotels Federation, the Irish Tourist Industry Confederation and the Irish Hospitality Institute, were consulted, as were members of Fáilte Ireland's Professional Development Unit and Business Support Service.
- A comprehensive database detailing all Fáilte Ireland, FETAC⁸ and HETAC⁹ tourism-related programmes currently offered at secondary and tertiary level in Ireland was compiled through desk based research, which focused on consulting the relevant institution websites and prospectuses. The list was cross checked with the national database of all third level and further education programmes, Qualifax (www.qualifax.ie) in order to ensure this was comprehensive. The Institutes of Technology were also invited to confirm this draft list.
- Module syllabi were requested directly from the relevant institutions in respect of all identified programmes. The collated programme content was then systematically reviewed to identify sustainability content. In order to control for bias and avoid subjectivity, the content analysis focused on indicative content which explicitly addresses sustainability issues.

The extent to which sustainability issues are embedded within programmes was then further explored.

- Site visits to ten Institutes of Technology, and interviews with a range of stakeholders took place.
- A workshop with teachers/lecturers involved in the delivery of FETAC/PLC programmes took place, with seven teachers/tutors from six colleges of further education in the Greater Dublin Area participating.
- Interviews took place with the National Transition Year Programme (TYP) and the Leaving Certificate Applied Programme (LCA) Coordinators, along with teachers involved in the delivery of the TYP and LCA respectively.
Overall, almost 100 people actively involved in tourism education had input into this process.

⁸ FETAC: Further Education and Training Awards Council

⁹ HETAC: Higher Education and Training Awards Council

4. Phase II Methodology: International Best Practice Review

The objective of the second phase of the review was to identify international best practice in relation to sustainability content and issues in tourism education and training programmes.

This phase of the research was largely desk based, augmented by consultations with key international experts and stakeholders. As with the Irish programmes, the focus was on indicative content which explicitly addresses sustainability issues.

What constitutes best practice?

In identifying international best practice, the researchers used a number of accreditation and ranking schemes including the following:

Higher level programmes

- THEMIS: an operational instrument developed by the United Nations World Tourism Organisation (UNWTO) to facilitate administration and management in implementing its programme of work in the area of education and training in tourism. This is a rigorous accreditation process which recognises the highest global standards of quality and effectiveness in tourism education and training.
- RAE [Research Assessment Exercise] 2001: conducted jointly by the Higher Education Funding Council for England (HEFCE), the Scottish Funding Council (SFC), the Higher Education Funding Council for Wales (HEFCW) and the Department for Employment and Learning, Northern Ireland (DEL). The RAE assesses the quality of research in universities and colleges in the UK, providing quality ratings for research across all disciplines.
- EQUIS - the European Quality Improvement System: the leading international system of quality assessment, improvement and accreditation for higher education institutions in management and business administration.

Skills/craft level programmes

- Consultation with a broad range of over 20 experts, both Irish and international, face-to-face, via email and telephone, many of whom are affiliated with the TTRA [Travel and Tourism Research Association] and ATLAS [European Association of Tourism and Leisure Education].
- A TRINET posting: TRINET [Tourism Research Information Network] is an internationally recognised electronic bulletin board administered by the School of Travel Industry Management at the University of Hawaii, Manoa, which serves as a means to connect the international tourism research and education community.
- A considerable amount of desk research was also undertaken in identifying skills/craft level best practice.

The approach

The programmes of 24 international institutions in eight different countries, were included in the review. A range of other material was also examined, e.g.

- Service Skills Australia (the Industry Skills Council for the Australian service industries);
- Edexcel, (the UK's largest awarding body, providing academic and vocational qualifications to more than 25,000 places of learning in the UK, and in over 100 countries worldwide);
- The BEST Education Network (BEST EN) (an international consortium of educators committed to furthering the development and dissemination of knowledge in the field of sustainable tourism);
- Agenda 21 and Higher Education: Sustainable Development Education in Leisure & Tourism Degree Courses (a project jointly conducted by the UK Department for Environment, Food and Rural Affairs, Tourism Concern and the University of North London (now London Metropolitan University).

The desk based research involved reviewing the websites and online prospectuses of the institutions in order to identify a candidate list of international best practice. All publicly available programmatic information (which varied greatly in terms of detail) was accessed and downloaded. This information was then systematically reviewed to identify sustainability issues and examples of best practice. The process was undertaken with reference to the Dimensions of Sustainability which were used during the programme content analysis in Phase I, to ensure consistency of approach across the phases of the project.

5. Phase III Methodology: Development of Programme Content

The objective of the third phase of the review was to identify suitable sustainability content for inclusion in education and training programmes in Ireland. This phase represents the culmination of a three stage process, involving desk research and extensive national and international consultation. It includes the following:

1. Recommended standards and achievable outcomes of programme/module content at each level, linked to NQAI standards
2. Best practice teaching and learning strategies
3. Resource pack for teachers, identifying resource materials including recommended texts, websites, reports, case studies, etc.

An **Expert Advisory Panel**, consisting of key international experts and leaders in the area of sustainable tourism was drawn together to carry out the work of this phase. It comprised of:

- Professor Richard Butler, University of Strathclyde
- Mr John Swarbrooke, Sheffield Hallam University
- Professor John Tribe, University of Surrey
- Dr Rebecca Hawkins, Oxford Brookes University
- Professor Frederic Dimanche, CERAM Sophia Antipolis
- Mr Leo McMorrow, Fáilte Ireland

The brief of the Expert Advisory Panel was to:

- Review and validate Phases I and II of the review
- Discuss key programmatic content, focusing on indicative content, teaching and learning strategies and resources.
- Contribute to the programmatic content development in Phase III.

Simultaneous to this process, the research team consulted with Irish curricular experts to validate the draft programmatic content in terms of curriculum development and delivery and quality assurance standards.

6. Key Findings and Recommendations From Phases I and II

6.1 Key Findings from Programmatic Content Analysis and Consultative Process

- A small number of institutions currently have specific modules on sustainability. ITs in Tralee, Dublin, Limerick and Galway/Mayo all have specific sustainability modules; two ITs intend introducing specific modules in 2008 (Cork and Waterford), while Sligo runs a programme and modules on eco-tourism.
- With some exceptions, modules which treat sustainability issues in greatest depth tend to be offered as elective, higher level modules.
- Evidence suggests that little or no systematic treatment of sustainability issues takes place in Irish validated tourism and hospitality-related programmes. Far from being a guiding framework for achieving long term sustainable development and management, sustainability is a poorly understood and inconsistently applied concept.
- Sustainability issues are most prominent in specific tourism programmes, or in tourism modules delivered as part of other programmes. However, even where specifically addressed in these programmes, sustainability - with a few notable exceptions - tends to be a minor element, lacking systematic treatment.

In general, while there were exceptions, hospitality and culinary arts programmes contain little or no explicit reference to sustainability issues, particularly at the skills / craft levels. That is not to say that sustainability issues are not implicit in these programmes: waste, energy, water costs are all sustainable issues, but are not addressed from a sustainability perspective. Instead, they tend to be located under health & safety, cost control, etc.

Research participants confirmed that incorporation of sustainability content is largely discretionary and tends to be driven by an interest in such issues on the part of individual lecturers.

- Of the 'three pillars' of sustainable tourism (environmental, social, economic - sometimes referred to as the 'three P's - planet, people, profit'), environmental sustainability issues receive the greatest amount of attention.
- Where sustainability issues are addressed, the delivery methods centre on case studies, guest lecturers, field work and site visits.
- Irish resource materials are scarce, resulting in a heavy dependence of international (especially UK) resources, or on current media content.
- It is therefore quite possible for students at all levels to gain their qualifications with little or no exposure to sustainability issues and, in particular, to any wider treatment of sustainability principles and practice, or understanding of sustainability in the broader context.

6.2 Key Findings from International Best Practice Review

While the review did identify a number of examples of international good practice, the Irish provision of sustainability content - when compared to overall international provision - does not appear to lag significantly behind. The review did, however, identify certain aspects of international provision which constitute an improvement on the Irish provision, including:

- At skills/craft level, some of the international programmes examined focus explicitly on economic and socio-cultural as well as environmental impacts. While there is an emphasis on specific work practices to address these issues, broader conceptual awareness and understanding of sustainability principles are also evident, albeit to a limited extent, at this level.
- At all levels, sustainability issues are dealt with in greatest depth on programmes with a specific tourism focus. Explicit systematic treatment of sustainability issues tends to be incorporated into dedicated higher level modules.
- General sustainability issues are incorporated in tourism modules of hospitality and culinary arts programmes. On hospitality programmes, sustainability issues are most prevalent in modules on facilities planning, design, management and maintenance.
- While triple bottom line issues are addressed throughout, environmental issues receive most attention at all levels, especially in hospitality and culinary arts programmes. Environmental issues are specifically addressed in hospitality programme modules such as Environmental Management / Policy for the Hospitality Sector. At further education level, front office and accommodation management modules incorporate specific units on environmental issues and management.
- Socio-cultural issues are addressed, in a specific sustainability context, most frequently in relation to cultural diversity in the workplace and among the visitor base.
- Culinary arts programmes, for the most part, do not explicitly address sustainability issues through specific modules, making it difficult to identify specific issues which are addressed in these programmes. Rather, issues relating to sustainability appear to be integrated into various elements of the programmes where appropriate. Such programmes include modules such as: Food, Culture and Society; Gastronomy; and Managing Resources in the Food Business. However, in a small number of institutions there is an explicit commitment to dealing with these issues in a sustainability context.

⁵ OTMI 'Consumer Journeys' research Fáilte Ireland's Annual Visitor Attitudes Survey

7. Guidelines for the Development of Programmatic Content

Drawing on the research conducted in Phases I-III of the project this section presents guidelines for the development of programme content in relation to sustainability.

Key Recommendations

1. Flexible Guidelines

The teaching and learning guidelines should be seen as descriptive, not prescriptive. The guidelines are designed to be flexible: colleges, institutions and individual lecturers are encouraged to adapt -or add to - these guidelines, to accommodate and integrate particular strengths, interests or approaches, according to specific needs, requirements and resources.

2. Integrated Approach

There should be an integrated, holistic approach to sustainability programme content. Sustainability should be treated as a philosophy, informing all aspects of a learner's life, rather than as a self-contained curriculum unit. All students, regardless of level and subject area, should receive grounding in general sustainability issues, in addition to discipline specific consideration of sustainability issues relevant to their field of study.

3. Sustainability: a Function of the Whole Curriculum

Sustainability issues should be incorporated throughout all modules, at all levels, with linkages between modules. Offering dedicated sustainability modules treats sustainability as something which is done. However, an integrated approach, where sustainability elements can be incorporated in all programme modules, treats sustainability as a way of doing things. Where institutions deliver dedicated sustainability modules, these modules should form part of the core programmatic requirements (i.e., should not be offered as electives).

4. Strategic Approach

Sustainability needs to be strategically located at school or department level, in order to ensure the principles of sustainability are truly embedded in teaching and learning. Individual departments need to consider strategically where and how sustainability will be incorporated within their programme(s) and, where possible, have the concept intrinsically embedded at both a module and programme level.

5. 'Sustainability', not 'Sustainable Tourism'

There is a need to focus on 'sustainability', rather than 'sustainable tourism', 'sustainable kitchen management' or any other limiting definition. The focus, ultimately, is how individual and sectoral actions (whether tourism, hospitality or culinary arts) fit into the sustainability whole, and not vice versa.

6. Explicit Incorporation of Sustainability: In Philosophy if not Terminology

Sustainability issues need to be incorporated proactively into teaching and learning at programme and module level - however, this does not necessarily have to be done under an explicit 'sustainability' heading. The terminology may change - 'responsible practices', 'appropriate practices' - but what is ultimately of importance is that such issues are dealt with and situated to some extent within the wider context. Indeed, it could be argued that avoiding even the use of the term 'sustainability' can help prevent a tokenistic incorporation of sustainability into programmes/modules.

7. Theoretical Consideration, Practical Application

A progressive approach to teaching and learning is recommended, incorporating both theoretical and practical elements at all levels as appropriate, including skills levels. While there will necessarily be an emphasis on specific work practices to address sustainability issues at skills level, it will also be important to create broader conceptual awareness and understanding of sustainability principles. This will give learners an appreciation of why they do certain things, and an understanding of personal responsibility in relation to sustainability.

8. Training the Trainers

There is a need to consider both current and future capacity to address sustainability issues in programmes on offer and also to consider the availability of opportunities for staff development and scholarship.

9. The 'Triple Bottom Line' of Sustainability

Tourism and hospitality programmes in Ireland generally tend to be delivered from a business perspective, with the economic imperative overshadowing the environmental, and to an even greater extent, the socio-cultural perspective. The triple bottom line of sustainability - economic, environmental and socio-cultural - and their inter-relationship all need to be addressed when considering sustainability issues. Sustainability is not anti-business and must permeate all classical management subjects, not as an add on theme but as an underlying philosophy.

10. Leading by Example: Sustainability in Practice

Institutions need to look at their own practices in the context of sustainability (e.g. waste management, energy conservation and water use), as these unconsciously inform teaching and learning.

11. Sustainability: an Ongoing Debate

Sustainability is not a neat concept lending itself to being taught as fact, but rather represents a guiding framework for understanding and implementing responsible and appropriate practices in order to achieve long term sustainable development and management. Sustainability is an ongoing debate, requiring the selection of appropriate teaching and learning strategies, while teachers themselves need to remain informed about future developments.

8. Background to National Framework of Qualifications (NFQ)

Under the 1999 Qualifications (Education & Training) Act, the National Qualifications Authority of Ireland (NQAI) was required to establish and maintain a National Framework of Qualifications (NFQ) based on standards of knowledge, skill and competence.

The NFQ is a system of ten levels, based on standards of knowledge, skill and competence, which incorporates awards made for all kinds of learning. Each level has specified level indicators. The aim is to create an environment where all stakeholders can be confident that a learner holding an award at a given level and another learner with an award at the same level have both attained comparable standards of knowledge, skill and competence, regardless of when or where that award was made.

Qualifications awarded at second level by the State Examination Commission (SEC), Further Education and Training Awards Council (FETAC) and Higher Education and Training Awards Council (HETAC, DIT and the university sector) are all included.

The NFQ, while a national development, is also linked to similar initiatives that are taking place in other countries and at an overall European level (e.g. the Bologna Qualifications Framework, the European Qualifications Framework, Europass). These initiatives seek to increase the mobility of learners across Europe.

The next sections are structured as follows:

Section 9: provides an overview of the recommended guideline sustainability learning outcomes for each Award level, as they relate to the level indicators of knowledge, skills and competence outlined by the NQAI in its National Framework of Qualifications.

Sections 10 -14: provide guidelines by discipline area for the inclusion of sustainability content in tourism-related programmes at all levels in alignment with the appropriate NQAI level indicators.

These guidelines are descriptive, not prescriptive. Colleges, institutions and individual lecturers are encouraged to adapt - or add to - these guidelines, to accommodate and integrate particular strengths, interests or approaches.

9. Recommended Guideline Sustainability Learning Outcomes: Overview

This section presents general learning outcomes by level (more detailed learning outcomes by discipline area and by level are presented in the next section).

Level 4

Recommended learning outcomes for this level which relate to the NQAI required standards of knowledge, skill and competence are that those who successfully complete the level will:

- Be aware of the general concept of sustainability
- Have an understanding of the positive and negative impacts of tourism
- Consider sustainability issues in the context of their daily lives
- Consider wider societal issues regarding sustainability
- Display an understanding of sustainability trends, theories and key issues

Level 5

Recommended learning outcomes for this level which relate to the NQAI required standards of knowledge, skill and competence are that those who successfully complete the level will:

- Demonstrate a general awareness and understanding of sustainability
- Display some theoretical and practical understanding of sustainability
- In the context of impacts on various stakeholders, be able to evaluate various practical measures which can be taken regarding sustainability
- Display a working knowledge of relevant sustainability certification and awards schemes

Level 6

Recommended learning outcomes for this level which relate to the NQAI required standards of knowledge, skill and competence are that those who successfully complete the level will:

- Demonstrate a general theoretical and practical understanding of sustainability and measures for its implementation
- Be aware of tools and techniques for sustainable management at a theoretical and practical level
- Be familiar with operational issues that will be encountered in the workplace (management, customer service, human resource management, systems/infrastructure, consumer behaviour)
- Possess a working knowledge of key legislation (local and national)
- Understand the importance of stakeholder management and partnership
- Have developed an appreciation of the implications of inaction and related issues constraining the adoption of sustainable business practices

Level 7

Recommended learning outcomes for this level which relate to the NQAI required standards of knowledge, skill and competence are that those who successfully complete the level will:

- Demonstrate a theoretical and practical understanding of sustainability and its application in the workplace
- Be proficient in the operation, supervision and management of sustainable practices (economic bottom line, societal responsibility, corporate social responsibility, customer management, change management, environmental synergies, legislation)
- Have developed an awareness of key strategic issues regarding sustainable planning and development
- Understand the complexities of sustainability theory and its influence in the context of policy (triple bottom line, carrying capacity, performance, measurement and control)
- Be able to appreciate the linkages between sustainability theory and practice, at local, national and global levels (according to discipline)

Level 8

Recommended learning outcomes for this level which relate to the NQAI required standards of knowledge, skill and competence are that those who successfully complete the level will:

- Demonstrate a detailed understanding of sustainability from a theoretical, practical and policy perspective
- Demonstrate an ability to effectively implement the theoretical and practical aspects of sustainability in a variety of circumstances
- Demonstrate a mastery in the management, planning and development of sustainable policies and practices
- Exhibit a capacity to exercise appropriate judgement in strategic sustainable planning and development
- Display competency in the development of policy and planning, reflecting a detailed consideration of current sustainability theory at multiple levels (local, national, global)

Sections 10- 14 present guideline standards for sustainability by Award Level as they relate to the discipline areas of Hospitality, Culinary Arts, Leisure, Event Management and Tourism.

Guideline Standards for Hospitality Programmes Levels 4-8

10. Guideline Standards for Hospitality Programmes: Levels 4-8

The following tables, based on the learning outcomes outlined in the NQAI National Framework of Qualifications, outline the recommended standards which it is expected that a student will achieve at each level of a hospitality programme. The learning outcomes at each level build upon the foundations established at previous levels.

HOSPITALITY - Guidelines for Standards in Level 4 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	General Treatment of Sustainability	Overview of sustainability in general terms, not specifically hospitality-related - incorporating a broad understanding of the concept. Global challenges e.g. climate change, population growth
	Policy Implementation / Behaviour Modification	Awareness of government / sectoral initiatives which promote sustainability, e.g. recycling, plastic bag levy, no-smoking, minimum wage etc. Focus on hospitality industry
	Raising Awareness of Sustainability Concept	Three pillars of sustainability - need for balance between environment, economy and society
	Human Behaviour	Relating sustainability to human behaviour issues of the day, e.g. news stories such as over-use of resources, building of controversial roadways, destruction of rainforests etc.
	Key Current Trends / Theories / Issues	To be related to concrete current examples, i.e. calculating the Food Miles of an average shopping basket
Know-how and Skill	Environmental Synergies	Highlighting inter-linkage and cause-effect, e.g. realisation of global damage by the pesticide DDT in 1960s, Chernobyl disaster, how one species can impact on many others , e.g. grey/red squirrel in Ireland
	Energy / Waste / Water Conservation	Highlighting practices in private houses, industry etc such as solar panels; water, waste and energy. Management by hospitality industry etc. highlighting best practice
	Waste Management	Understanding key principles of waste management
Competence	Make individuals think about sustainability in their own life	Using examples from a person's own life to highlight our individual use of resources - use of individual carbon calculators, etc.

HOSPITALITY - Guidelines for Standards in Level 5 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Practical	Linking sustainability education to cause and effect - to demonstrate to students how actions have consequences. This will require local / regional / national and international case studies of a practical nature (some hospitality specific, others more general)
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a national level
	Policy Implementation / Human Behaviour Modification	Reflection on how sustainability policy is promoted and implemented nationally, internationally and globally
Know-how and Skill	Certification and Awards	Investigation of various 'sustainable' labels - eco / green, Green Flags for schools, Blue Flag beaches, the European "Flower" Eco-label etc. and their relationship to hospitality sectors
	Recycling	Understanding of recycling methodologies and how each can be applied in business / home - some reference to hospitality industry
	Energy / Waste / Water Conservation	Examining various practical methodologies in private houses, industry, etc for water, waste and energy management - highlighting best practice in hospitality
	Food Miles	Awareness of concept of Food Miles and implications for the food / hospitality industry and society - where does 'my' food come from?
Competence	What each individual / business can do	Case studies of industry leaders in the area of sustainability, e.g. Greenbox, EPA's Cleaner, Greener Production Programme, Greening Irish Hotels etc.

HOSPITALITY - Guidelines for Standards in Level 6 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Systems / Infrastructure	Knowledge and awareness of agencies / organisations involved at national and international level - hotel federations / restaurant associations etc.
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a European level - Natura 2000 etc.
	Policy Implementation	Examination of how sustainability policy has evolved since 1960s, up to Rio and Johannesburg
	Legislation - Local and National	Working knowledge of national directives re sustainability - water charges / car taxation based on emissions etc.
Know-how and Skill	Tools and Techniques	Carrying capacity - overall understanding of the concept and its application Sustainability indicators - overall understanding of the concept and its application Management tools - understanding management tools to quantify, reduce or improve impacts & differing impact of different tools on stakeholders and operations
	Resource Knowledge and Use Minimisation	Knowledge of calculating the various measures of efficiency - how to evaluate resource usage, e.g. energy / water use in a hotel or a kitchen
	Recycling	Awareness of costs - economic and environmental, and finding best model for management of recycling - both long and short term perspective
	Certification	Ability to analyse different eco-labels; systems of evaluating sustainability

HOSPITALITY - Guidelines for Standards in Level 6 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Competence	Operational Issues Students will Encounter when Working	Operations management and sustainability How to put sustainable principles into practice in hospitality industry
	Human Behaviour Modification	Awareness of public media and sustainability - how trends and 'fads' (e.g. organic foods / fair-trade fabrics etc.) undergo a lifecycle and how these media trends influence hospitality
	Stakeholder Management / Partnership	Based on the 'social' pillar of sustainability, an appreciation of the importance which the various stakeholders play in developing a sustainability ethos
	Energy / Waste / Water Reduction and Conservation	Examination of international debate on water, waste and energy management by hospitality industry etc.

HOSPITALITY - Guidelines for Standards in Level 7 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Legislation	Examination of legislative framework - principles of Irish environmental and sustainability legislation
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a global level; examining their importance, strengths and weaknesses; the Kyoto Agreement
	Carrying Capacity / Indicators	Questioning carrying capacity and the science / theory of indicators - their development and use
	Triple Bottom Line	Questioning the application of the Triple Bottom Line
	Human Behaviour Modification	Examine how consumer attitudes and trends can be adopted by the hospitality industry, e.g. acceptance of energy efficient light bulbs, non-washing of towels etc. in hotels - acceptability, and next steps
Know-how and Skill	Issues re Cost Control / Dynamics / Drivers (according to discipline)	Evaluation of various influences on tools etc., e.g. how Co2 reduction imperative can influence adoption of combined heat / energy boilers - grants etc.
	Tools and Techniques / Systems / Infrastructure	Integrated facility management from design to operations - particularly in multi-function facilities
	Management / Change Management	Challenge of adopting sustainability as a method of evaluating / driving change management - and its role in hospitality
	Policy Implementation	Examining the strengths and weaknesses of national and international policy
	Performance and Measurement / Control	Evaluation of sustainability at organisational / regional / national / international level
	Operational Issues Students will Encounter when Working	Practical case studies of adoption of sustainability Green Hotels Initiative, and how these can be implemented at the level of an individual organisation

HOSPITALITY - Guidelines for Standards in Level 7 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
	Managerial Skills / Strategy	Holistic view of sustainability across various management practices from HRM to finance and environmental practice
	Resource Use Minimisation / Recycling, e.g. Energy / Waste / Water Reduction	Examine the implementation of sustainable practices such as solar panels; water, waste and energy management etc. - examples of best practice in Irish / international hospitality industry
	Human Ecology	Broader perspective of humans and the environment - how humans 'fit' into the world and how humans / environment inter-relate
	Legislation - Local and National / Certification	Overview of legislation according to premises type / scale etc. and implications for management
Competence	Emphasis on Marketing and Consumer - Customers / Segmentation	Use of sustainability as product differentiation tool , e.g. premises using Irish / local products
	Stakeholder Management / Partnership	Examination of scenarios where broad range of stakeholders / partners have adopted sustainable principles - highlighting how philosophical concepts can have real impacts
	Global / National Views	Analysis of current state of sustainability and influences on current thinking in hospitality
	Customers	Seeing customer care as a sustainable practice
	HRM / Managing People within the Organisation	HRM as an important element of sustainable management
	Management Issues - learning how to manage operations / enterprise level application / development economic bottom line Corporate Social Responsibility/ etc.	Challenging examination of current management issues from a sustainability perspective - ideally undertaken through problem based learning - faced with challenge to outline possible solutions

HOSPITALITY - Guidelines for Standards in Level 8 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Carrying Capacity Triple Bottom Line Legislation Global / National Views	Theoretical understanding and evaluation of material - challenging established view using cutting edge current thought / literature
	Emphasis on Marketing and Consumer - Segmentation and its use for Human Behaviour Modification	Awareness that sustainability is a key challenge in winning consumers and establishing differentiation in hospitality
	Environmental Synergies	Questioning the inter-relationship of the three pillars of sustainability - is a true balance of environmental, social and economic costs attainable?
	Policy Implementation	Challenging sustainability policy - questioning current philosophies and proposing alternatives
Knowledge	Change Management	Evaluating the importance of sustainability as an element of change management - rather than a free-standing concept / theory
	Corporate Social Responsibility	Need to challenge the issue of CSR, both at a theoretical level and its place in individual hospitality organisations
	Resource Use and Minimisation - Energy / Waste / Water - Reduction & Recycling	Identify strengths and weaknesses re sustainable practices such as solar panels; water, waste and energy management etc. Identify best options for individual hospitality enterprises etc.
	Human Ecology	Explore the human-environment relationship and mutual dependencies using practical examples

HOSPITALITY - Guidelines for Standards in Level 8 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Know-how and Skill	Performance, Measurement and Control	Use of 'Indicators' to highlight how sustainability theory can be employed to measure performance
	Managerial Skills	Outlining the range of skills required in the identification and evaluation of tools for research and adoption of sustainable practice
	Issues re Cost Control / Dynamics / Drivers (according to discipline)	High level of skill in relation to operations management - tools and techniques for the evaluation of alternative options re sustainable management
	Managing People within the Organisation	Development of policy, training regimes and management goals re sustainable management of people
Competence	Strategy	Theoretical and strategic overview of sustainability at the level of strategy and policy development - national and international
	Enterprise Level Application / Development	Theoretical and strategic overview of sustainability and its integration at the level of organisation
	Learning how to Manage Operations - economic bottom line / societal responsibility etc.	Challenging the accepted understanding of operations management; questioning the aims and objectives of management at the level of an organisation, based on sustainability principles and ideals

Guideline Standards for Culinary Arts Programmes Levels 4-8

11. Guideline Standards for Culinary Arts Programmes: Levels 4-8

The following tables, based on the learning outcomes outlined in the NQAI National Framework of Qualifications, outline the recommended standards which it is expected that a student will achieve at each level of a culinary arts programme. The learning outcomes at each level build upon the foundations established at previous levels.

CULINARY ARTS - Guidelines for Standards in Level 4 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	General Treatment of Sustainability	Overview of sustainability in general terms (i.e. not specifically culinary arts-related), incorporating broad understanding of the concept; global challenges e.g. climate change, population growth
	Policy Implementation / Behaviour Modification	Awareness of government / sectoral initiatives which promote sustainability, e.g. recycling, plastic bag levy, no-smoking, minimum wage etc.
	Raising Awareness of Sustainability Concept	Three pillars of sustainability - need for balance between environment, economy and society
	Human Behaviour	Relating sustainability to human behaviour issues of the day , e.g. news stories such as over-use of resources, building of controversial roadways, destruction of rainforests etc.
	Key Current Trends / Theories / Issues	To be related to concrete current examples, i.e. calculating the Food Miles of an average shopping basket, food ethics (sourcing etc.)
	Know-how and Skill	Environmental Synergies
Energy / Waste / Water Conservation		Highlighting practices in private houses, industry etc such as solar panels; water, waste and energy management by industry etc. Focusing on best practice
Waste Management		Understanding key principles of waste management / recycling
Competence	Make individuals think about sustainability in their own life	Using examples from a person's own life to highlight individual use of resources - use of individual carbon calculators, etc.

CULINARY ARTS - Guidelines for Standards in Level 5 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Practical	Linking sustainability education to cause and effect - to demonstrate to students how actions have consequences. This will require local / regional / national and international case studies of a practical nature
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a national level
	Policy Implementation / Human Behaviour Modification	Reflection on how sustainability policy is promoted and implemented nationally and globally
Know-how and Skill	Certification and Awards	Investigation of various 'sustainable' labels - eco / green etc.. Green Flags for schools, Blue Flag beaches, the European "Flower" Eco-label, organic foods, etc.
	Recycling	Understanding of recycling methodologies and how each can be applied in business / home
	Energy / Waste / Water Conservation	Examining various practical methodologies in private houses, food industry etc for water, waste and energy management
	Food Miles & Ethics	Awareness of concept of Food Miles and implications for the food / hospitality industry and society - where does food come from - fair trade - ethical food sourcing, animal rearing and slaughter etc.
Competence	What each individual / business can do	Case studies of industry leaders in the area of sustainability, e.g. Greenbox, various food companies and fair-trade, organic foods, local produce promotion etc.

CULINARY ARTS - Guidelines for Standards in Level 6 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Systems / Infrastructure	Knowledge and awareness of agencies / organisations involved at national and international level - restaurant associations etc.
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a European level - Natura 2000 etc.
	Policy Implementation	Examination of how sustainability policy has evolved since 1960s, up to Rio and Johannesburg
Know-how and Skill	Legislation - Local and National	Working knowledge of national directives re sustainability - water charges / vehicle taxation based on emissions etc.
	Tools and Techniques	<ul style="list-style-type: none"> • Carrying capacity - overall understanding of concept/application • Sustainability indicators - overall understanding of concept /application • Management tools - using management tools to quantify, reduce or improve impacts & differing impact of different tools on stakeholders and operations
	Resource Knowledge and Use Minimisation	Knowledge of calculating the various measures of efficiency - how to evaluate resource usage at a practical level in a kitchen, restaurant etc.
	Recycling	Finding best model for management of recycling - both long and short term perspective
	Certification	Ability to analyse different eco-labels and systems of evaluating sustainability, e.g. when is responsible food responsible?

CULINARY ARTS - Guidelines for Standards in Level 6 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Competence	Operational Issues that Students will Encounter when Working	Operations management and sustainability. How to put sustainable principles into practice in food industry
	Human Behaviour Modification	Awareness of media and sustainability - how trends and 'fads' undergo a lifecycle, and how these media trends influence hospitality - examples of restaurants capitalising on fair trade or local produce etc.
	Stakeholder Management / Partnership	Based on the 'social' pillar of sustainability, an appreciation of the importance which the various stakeholders play in developing a sustainability ethos
	Energy / Waste / Water Reduction and Conservation	Examination of international debate on water, waste and energy management by food industry etc.

CULINARY ARTS - Guidelines for Standards in Level 7 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Legislation	Examination of legislative framework - principles of Irish environmental and sustainability legislation
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a global level - examining their importance, strengths and weaknesses; the Kyoto Agreement
	Carrying Capacity / Indicators	Questioning carrying capacity and the science / theory of indicators - their development and use
	Triple Bottom Line	Questioning the application of the Triple Bottom Line
	Human Behaviour Modification	Examination of how consumer attitudes and trends can be, and are, used by the food industry
Know-how and Skill	Issues re Cost Control / Dynamics / Drivers (according to discipline)	Evaluation of various influences on tools etc., e.g. how CO ₂ reduction imperative can influence adoption of combined heat / energy boilers / new washing machines - grants etc.
	Tools and Techniques / Systems / Infrastructure	Integrated facility management from design to operations
	Management / Change Management	Challenge of adopting sustainability as a method of evaluating / driving change management
	Policy Implementation	Examining the strengths and weaknesses of national and international policy
	Performance and Measurement / Control	Evaluation of sustainability at organisational / regional / national / international level

CULINARY ARTS - Guidelines for Standards in Level 7 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
	Operational Issues Students will Encounter when Working	Practical case studies of 'real' adoption of sustainability , e.g. Irish Organic Food Growers Association label and how these can be implemented at the level of an individual organisation - ethical food sourcing
	Managerial Skills / Strategy	Holistic view of sustainability across various food industry management practices from HRM to finance and environmental practice
	Resource Use Minimisation / Recycling i.e. Energy / Waste / Water rRduction	Examine the implementation of sustainable practices such as solar panels; water, waste and energy management, composting etc.
	Human Ecology	Broader perspective of humans and the environment - how humans 'fit' into the world and how humans / environment inter-relate
	Legislation - Local and National / Certification	Overview of legislation according to premises type / scale etc. and implications for management
Competence	Emphasis on Marketing and Consumer - customers / segmentation	Use of sustainability as product differentiation tool - local menu, organic produce, culturally / environmentally aware etc.
	Stakeholder Management / Partnership	Examination of scenarios where broad range of stakeholders / partners have adopted sustainable principles - highlighting how philosophical concepts can have real impacts
	Global / National Views	Analysis of current state of sustainability and influences on current thinking
	Customers	Seeing customer care as a sustainable practice - also considering customer expectations - importance of maintaining standards
	HRM / Managing People within the Organisation	Consideration of HRM as an important element of sustainable management
	Management issues - Learning how to manage operations / enterprise level application / development economic bottom line Corporate Social Responsibility/ etc.	Challenging examination of current management issues from a sustainability perspective - ideally undertaken through problem based learning - faced with challenge to outline possible solutions

CULINARY ARTS - Guidelines for Standards in Level 8 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Carrying Capacity Triple Bottom Line Legislation Global / National Views	Theoretical understanding and evaluation of material - challenging established view using cutting edge current thought / literature
	Emphasis on Marketing and Consumer - Segmentation and its Use for Human Behaviour Modification	Awareness that sustainability is a key challenge in winning consumers and creating differentiation in the food industry
	Environmental Synergies	Questioning the inter-relationship of the three pillars of sustainability - is a true balance of environmental, social and economic costs attainable?
	Policy Implementation	Challenging sustainability policy - questioning current philosophies and proposing alternatives
	Change Management	Evaluating the importance of sustainability as an element of change management - rather than a free-standing concept / theory
	Corporate Social Responsibility	Need to challenge the issue of CSR, both at a theoretical level and its place in individual culinary organisations
	Resource Use and Minimisation - Energy / Waste / Water - Reduction & Recycling	Identify strengths and weaknesses re sustainable practices such as solar panels; water, waste and energy management, composting etc. Identify best options for individual enterprises etc.
	Human Ecology	Explore the human-environment relationship and mutual dependencies using practical examples
Know-how and Skill	Performance, Measurement and Control	Use of 'Indicators' to highlight how sustainability theory can be employed to measure performance

CULINARY ARTS - Guidelines for Standards in Level 8 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
	Managerial Skills	Outlining the range of skills required in the identification and evaluation of tools for (research and adoption of) sustainable practice
	Issues re Cost Control / Dynamics / Drivers (according to discipline)	High level of skill in relation to operations management - tools and techniques for the evaluation of alternative options re sustainable management
	Managing People within the Organisation	Development of policy, training regimes and management goals re sustainable management of people
Competence	Strategy	Theoretical and strategic overview of sustainability at the level of strategy and policy development - national and international
	Enterprise Level Application / Development	Theoretical and strategic overview of sustainability and its integration at the level of culinary organisation
	Learning how to Manage Operations - Economic Bottom Line / Societal Responsibility etc.	Challenging the accepted understanding of operations management; questioning the aims and objectives of management at the level of a culinary organisation, based on sustainability principles and ideals

Guideline Standards for Leisure Programmes Levels 4-8

12. Guideline Standards for Leisure Programmes: Levels 4-8

The following tables, based on the learning outcomes outlined in the NQAI National Framework of Qualifications, outline the recommended standards which it is expected that a student will achieve at each level of leisure programmes. The learning outcomes at each level build upon the foundations established at previous levels.

LEISURE - Guidelines for Standards in Level 4 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	General Treatment of Sustainability	Overview of sustainability in general terms, not specifically leisure-related - incorporating broad understanding of the concept Global challenges e.g. climate change, population growth
	Policy Implementation / Behaviour Modification	Awareness of government / sectoral initiatives which promote sustainability, e.g. recycling, plastic bag levy, no-smoking, minimum wage
	Raising Awareness of Sustainability Concept	Three pillars of sustainability - need for balance between environment, economy and society
	Human Behaviour	Relating sustainability to human behaviour issues of the day , e.g. news stories such as over-use of resources, building of controversial roadways, destruction of rainforests etc.
	Key Current Trends /Theories / Issues	To be related to concrete current examples, i.e. use of water for leisure (swimming, watering of golf course etc) and how that impacts on local availability / pricing
	Know-how and Skill	Environmental Synergies
Energy / Waste / Water Conservation		Highlighting practices in private houses, industry etc such as solar panels; water, waste and energy management by industry etc. Highlighting best practice - and how this can be applied by leisure facilities
Competence		Energy / Water Management
	Make individuals think about sustainability in their own life	Using examples from a person's own life to highlight individual use of resources - use of individual carbon calculators, etc.

LEISURE - Guidelines for Standards in Level 5 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Practical	Linking sustainability education to cause and effect - to demonstrate to students how actions have consequences. This will require local / regional / national and international case studies of a practical nature
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a national level
	Policy Implementation / Human Behaviour Modification	Reflection on how sustainability policy is promoted and implemented nationally and globally
Know-how and Skill	Certification and Awards	Investigation of various 'sustainable' labels - eco / green, e.g. . Green Flags for schools, Blue Flag beaches, White Flag leisure facilities, the European "Flower" Eco-label
	Energy / Waste / Water Conservation	Examining various practical methodologies in private houses, industry etc for water, waste and energy management Understanding of energy wastage by individuals and how this can be linked to leisure activities, e.g. walking versus driving etc.
Competence	What each individual / business can do	Case studies of industry leaders in the area of sustainability, e.g. Greenbox / Ballyhoura for outdoor activities etc.

LEISURE - Guidelines for Standards in Level 6 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Systems / Infrastructure	Knowledge and awareness of agencies / organisations involved at national and international level - the Institute of Leisure & Amenity Management (ILAM), International Health Racquet & Sportsclub Association (IHRSA), Irish Sports Council, etc.
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a European level - Natura 2000 etc.
	Policy Implementation	Examination of how sustainability policy has evolved since 1960s, up to Rio and Johannesburg
Know-how and Skill	Legislation - Local and National	Working knowledge of national directives re sustainability - water charges / car taxation based on emissions etc.
	Tools and Techniques	<ul style="list-style-type: none"> • Carrying capacity - overall understanding of the concept and its application , e.g. level at which an outdoor leisure resource is put under pressure • Sustainability indicators - overall understanding of the concept and its application • Management tools - understanding management tools to quantify, reduce or improve impacts; impact of different tools on stakeholders and operations
	Resource Knowledge and Use Minimisation	Knowledge of calculating the various measures of efficiency - how to evaluate resource usage at a practical level
	Certification	Ability to analyse eco-labels, and systems of evaluating sustainability
Competence	Operational Issues that Students will Encounter when Working	Operations management and sustainability. How to put sustainable principles into practice in industry
	Human Behaviour Modification	Awareness of media and sustainability - how trends undergo a lifecycle, and how these can be used by the leisure industry
	Stakeholder Management / Partnership	Based on the 'social' pillar of sustainability, an appreciation of the importance which the various stakeholders play in developing a sustainability ethos. Challenge of involving all partners - e.g. the debate surrounding access to privately owned upland areas by walkers in Ireland
	Energy / Waste / Water Reduction and Conservation	Examination of international debate on water, waste and energy management / recycling by industry etc.

LEISURE - Guidelines for Standards in Level 7 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Legislation	Examination of legislative framework - principles of Irish environmental and sustainability legislation
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a global level; examining their importance, strengths and weaknesses; the Kyoto Agreement
	Carrying Capacity / Indicators	Questioning carrying capacity and the science / theory of indicators - their development and use
	Triple Bottom Line	Questioning the application of the Triple Bottom Line
	Human Behaviour Modification	Examination of how consumer attitudes and trends can be used by the leisure industry, e.g. awareness of health
Know-how and Skill	Issues re Cost Control / Dynamics / Drivers (according to discipline)	Evaluation of various influences on tools etc., e.g. how CO ₂ reduction imperative can influence adoption of combined heat / energy boilers - grants etc.
	Tools and Techniques / Systems / Infrastructure	Integrated facility management from design to operations - particularly important in facilities with high water / energy usage
	Management / Change Management	Challenge of adopting sustainability as a method of evaluating / driving change management
	Policy Implementation	Examining the strengths and weaknesses of national and international policy
	Performance and Measurement / Control	Evaluation of sustainability at organisational / regional / national / international level
	Operational Issues Students will Encounter when Working	Practical case studies of 'real' adoption of sustainability, e.g. White Flag Award for Spa and Leisure and how these can be implemented at the level of an organisation
	Managerial Skills / Strategy	Holistic view of sustainability across various management practices from HRM to finance and environmental practice
	Resource Use Minimisation / Recycling i.e. Energy / Waste / Water Reduction	Examine the implementation of sustainable practices such as usage of solar panels; water, waste and energy management etc.

LEISURE - Guidelines for Standards in Level 7 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
	Human Ecology	Broader perspective of humans and the environment - how humans 'fit' into the world and how humans / environment inter-relate
	Legislation - Local and National / Certification	Overview of legislation according to premises type / scale etc. and implications for management (also to include outdoor legislation - controversy re access to countryside etc.)
Competence	Emphasis on Marketing and Consumer - Customers / Segmentation	Use of sustainability as product differentiation tool - Ireland's green countryside
	Stakeholder Management / Partnership	Examination of scenarios where broad range of stakeholders / partners have adopted sustainable principles - highlighting how philosophical concepts can have real impacts
	Global / National Views	Analysis of current state of sustainability, and influences on current thinking
	Customers	Seeing customer care as a sustainable practice - also considering customer expectations
	HRM / Managing People within the Organisation	Consideration of HRM as an important element of sustainable management
	Management Issues - learning how to manage operations / enterprise level application / development economic bottom line /Corporate Social Responsibility/ etc.	Challenging examination of current management issues from a sustainability perspective - ideally undertaken through problem based learning - faced with challenge to outline possible solutions

LEISURE - Guidelines for Standards in Level 8 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Carrying Capacity Triple Bottom Line Legislation Global / National Views	Theoretical understanding and evaluation of material - challenging established view using cutting edge current thought / literature
	Emphasis on Marketing and Consumer - Segmentation and its use for Human Behaviour Modification	Awareness that sustainability is a key challenge in winning consumers and differentiating Ireland as a tourism/leisure destination (particularly the key image of a 'green' Ireland for leisure)
	Environmental Synergies	Questioning the inter-relationship of the three pillars of sustainability - is a true balance of environmental, social and economic costs attainable?
	Policy Implementation	Challenging sustainability policy - questioning current philosophies and proposing alternatives
	Change Management	Evaluating the importance of sustainability as an element of change management - rather than a free-standing concept / theory
	Corporate Social Responsibility	Need to challenge the issue of CSR, both at a theoretical level and its place in individual organisations
	Resource Use and Minimisation - Energy / Waste / Water - Reduction & Recycling	Identify strengths and weaknesses re sustainable practices such as usage of solar panels; water, waste and energy management etc. Identify best options for individual enterprises / landscapes etc.
	Human Ecology	Delve deeper into human-environment relationship and mutual dependencies - particularly important to consider human impact on the landscape and resultant human attitudes
Know-how and Skill	Performance, Measurement and Control	Use of 'Indicators' to highlight how sustainability theory can be employed to measure performance

LEISURE - Guidelines for Standards in Level 8 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
	Managerial Skills	Outlining the range of skills required in the identification and evaluation of tools for (research and adoption of) sustainable practice
	Issues re Cost Control / Dynamics / Drivers (according to discipline)	High level of skill re operations management - tools and techniques for evaluation of alternative options re sustainable management
	Managing People within the Organisation	Development of policy, training regimes and management goals re sustainable management of people in the leisure industry
Competence	Strategy	Theoretical and strategic overview of sustainability at the level of strategy and policy development - national and international
	Enterprise Level Application / Development	Theoretical and strategic overview of sustainability and its integration at the level of leisure organisation
	Learning how to Manage Operations - Economic Bottom Line / Societal Responsibility etc.	Challenging the accepted understanding of operations management; questioning the aims and objectives of management at the level of an organisation, based on sustainability principles and ideals

Guideline Standards for Event Management Programmes Levels 4-8

13. GUIDELINE STANDARDS FOR EVENT MANAGEMENT PROGRAMMES: LEVELS 4 -8

The following tables, based on the learning outcomes outlined in the NQAI National Framework of Qualifications, outline the recommended standards which it is expected that a student will achieve at each level of event management programmes. The learning outcomes at each level build upon the foundations established at previous levels.

EVENT MANAGEMENT- Guidelines for Standards in Level 4 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	General Treatment of Sustainability	Overview of sustainability in generic terms, not specifically events-related - incorporating broad understanding of the concept; global challenges, e.g. climate change, population growth
	Policy Implementation / Behaviour Modification	Awareness of government / sectoral initiatives which promote sustainability , e.g. recycling, plastic bag levy, no-smoking, minimum wage
	Raising Awareness of Sustainability Concept	Three pillars of sustainability - need for balance between environment, economy and society
	Human Behaviour	Relating sustainability to non-event specific human behaviour issues of the day , e.g. news stories such as over-use of resources, building of controversial roadways, destruction of rainforests etc.
	Key Current Trends / Theories / Issues	To be related to concrete current examples, i.e. Food Miles and how they impact on my shopping basket
Know-how and Skill	Environmental Synergies	Highlighting inter-linkage and cause-effect, e.g. realisation of global damage by the pesticide DDT in 1960s, Chernobyl disaster, how one species can impact on many others, e.g. grey/red squirrel in Ireland
	Energy / Waste / Water Conservation	Highlighting practices in private houses, industry etc such as solar panels; water, waste and energy management by industry etc. Highlighting best practice
	Waste Management	Understanding key principles of waste management
Competence	Make individuals think about sustainability in their own life	Using examples from a person's own life to highlight individual use of resources - use of individual carbon calculators, etc.

EVENT MANAGEMENT- Guidelines for Standards in Level 5 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Practical	Linking sustainability education to cause and effect - to demonstrate to students how actions have consequences. This will require local / regional / national and international case studies of a practical nature
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a national level
	Policy Implementation / Human Behaviour Modification	Reflection on how sustainability policy is promoted and implemented nationally and globally
Know-how and Skill	Certification and Awards	Investigation of various 'sustainable' labels - eco / green etc. Green Flags for schools, Blue Flag beaches, British Standard BS8901 (Sustainable Events), the "EU Flower" Eco-label etc.
	Recycling	Understanding of recycling methodologies and how each can be applied in business / home
	Energy / Waste / Water Conservation	Examining various practical methodologies in private houses, industry, at events etc for water, waste and energy management
Competence	What each individual / business can do	Case studies of industry leaders in the area of sustainable events , e.g. Manchester International Festival, Seventeen Events, Vancouver 2010 Winter Olympics etc.

EVENT MANAGEMENT- Guidelines for Standards in Level 6 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Systems / Infrastructure	Knowledge and awareness of agencies / organisations involved at national and international level - ICCA, Irish Exhibition Organisers Association, Association of Event Organisers etc.
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a European level - Natura 2000 etc.
	Policy Implementation	Examination of how sustainability policy has evolved since 1960s, up to Rio and Johannesburg
Know-how and Skill	Legislation - Local and National	Working knowledge of national directives re sustainability - water charges / car taxation based on emissions / noise pollution etc.
	Tools and Techniques	<ul style="list-style-type: none"> • Carrying capacity - overall understanding of the concept and its application particularly in the context of events • Sustainability indicators - overall understanding of the concept and its application • Management Tools - using management tools to quantify, reduce or improve impacts & differing impact of different tools on stake holders and operations
	Resource Knowledge Use Minimisation	Knowledge of calculating the various measures of efficiency - how to evaluate resource usage at a practical level
	Recycling	Finding best model for recycling management, long and short term
	Certification	Ability to analyse eco-labels and systems of evaluating sustainability
Competence	Operational Issues that Students will Encounter when Working	Operations management and sustainability. How to put sustainable principles into practice in industry
	Human Behaviour Modification	Awareness of media and sustainability - how trends and 'fads' undergo a lifecycle, and how these media trends influence event organisation
	Stakeholder Management / Partnership	Based on the 'social' pillar of sustainability, an appreciation of the importance which the various stakeholders play in developing a sustainability ethos - in the context of events, the importance of the local community
	Energy / Waste / Water Reduction/ Conservation	Examination of international debate on water, waste and energy management by industry etc.

EVENT MANAGEMENT- Guidelines for Standards in Level 7 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Legislation	Examination of legislative framework - principles of Irish environmental / planning and sustainability legislation
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a global level; examining their importance, strengths and weaknesses; the Kyoto Agreement
	Carrying Capacity / Indicators	Questioning carrying capacity and the science / theory of indicators - their development and use
	Triple Bottom Line	Questioning the application of the Triple Bottom Line
	Human Behaviour Modification	Examination of how consumer attitudes and trends can be used by the events industry
Know-how and Skill	Issues re Cost Control / Dynamics / Drivers (according to discipline)	Evaluation of various influences on tools etc. i.e. how CO ₂ reduction imperative can influence adoption of combined heat / energy boilers - grants etc.
	Tools and Techniques / Systems / Infrastructure	Integrated facility management from design to operations - particularly in high impact events over short periods
	Management / Change Management	Challenge of adopting sustainability as a method of evaluating / driving change management
	Policy Implementation	Examining the strengths and weaknesses of national and international policy
	Performance and Measurement / Control	Evaluation of sustainability at the site /organisation / regional / national / international level
	Operational Issues that Students will Encounter when Working	Practical case studies of 'real' adoption of sustainability , e.g. the application of BS:8901 (an agreed standard for sustainable event management) to an individual event
	Managerial Skills / Strategy	Holistic view of sustainability across various management practices from HRM to finance and environmental practice

EVENT MANAGEMENT- Guidelines for Standards in Level 7 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
	Resource Use Minimisation / Recycling i.e. Energy / Waste / Water Reduction	Examine the implementation of sustainable practices such as usage of solar panels; water, waste and energy management etc.
	Human Ecology	Broader perspective of humans and the environment - how humans 'fit' into the world and how humans / environment inter-relate
	Legislation - Local and National / Certification	Overview of legislation according to event or premises type / scale etc. and implications for management
Competence	Emphasis on Marketing and Consumer - Customers / Segmentation	Use of sustainability as product differentiation tool
	Stakeholder Management / Partnership	Examination of scenarios where broad range of stakeholders / partners have adopted sustainable principles - highlighting how philosophical concept can have real impacts
	Global / National Views	Analysis of current state of sustainability, and influences on current thinking
	Customers	Seeing customer care as a sustainable practice - also considering customer expectations
	HRM / Managing People within the Organisation	Consideration of HRM as an important element of sustainable management
	Management issues - learning how to manage operations / enterprise level application / development economic bottom line /Corporate Social Responsibility etc.	Challenging examination of current management issues from a sustainability perspective - ideally undertaken through problem based learning - faced with challenge to outline possible solutions for specific event case studies

EVENT MANAGEMENT - Guidelines for Standards in Level 8 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Carrying Capacity Triple Bottom Line Legislation Global / National Views	Theoretical understanding and evaluation of material - challenging established view using cutting edge current thought / literature
	Emphasis on Marketing and Consumer - Segmentation and its use for Human Behaviour Modification	Awareness that sustainability is a key challenge in winning consumers and in product differentiation
	Environmental Synergies	Questioning the inter-relationship of the three pillars of sustainability - is a true balance of environmental, social and economic costs attainable?
	Policy Implementation	Challenging sustainability policy - questioning current philosophies and proposing alternatives
	Change Management	Evaluating the importance of sustainability as an element of change management - rather than a free-standing concept / theory
	Corporate Social Responsibility	Need to challenge the issue of CSR, both at a theoretical level and its place in the individual organisation / event
	Resource Use and Minimisation - Energy / Waste / Water - Reduction & Recycling	Identify strengths and weaknesses re sustainable practices such as usage of solar panels; water, waste and energy management etc. Identify best options for individual enterprises / events etc.
	Human Ecology	Explore the human-environment relationship and mutual dependencies using practical examples
Know-how and Skill	Performance, Measurement and Control	Use of 'Indicators' to highlight how sustainability theory can be employed to monitor performance
	Managerial Skills	Outlining the range of skills required in the identification and evaluation of tools for (research and adoption of) sustainable practice

EVENT MANAGEMENT - Guidelines for Standards in Level 8 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
	Issues re Cost Control / Dynamics / Drivers (according to discipline)	High level of skill in relation to operations management - tools and techniques for the evaluation of alternative options re sustainable management of events
	Managing People within the Organisation	Development of policy, training regimes and management goals re sustainable management of people
Competence	Strategy	Theoretical and strategic overview of sustainability at the level of strategy and policy development - national and international
	Enterprise Level Application / Development	Theoretical and strategic overview of sustainability and its integration at the level of an individual organisation / event
	Learning how to Manage Operations - Economic 'Bottom Line' / Societal Responsibility etc.	Challenging the accepted understanding of operations management; questioning the aims and objectives of management at the level of an organisation, based on sustainability principles and ideals

Guideline Standards for Tourism Programmes Levels 4-8

14. GUIDELINE STANDARDS FOR TOURISM PROGRAMMES: LEVELS 4-8

The following tables, based on the learning outcomes outlined in the NQAI National Framework of Qualifications, outline the recommended standards which it is expected that a student will achieve at each level of tourism programme. The learning outcomes at each level build upon the foundations established at previous levels.

TOURISM - Guidelines for Standards in Level 4 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	General Treatment of Sustainability	Overview of sustainability in general terms, not specifically tourism-related - incorporating broad understanding of the concept. Global challenges, e.g. climate change, population growth
	Policy Implementation	Awareness of government / sectoral initiatives which promote sustainability - e.g. recycling, plastic bag levy, no-smoking, minimum wage etc.
	Raising Awareness of Sustainability Concept	Three pillars of sustainability - need for balance between environment, economy and society
	Incorporate Idea of Society in General	Relating sustainability to social issues of the day - e.g. news stories such as over-use of resources, building of controversial roadways, destruction of rainforests etc
	Key Current Trends / Theories / Issues	To be related to concrete current examples
	Environmental Synergies	Highlighting inter-linkage and cause-effect, e.g. realisation of global damage by the pesticide DDT in 1960s, Chernobyl disaster, how one species can impact on many others , e.g. grey/red squirrel in Ireland
Know-how and Skill	Energy / Waste / Water Reduction	Highlighting practices in private houses, industry etc such as solar panels, water, waste and energy. Management by industry etc. Highlighting best practice
Competence	Make individuals think about sustainability in their own life	Using examples from a person's own life to highlight our individual use of resources - use of individual carbon calculators, etc.

TOURISM - Guidelines for Standards in Level 5 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Practical	Linking sustainability education to cause and effect - demonstrate to students how actions have consequences. This will require local / regional / national and international case studies of a practical tourism nature
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a national level
	Policy Implementation	Reflection on how sustainability policy is promoted and implemented nationally, internationally and globally
Know-how and Skill	Certification and Awards	Investigation of various 'sustainable' labels (with some emphasis on tourism) - eco / green etc. : Green Flags for schools, Blue Flag beaches, the European "Flower" Eco-label, etc.
	Energy / Waste / Water Reduction	Examining various methodologies in private houses, tourism and other industry for water, waste and energy management
Competence	What each individual / business can do	Case studies of tourism industry leaders in the area of sustainability, e.g. Greenbox etc.

TOURISM - Guidelines for Standards in Level 6 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Systems / Infrastructure	Knowledge and awareness of agencies / organisations involved at national and international level (i.e. Fáilte Ireland, Comhar etc.)
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a European level - Natura 2000 etc.
	Policy Implementation	Examination of how sustainability policy has evolved since 1960s, up to the United Nations Conference on Environment and Development (the 'Earth Summit') held in Rio de Janeiro in 1992; and the World Summit on Sustainable Development, Johannesburg, 26 August - 4 September 2002 (henceforth referred to as "Rio" and "Johannesburg")
Know-how and Skill	Legislation - Local and National	Working knowledge of national directives (tourism and broader) re sustainability - water charges / car taxation based on emissions etc.
	Tools and Techniques	<ul style="list-style-type: none"> • Carrying capacity - overall understanding of the concept and its application • Sustainability indicators - overall understanding of the concept and its application • Management tools - understanding management tools to quantify, reduce or improve impacts & differing impact of different tools on stakeholders and operations
	Resource Knowledge and Use Minimisation	Knowledge of calculating the various measures of efficiency - how to evaluate resource usage at a practical level
	Certification	Ability to analyse different eco-labels and systems of evaluating sustainability and how they pertain in both practical and theoretical ways to tourism

TOURISM - Guidelines for Standards in Level 6 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Competence	Operational Issues Students will Encounter when Working	Operations management and sustainability. How to put sustainable principles into practice in industry
	Consumer Attitudes and Trends	Awareness of public media and sustainability - how trends and 'fads' undergo a lifecycle and how these media trends influence tourism
	Stakeholder Management / Partnership	Based on the 'social' pillar of sustainability, an appreciation of the role which the various stakeholders play in developing a sustainability ethos
	Energy / Waste / Water Reduction	Examination of international debate on water, waste and energy management by industry etc.

TOURISM - Guidelines for Standards in Level 7 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Legislation	Examination of legislative framework - principles of Irish environmental and sustainability legislation
	Environmental Synergies	Highlighting the inter-relationship of the three pillars of sustainability at a global level; examining their importance, strengths and weaknesses; the Kyoto Agreement
	Carrying Capacity / Indicators	Questioning carrying capacity and the science / theory of indicators - their development and application (in tourism and elsewhere)
	Triple Bottom Line	Questioning the application of the Triple Bottom Line
	Consumer Attitudes and Trends	Examination of how consumer attitudes and trends can influence policy making
Know-how and Skill	Issues re Cost Control / Dynamics / Drivers (according to discipline)	Evaluation of various influences on tools etc. i.e. how Co2 reduction imperative can influence adoption of combined heat / energy boilers - through grants etc.
	Tools and Techniques / Systems / Infrastructure	Integrated facility management from design to operations
	Management / Change Management	Challenge of adopting sustainability as a method of evaluating / driving change management
	Policy Implementation	Examining the strengths and weaknesses of national and international policy (both general and specific to tourism)
	Performance and Measurement / Control	Evaluation of sustainability at the organisation / regional / national / international level

TOURISM - Guidelines for Standards in Level 7 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
	Operational Issues Students will Encounter when Working	Practical case studies of 'real' adoption of sustainability - e.g. Green Hotels Initiative and how these can be implemented at the level of an organisation
	Managerial Skills / Strategy	Holistic view of sustainability across various management practices from human resource management (HRM) to finance and environmental practice
	Energy / Waste / Water Reduction	Examine the implementation of sustainable practices such as solar panels; water, waste and energy management etc. and how these can be applied in tourism industries
	Legislation - Local and National / Certification	Overview of legislation according to premises type / scale etc. and implications for management
Competence	Emphasis on Marketing and Consumer - Customers / Segmentation	Use of sustainability as product differentiation tool
	Stakeholder Management / Partnership	Examination of scenarios where broad range of stakeholders / partners have adopted sustainable principles - highlighting how philosophical concept can have real impacts
	Global / National Views	Analysis of current state of sustainability, and influences on current thinking in tourism and elsewhere
	Customers	Seeing customer care as a sustainable practice - also considering customer expectations
	HRM / Managing People within the Organisation	Consideration of HRM as an important element of sustainable management
	Management Issues - learning how to manage operations / enterprise level application / development economic bottom line ,corporate social responsibility/ etc.	Challenging examination of current management issues in tourism from a sustainability perspective - ideally undertaken through problem based learning - faced with challenge to outline possible solutions

TOURISM - Guidelines for Standards in Level 8 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
Knowledge	Carrying Capacity Triple Bottom Line Legislation Global / National Views	Theoretical understanding and evaluation of material - challenging established view using cutting edge current thought / literature, both in broader industry and specifically in tourism
	Emphasis on Marketing and Consumer - Segmentation	Awareness that sustainability is a key challenge in winning consumers and establishing differentiation
	Environmental Synergies	Questioning the inter-relationship of the three pillars of sustainability - is a true balance of environmental, social and economic costs attainable?
	Policy Implementation	Challenging sustainability policy - questioning current philosophies and proposing alternatives
	Change Management	Evaluating the importance of sustainability as an element of change management - rather than a free-standing concept / theory
	Corporate Social Responsibility (CSR)	Need to challenge the issue of CSR, both at a theoretical level and its place in individual organisations
	Energy / Waste / Water Reduction	Identify strengths and weaknesses of sustainable practices such as solar panels; water, waste and energy management etc. Identify best options for individual enterprises (tourism and non-tourism) etc.
Know-how and Skill	Performance, Measurement and Control	Use of 'Indicators' to highlight how sustainability theory can be employed to monitor performance
	Managerial Skills	Outlining the range of skills required in the identification and evaluation of tools for (research and adoption of) sustainable practice/management

TOURISM - Guidelines for Standards in Level 8 Programme

NQAI Recommended Standards	Issues Addressed at This Level	Comments / Ideas for Integration into Programmes
	Issues re Cost Control / Dynamics / Drivers (according to discipline)	High level of skill in relation to operations management - tools and techniques for the evaluation of alternative options re sustainable management
	Managing People within the Organisation	Development of policy, training regimes and management goals re sustainable management of people - and recognition of the importance of sustainable management of people in tourism
	Strategy	Theoretical and strategic overview of sustainability at the level of strategy and policy development - national and international
	Enterprise Level Application / Development	Theoretical and strategic overview of sustainability and its integration at the level of an individual organisation
	Learning how to Manage Operations - economic bottom line / societal responsibility etc.	Challenging the accepted understanding of operations management, questioning the aims and objectives of management at the level of an organisation, based on sustainability principles and ideals
Competence	Strategy	Theoretical and strategic overview of sustainability at the level of strategy and policy development - national and international
	Enterprise level application / development	Theoretical and strategic overview of sustainability and its integration at the level of firm
	Learning how to manage operations - economic bottom line / societal responsibility etc.	Challenging the accepted understanding of operations management, questioning the aims and objectives of management at the level of a firm, based on sustainability principles and ideals

15. TEACHING AND LEARNING STRATEGIES

By its very nature, the concept of sustainability does not lend itself to 'lecturing'. There are no universal, unchallenged truths regarding sustainability. Instead, students need to appreciate that there is a wide variety of possible approaches to sustainable development. The continual evolution of our knowledge of the world we live in, and the inter-relationships which impact on it, demand:

- An understanding of the interdependent nature of our world - social, environmental and economic
- An ability to discern and critically evaluate the different voices in the ongoing sustainability debate
- A tolerance of uncertainty and an appreciation of the need for lifelong learning
- A sense of personal and group responsibility in relation to the impact on resource and carrying capacity of lifestyle choices

The complexity of the subject matter needs to be reflected in the teaching and learning strategies employed. Students need to be challenged to take ownership of their own learning experience through a diverse range of creative methods which do not necessarily replace - but which extend and enrich - current thinking and practices, while simultaneously ensuring the approaches are 'simple, real and local', and are related to students own lives, particularly at introductory levels. Such methods may include problem-based learning, practical investigation, real life case studies, the use of advanced research skills, project work with industry, usage of cutting edge online resources, learning contracts, e-portfolios, and, above all, 'learning to learn'.

As stated in the overall review recommendations, there should be an integrated approach to the delivery of sustainability programme content. Creating awareness of, and a participative approach to, sustainability issues is a function of the whole curriculum and requires engagement of all subjects. It also assumes an impact on *whole* school development - institutions need to look at their own practices in the context of sustainability. The principles of sustainability should inform the whole school ethos - not only curricular but also areas including management of resources such as energy and water, transportation, respect for social, economic and cultural diversity, etc.

Some Proposed Methodologies

The review proposes a range of teaching/learning methodologies, which include:

Case studies - conventional and virtual - provide excellent learning opportunities, provided that they are relevant, recent, thought-provoking and engaging. Where possible case studies should be locally specific; this is particularly important at lower levels, but equally valid at higher levels also.

e-learning: Many of the concepts of sustainability lend themselves (though not exclusively) in both methodology and content to the use of e-learning, which is both adaptable and current. Online supports use reflective and self directed learning, and encourage a constructivist approach to teaching and learning. Bized.co.uk has a range of web pages offering excellent interactive learning tools, including virtual case studies, interactive work sheets, problem/project based activities, multimedia to enhance case study presentation, discussion and debate, role playing and simulations. Tools such as Wikis, Google Groups or YouTube also offer simple online learning resources, while social networking media may provide technical possibilities in the near future.

Personal Development Planning (PDP) can be integrated with the use of:

- e-portfolios (electronic portfolios) support lifelong learning, assisting learners to record and reflect upon the knowledge, skills and competence they build up in the course of their learning experiences. The scope, therefore, extends beyond a record of achievement for a single programme. They are an excellent useful tool in Personal Development Planning (PDP), and they have the added advantage that learners can furnish relevant elements of their e-portfolio to teachers or potential employers.

Some useful e-portfolio sites are:

- <http://www.mahara.org>
- <http://www.pebblelearning.co.uk>
- <http://www.profile.ac.uk/profile/about/about.htm>
- http://www.ulster.ac.uk/progressfiles/resources_screen.php

Learning Contracts are agreements between a teacher (or teaching team) and a learner (or occasionally a group of learners). They normally concern issues of assessment and provide a useful mechanism for reassuring both parties as to whether a planned piece of work will meet the requirements of a programme or module: this is particularly valuable when the assessment is not in the form of a set essay title, or an examination. Useful resources for Learning Contracts include:

- <http://www.mdx.ac.uk/wbl/research/docs/uall07/UALL%2007/PaulGiDiliOjPaper10.pdf>
- <http://www.nes.scot.nhs.uk/Courses/ti/LearningContracts.pdf>
- Boud, D. & Garrick, J. (eds.) (1999), *Understanding Learning at Work*, London: Routledge.
- Eraut, M. (1994) *Developing Professional Knowledge and Competence*, London: Falmer Press.
- Moon, J. (2004) *A Handbook of Reflective and Experiential Learning: Theory and Practice*, London: RoutledgeFalmer. Stephenson, J. & Laycock M. (1993) *Using Learning Contracts in Higher Education*, London: Routledge.

Discussion and Debate

More teaching approaches are needed where educators admit 'we don't know'. Many of the top-end good practice manuals have not been road-tested. Therefore emerging graduates need to be encouraging debate and discussion, realising that there are no hard-and-fast rules in this evolving concept of tourism/hospitality management.

16. GUIDELINE RESOURCE MATERIALS

One of the constant issues raised by teachers/lecturers is the lack of up-to-date, relevant and usable material in the area of sustainability. The following is a selection from a range of resources which have been recommended by those delivering programmes/modules throughout Ireland and internationally.

Core Texts:

Overall

Swarbrooke, J. (1999), *Sustainable Tourism Management*, Wallingford: CAB International

Tourism

Boniface, B., and Cooper, C. (2005) *Worldwide Destinations: The Geography of Travel and Tourism*, 4th edition, Oxford: Elsevier Butterworth-Heinemann.

Harrison, L. C. and Husbands, W. (1996) *Practicing Responsible Tourism: International Case Studies in Tourism, Planning, Policy and Development*, New York: John Wiley & Sons.

Holden, A. (2007) *Environment & Tourism*, 2nd edition, London: Routledge.

Mowforth, M. and Munt, I. (2008) *Tourism and Sustainability. Development, Globalisation and New Tourism in the Third World*, 3rd edition, London and New York: Routledge.

Tribe, J., Font, X., Griffiths, N., Vickery, R. & Yale, K. (2002) *Environmental Management for Rural Tourism and Recreation*, London: Continuum.

Hospitality

Hospitality, Leisure, Sport and Tourism Network (2002) *Resource Guide in Sustainable Waste Management*, Higher Education Academy Network for Hospitality, Leisure, Sport and Tourism. Available at: http://www.heacademy.ac.uk/hlst/resources/detail/resources/guide_susta

Kirk, D. (1997) *Environmental Management for Hotels*, Oxford: Butterworth-Heinemann.

Webster, K. (2006) *Environmental Management in the Hospitality Industry*, London: Thomson Learning.

The International Tourism Partnership (2008) *Environmental Management for Hotels: The Industry Guide to Sustainable Operations*. 3rd edition. Further information on: www.tourismpartnership.org

Core Supporting Texts:

Sustainability

Baker, S., Kousis, M., Richardson, D., Young, S (1997) *The Politics of Sustainable Development*, Routledge: London.

Bartelmus, P. (1994) *Environment, Growth and Development: The Concepts and Strategies of Sustainability*, Routledge: London.

Park, C. (2001) *The Environment: Principles and Applications*, 2nd edition, London: Routledge.

Starkey, R. and Welford, R. (2001) *The Earthscan Reader in Business and Sustainable Development*, London: Earthscan.

Tourism

Butler, R. (1999) 'Sustainable Tourism: a State-of-the-Art Review', *Tourism Geographies*, Vol. 1 No. 1, p7-25.

Cater, E. and Lowman, G. (eds.) (1994) *Ecotourism: A Sustainable Option?* New York: John Wiley & Sons.

Clarke, J. (1997) 'A Framework of Approaches to Sustainable Tourism', *Journal of Sustainable Tourism*, Vol. 5 No. 3, p224-233.

Cooper, C. and S. Wanhill (eds.) (1997) *Tourism Development: Environmental and Community Issues*, New York: John Wiley & Sons.

Eber, S. (ed.) (1992) *Beyond the Green Horizon: Principles of Sustainable Tourism Development*, London: Tourism Concern/World Wide Fund for Nature.

France, L. (ed.) (1997) *The Earthscan Reader in Sustainable Tourism*, London: Earthscan Publications.

Goeldner, C. and Ritchie J.R. (2005) *Tourism Principles, Practices, Philosophies*, 10th edition, Hoboken: John Wiley & Sons.

Hall, C.M. and Lew, A.A. (1998) *Sustainable Tourism: A Geographical Perspective*, Harlow: Longman.

Hall, C. M. and Higham, J. (eds.) (2005) *Introduction: Tourism, Recreation and Climate Change*, Clevedon: Channel View Publications.

Hall, C. and Page, S. (2006) *The Geography of Tourism and Recreation*, 3rd edition, New York/London: Routledge.

Harris, R., Griffin, T. and Williams, P. (2002) (eds.) *Sustainable Tourism: A global perspective*, Oxford: Butterworth-Heinemann.

Harrison, D. (ed.) (2001) *Tourism and the Less Developed World: Issues and Case Studies*, Wallingford: CABI Publishing.

Honey, M. (ed.) (2002) *Ecotourism and Certification: Setting Standards in Practice*, Washington D.C., Island Press.

Honey, M. (1999) *Ecotourism and Sustainable Development: Who Owns Paradise?*, Washington D.C., Island Press.

Inskip, E. (1997) *Tourism Planning: An Integrated and Sustainable Development Approach*, New York: John Wiley & Sons.

Mason, P. (2008) *Tourism Impacts, Planning and Management*, 2nd edition, Oxford: Butterworth-Heinemann.

Mathieson, A. and Wall, G. (2006) *Tourism: Change, Impacts and Opportunities*, 2nd edition, Harlow: Pearson/Prentice Hall.

Middleton, V. and Hawkins, R. (1998) *Sustainable Tourism: A Marketing Perspective*, Oxford: Butterworth Heinemann.

- Miller, G. (2001) 'The Development of Indicators for Sustainable Tourism: Results of a Delphi Survey of Tourism Researchers', *Tourism Management*, Vol. 22 No.4, p351-362.
- Miller, G. (2001) 'Corporate Responsibility in the Tourism Industry', *Tourism Management*, Vol. 22 No. 6, p500-512.
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Journal of Ecotourism
Green Hotelier
Annals of Tourism Research
Cornell Restaurant and Hotel Administration Quarterly
Tourism Management
Journal of Business Ethics
Environmental Impact Assessment Review
Ethical Consumer
Green Futures
Fáilte Ireland's *Tourism Matters*
Tourism Concern's *In Focus*

BEST Education Network Teaching Modules:

To date, four modules have been developed and are available for download on the BEST EN website www.besteducationnetwork.org:

- Sustainable Tourism Planning
- Marketing for Sustainable Tourism
- Sustainable Festivals, Meetings and Event Management
- Sustainable Operations Management

Case Studies:

BEST Education Network

<http://www.besteducationnetwork.org/books/pdf/2007/Case%20Study%20Publication%20full.pdf>

Case Studies:

- Tasting Arizona
- Diablo Canyon Rural Planning Area
- Xanterra LLC: you can't save what you can't measure - Corporate Environmental Responsibility

Case Studies included in:

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Certification and Initiatives:

EU Flower Eco-Label	www.eco-label.com
Green Hospitality Award	www.greenfailte.ie
Fáilte Ireland's Performance Plus Programme	http://www.performanceplus.ireland.ie/
International Tourism Partnership	www.tourismpartnership.org
The Green Tourism Business Scheme	www.green-business.co.uk
The Green Audit Kit	www.greenauditkit.org
Green Globe Labelling	www.greenglobe.org

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Centre for Environmental Studies in the Hospitality Industry, Oxford Brookes University
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Industry Codes of Conduct: e.g. AITO *Responsible Tourism Guidelines*

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Ireland

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Sustainable Tourism Ireland	www.sustourism.ie
Greenbox	www.greenbox.ie
EPA's Cleaner, Greener Production Programme	http://www.epa.ie/downloads/pubs/research/tech/
Environmental Protection Agency Ireland	www.epa.ie
Cultivate	www.cultivate.ie
ENFO	www.enfo.ie
Comhar Sustainable Development Council	www.comharsdc.ie
Race Against Waste	www.raceagainstwaste.ie
Power of One	www.powerof1.ie
Dublin City Council Tap Tips	www.taptips.ie

CDVEC e-book: Global Sustainable Development: A Challenge for Consumer Citizens (forthcoming)

UK

Tourism Concern	www.tourismconcern.org.uk
The Tourism Society	www.tourismsociety.org
The Travel Foundation	www.thetravelfoundation.org.uk
Hospitable Climates	www.hospitableclimates.org.uk
British Institute of Facilities Management	www.bifm.org.uk
FM Link (Facilities Management)	www.fm-link.com
Future Energy Solutions	www.future-energy-solutions.com

International

World Tourism Organisation	www.world-tourism.org
The International Ecotourism Society	www.ecotourism.org
World Travel and Tourism Council	www.wttc.org
Sustainable Tourism Co-operative Research Centre	www.crctourism.com.au
Green Hotels Association	www.greenhotels.com
Tourism & Agenda 21	http://www.uneptie.org/pc/tourism/library/local-agenda21.htm
UNEP Tourism Programme	www.uneptie.org/pc/tourism
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Tourism Online Resource Centre	www.bctorc.ca

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