

National Strategy on Education for Sustainable Development

Analysis of Public Consultation process

19 November 2013

1. Introduction

The development of the National Strategy on Education for Sustainable Development (ESD) by the Department of Education and Skills (DES) arises from a commitment in *Our Sustainable Future - A Framework for Sustainable Development in Ireland* (hereafter referred to as *Our Sustainable Future*) which was published by the Department of the Environment, Community and Local Government (D/ECLG) in June 2012.

The overall objective of *Our Sustainable Future* is to provide for the integration of sustainable development into key areas of public policy, to put in place effective implementation mechanisms and to deliver concrete measures to progress sustainable development.¹

Our Sustainable Future is built upon a number of ‘themes’ that include the economy, the efficient use of resources, equity, respect, and good decision making. These themes are further refined into key ‘principles’ of sustainable development, which in turn give rise to seventy measures that are intended to improve the quality of life of current and future generations. These measures encompass the sustainability of public finances, to climate change and clean energy, sustainable transport, social inclusion and sustainable communities, education, research and innovation, and skills and training.²

A High Level Inter-Departmental Group on Sustainable Development, chaired by the D/ECLG, is coordinating overall implementation of *Our Sustainable Future* and reports on progress to the Cabinet Committee on Climate Change and the Green Economy, which is chaired by the Taoiseach.

Education has an important role to play in relation to promoting sustainable development. *Our Sustainable Future* highlights the importance of education in strengthening the capacity of individuals, communities, businesses and governments to make decisions that take appropriate account of environmental protection.³ One of the seventy measures contained in *Our Sustainable Future* is the development of a National Strategy on ESD by the DES.

This is not the first time that the DES has initiated the development of a National Strategy on ESD. A steering group, chaired by the DES, was established in 2007 for the same purpose. The steering group was supported by ECO-UNESCO. There was a public consultation process, a discussion paper was produced, and a conference was held to discuss the main issues arising from the discussion paper. However, this process was never concluded. This was due to a number of issues affecting the DES including staffing constraints and a multitude of competing priorities. In addition, the DES, and Government Departments in

¹ Department of the Environment, Community and Local Government *Our Sustainable Future – A Framework for Sustainable Development in Ireland*, (2012), p.21

² *ibid.* pp.21-22

³ *ibid.*, 77

general, are often not orientated effectively to deal with issues like ESD that cross divides between sections, Government Departments and even sectors of the economy.

The current process of developing a National Strategy on ESD is similar to that adopted in 2007. An initial discussion paper was produced, there has been a public consultation process, the results of that consultation have been analysed in this paper, and these will be discussed with stakeholders on 19 November. The DES will consider the outcome of the workshop on 19 November and use this feedback to finalise the National Strategy, either late in 2013 or early in 2014.

At an international level, the development of the National Strategy on ESD takes place against the background of the UN Decade for Education for Sustainable Development (DESD), which runs from 2005 to 2014. The goal of the DESD is to integrate the principles, values, and practices of sustainable development into all aspects of education and learning. As part of this process, Member States are required to develop and implement a national strategy for ESD.⁴

More recently, in July 2013, UNESCO identified the parameters of a follow up programme to the DESD.⁵ This proposal for a ‘Global Action Programme on Education for Sustainable Development’, which is to be transmitted to the UN General Assembly for a decision at its 69th session in 2014, contains recommendations for future action in relation to ESD. Reference will be made to the Global Action Programme as appropriate in this document.

2. Overview of submissions

A total of 47 submissions were received in response to the public consultation process. A complete list of the submissions received is outlined in Appendix 1. These submissions will all be published on the website of the DES when the National Strategy on ESD is published. The submissions were extremely helpful in informing the Department’s thinking on a number of key aspects of the National Strategy, namely:

- Defining ESD (section 3)
- Highlighting the extent of current provision on ESD (section 4 and appendix 2)
- Identifying the challenges to implementing ESD in Ireland (section 5)
- Highlighting potential objectives for the National Strategy on ESD (section 6)
- Identifying the characteristics of effective ESD (section 7)
- Suggesting potential recommendations (section 8)

These issues are treated in turn below. Some of the same issues arise under different headings in the analysis below. For example, the issues of data, coordination, and resources were identified in the submissions received through the consultation process as being both challenges to ESD, and characteristics of effective ESD. While the same issue may therefore appear more than once below, the focus of the analysis in each instance is different.

Participants in the workshop on 19 November will be asked for their views on each of the main headings in this document.

⁴ www.unesco.org/education (Oct 2007)

⁵ <http://unesdoc.unesco.org/images/0022/002223/222324e.pdf>

3. Definition of ESD

As part of the consultation process, stakeholders were asked to define what they understood ESD to be. There were a number of common themes or key phrases that were mentioned in the submissions. ESD was characterised as involving the following aspects which have been grouped together below for convenience:

- Encouraging active learning approaches; helping individuals to develop appropriate skills such as critical thinking; and being values driven.
- Being an agent for change and being future orientated.
- Being integrated / holistic and cross – disciplinary; recognising interdependence and interconnectivities; and being lifelong and inter-generational in nature.
- Balancing environmental, social, cultural considerations with the economic agenda.
- Recognising the local context, and linking the local to the national.
- Emphasising social justice; promoting active citizenship; being inclusive / participatory and empowering the individual and the community.
- Promoting Sustainable Development and sharing similarities with Development Education and Environmental Education.

A number of submissions suggested the recent (July 2013) definition of ESD by UNESCO in its draft ‘Global Action Programme on ESD’ for use in the National Strategy: “Education for Sustainable Development allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future”.⁶

4. Current provision

The submissions were very useful in identifying the extent of current provision in the area of ESD. The scale of what is currently underway is considerable. This involves all sectors of the education system, from the principles of *Aistear* and *Siolta* in the early years sector, to inclusion in curricular and subject areas in the school sector, to courses and programmes run by providers in the areas of further education, skills and training, and by programmes and action projects in higher education institutions. This work is complemented by an equally impressive contribution being made by NGOs in sectors which are technically outside the formal education system, such as the Youth sector. The detail of existing provision, as identified in the submissions received from stakeholders, is included as a separate appendix (Appendix 2 attached), where it is broken down by sector. This does not claim to be an exhaustive list of current provision but it is a very useful reference for what is available on the ground. What is also clear is that most of this provision is happening without any central involvement by the DES.

5. Challenges to effective ESD in Ireland

At a global level, UNESCO have recently identified some of the common challenges to implementing effective ESD:

- Successful activities in ESD often merely operate within fixed timeframes and with limited budgets;
- ESD policies and practices are often not properly linked;

⁶ <http://unesdoc.unesco.org/images/0022/002223/222324e.pdf>

- ESD has yet to complete its integration into the mainstream of the education and sustainable development agendas.⁷

The public consultation process was very useful in identifying the challenges that stakeholders viewed as the most important in an Irish context. These challenges are identified in turn below.

Definitional challenges

There are three separate but related ‘definitional’ challenges. In the first instance, there is a degree of overlap between the concepts of Sustainable Development (SD) and Education for Sustainable Development (ESD). The view of the DES is that SD is the primary responsibility of the Department of the Environment, Community and Local Government while the focus of the DES is on promoting *Education* for Sustainable Development. While clearly interlinked, and while ESD has the potential to contribute to SD, the two concepts are distinct. This important distinction has clear implications for the parameters of the National Strategy for ESD.

It is also important to recognise that Sustainable Development itself is not a static concept but is constantly evolving. The focus on the concept of ‘resilience’ is one example of how SD has changed in recent years.

Secondly, the submissions also suggested an ambiguity between ESD and other types of education such as Development Education (DE) and Environmental Education (EE). There is a perception that it is often difficult to discern where one policy area ends and the other begins. However some submissions, such as that by Worldwise Global Schools, identified this as a potential strength in that the ‘action dimension’ that has been successful in promoting changes in behaviour and attitudes in DE was a potential model for ESD. It is evident therefore that DE and EE have a role to play in complementing and supporting the National Strategy on ESD.

Finally, there was an extensive list of issues that were identified in submissions as being relevant to ESD. These issues included climate change; disaster risk reduction; biodiversity; poverty reduction; food prices; child labour; labelling of food products; citizenship; peace; environmental protection; biological and landscape diversity; ethics; responsibility in local and global contexts; democracy and governance; justice; security; human rights; health; gender equity; cultural diversity; production and consumption patterns; corporate responsibility; natural resource management; environmental degradation; urban decay; population growth; social exclusion; water security; migration; and debt.

It is not possible for any strategy to address such a variety of issues. This was identified as an issue in some submissions. David O’Brien pointed to the challenge posed by the fact that ESD as a concept is ‘too complicated and all-encompassing’. Maria Barry from Trócaire suggested that there is a lack of familiarity with subject content of SD beyond the banner headlines of climate change and environmental degradation. Submissions from the CICE and from Developmenteducation.ie advocated the need for the use of ‘jargon free’ accessible language in the Strategy and for clarity of meaning when discussing issues such as ‘sustainable development’ and ‘green growth’.

⁷ UNESCO, Proposal for a Global Action Programme on ESD (July 2013)

Lack of an ESD champion in Government

The submissions highlighted the considerable amount of work that is ongoing at the moment in relation to ESD. However, there is also a perception that this work, a considerable amount of which is being undertaken by NGOs, is developing without any clear involvement by or leadership from central Government. This is primarily due to the sheer variety of the issues covered by ESD, as well as the ambiguity between SD and ESD. While the DES is now assuming lead responsibility for ESD across Government, it will be reliant on a number of other stakeholders if the National Strategy on ESD is to be successfully implemented.

Lack of coordination and collaboration

Linked to the previous ‘challenge’, a number of submissions pointed to the lack of a coordinated approach in relation to ESD. This referred to a lack of collaboration between Government Departments (particularly between the DES and the Department of Foreign Affairs in relation to Development Education), between Government Departments and NGOs, between the formal and non-formal education sectors, and between individual NGOs. Developmenteducation.ie described the lack of coordination as carrying with it ‘the risk of duplication, project isolation and practice that is hidden and not shared by an ESD community’.

Resources and expectations

One of the key messages to arise from the consultation process was the view that, in order to be successful, any strategy for ESD must be resourced appropriately. Linked to this is the desire for increased and more permanent funding streams for NGOs and educational institutions involved in promoting ESD.

There is a need to be realistic about the scope of the National Strategy for ESD and the resources available to implement it. Some recommendations proposed fundamental changes to the structure of the education sector, others would involve significant expenditure which is not possible in the current climate (e.g. recruitment of additional ESD related staff), others are beyond the parameters of this strategy (e.g. tax credits for businesses involved in ESD), while others (laudable in themselves) are simply too vague to be acted upon. However, the submissions were extremely useful in highlighting common areas and themes where action is required and these priority areas will be the target of the National Strategy.

Some submissions (such as those from the JMB, David O’Brien, and Ubuntu) showed an appreciation of the scale of the current economic constraints. Such submissions, while still challenging the Government to act, advocated practical steps rather than a big bang approach and advocated building upon existing initiatives that have been shown to be successful. This is the emphasis in *Our Sustainable Future* and it is considered by the DES to be the most appropriate and realistic approach to developing recommendations in the National Strategy on ESD.

Constraints within the school system

A number of submissions highlighted the obstacles to integrating ESD into the school sector. In overall terms, the view was expressed that schools are currently struggling to do more with less. The Galway One World Centre expressed the view that in the current climate, with schools struggling to do more with less, ESD may be considered to be a luxury add-on that schools simply cannot afford.

ESD is also perceived by many stakeholders as currently occupying a marginal status within the formal curriculum, particularly at post-primary level where the obstacles to integration are seen to be greater. One reason for this is the ‘silo-isation’ of the second level curriculum.

Even where ESD is integrated, in subjects such as CSPE, such subjects were characterised (by St. Patrick’s College) as ‘Cinderella Subjects’ which often treat ESD themes in ‘a superficial, apolitical manner’. The positioning of ESD within such subjects was also identified as being important. For example, in Junior Cycle Geography, human development is placed behind physical geography, while ‘development and aid’ are relegated to the end of the syllabus, which increases the chances of it being skipped by teachers. There is also a perception that even where ESD is included in relevant curricula it is not given adequate priority in how those subjects are assessed. Some stakeholders felt that teachers who deliver such subjects are often ‘conscripted’ into that role rather than being willing participants.

The submission from St. Patrick’s College indicated that this situation was exacerbated by the lack of high quality teaching resources. The submission from DevelopmentEducation.ie, based on an audit of ESD resources, suggested that senior cycle was the poor relation in the school system in this respect. David O’Brien made the point, in relation to the primary sector, that a number of resources were available but that these were not coordinated. Looking from the DES perspective at the range of materials and processes that are currently available in relation to ESD one of the related challenges appears to be a lack of awareness of the resources that are available.

Another obstacle to integrating ESD at post primary level is the pressure arising from the ‘points race’. The submission from St. Patrick’s College expressed this point well: ‘The focus on measurable educational outputs leaves little room for the kinds of open ended dialogue and reflection that are critical to ESD’.

A related challenge in the school sector that was identified in a number of submissions was a perception that teachers are not adequately prepared to teach ESD in schools. The lack of ESD as an element in teacher accreditation, initial teacher education and continuing professional development was identified as a particular problem by Aidan Clifford in the CDU/CDET, among others on the basis that teaching ESD often requires a more innovative and multi-disciplinary approach than other subject areas. A similar point was made by Afri, who indicated that the manner in which ESD is delivered is every bit as important as the content. The SEAI pointed to the fact that even where training is available, there is often difficulty in securing teachers’ release from their teaching duties to attend because of lack of finances for teacher substitution.

Overall the submissions received placed a considerable emphasis on the formal school system to promote ESD. However, some submissions highlighted the constraints within the school system. In particular, the JMB, Dalkia, NUIG and Presentation Justice Network pointed to the need to motivate parents and wider society to play their part also.

Educating the educators

The issue of teacher preparedness was alluded to previously but this was also raised as an important issue in relation to educators in all areas of the education system, both formal and non-formal. It was most often identified in submissions as *the* major obstacle to effective ESD.

Higher education

At an overall level, one difficulty with promoting ESD in higher education is the autonomy of higher education institutions. This has the potential consequence that each institution charts its own course without central direction or coordination.

The lack of integration of ESD into third level curricula was identified by St. Patrick's College and Eddie Conlon and Iacovos Nicolaou from DIT. The lack of integration was seen to be equally applicable to disciplines like engineering where it would appear to be directly relevant, as well as other subjects where a knowledge of ESD would be beneficial. The submission from the College of Engineering in DIT highlighted recent research which pointed to a need to place greater emphasis within engineering on ensuring that graduates are facilitated to become 'change agents'. They suggested that such an approach would require multi-disciplinary inputs, across the STEM/Humanities divide, to an engineer's education. This presents a challenge for higher education institutions which are organised on a disciplinary basis.

Audrey Bryan in St. Patrick's College characterised the approach to ESD at third level as 'add ESD and stir', with ESD often taking the form of introductory lectures or 'development education weeks' which are not conducive to sustained engagement.

The other issue raised in relation to third level is a perceived lack of high-quality ESD-focused research.

Lack of data

The NYCI and Conor Norton in DIT highlighted a lack of data on current provision of ESD programmes. This is a problem that applies equally to the further education and training area as well as to higher education. In the absence of a baseline measurement it is difficult to measure progress or to coordinate existing provision. Conor Norton and ECO-UNESCO separately recommended a mapping and analysis of existing provision as a first step towards strengthening provision in this area.

Not all areas of the education sector included

There was a perception that the efforts of some sectors were not being harnessed enough in the pursuit of ESD. In particular, the NYCI and others such as ECO-UNESCO and IDEA, identified the youth sector as being particularly important. They pointed to the potential of the youth sector to build young people's self-esteem and self-confidence; build their capacity to make informed decisions; help them to develop social awareness and a sense of social solidarity; and enhance their role as active citizens.

Trócaire and ECO-UNESCO were the only ones to identify the contribution that could be made by the early years sector.

6. Potential objectives for the National Strategy on ESD

While participants in the public consultation process were not asked specifically about proposed objective(s) for the National Strategy on ESD, stakeholders will be asked in the workshop on 19 December for their views on this issue.

The previous consultation process on ESD, which was conducted by the DES in 2007, identified a set of objectives for the intended National Strategy. These objectives were

subsequently endorsed in *Our Sustainable Future* (D/ECLG, 2012). These objectives are as follows:

- Embed ESD at every level of the Education System
- Promote public awareness of ESD
- Promote capacity building in support of ESD
- Promote high standards of environmental management in education institutions.

Most recently, in July 2013, UNESCO has proposed a follow up programme to the Decade of Education for Sustainable Development (DESD). This ‘Global Action Programme on Education for Sustainable Development’ has as its overall goal :

- “to generate and scale-up action in all levels and areas of education and learning in order to accelerate progress towards sustainable development”.

This goal is further defined in two objectives:

- (a) to reorient education and learning so that everyone has the opportunity to acquire the knowledge, skills, values and attitudes that empower them to contribute to sustainable development; and
- (b) to strengthen education and learning in all agendas, programmes and activities that promote sustainable development.

The overall goal is divided into five priority action areas that are considered as key leverage points to advance the ESD agenda:

- (a) Policy support: Integrate ESD into international and national policies in education and sustainable development.
- (b) Whole-institution approaches: Promote whole-institution approaches to ESD at all levels and in all settings.
- (c) Educators: Strengthen the capacity of educators, trainers and other change agents to become learning facilitators for ESD.
- (d) Youth: Support youth in their role as change agents for sustainable development through ESD.
- (e) Local communities: Accelerate the search for sustainable development solutions at the local level through ESD.⁸

In providing feedback on the most appropriate objective(s) for the National Strategy, participants in the workshop on the 19th. will also be asked to consider the reach of such objectives. If the objectives extend into areas outside of the education sector then this raises the issue of which Government Departments are best placed to deliver on the elements of such objectives that require engagement by stakeholders outside of the education sector.

7. Characteristics of effective ESD

The submissions received were very useful in identifying a common set of characteristics that should inform effective ESD in Ireland. A number of these characteristics follow from the challenges identified earlier.

⁸ UNESCO (2013), Proposal for a Global Action Programme on ESD

Overall policy framework

St. Patrick's College, IDEA, and others pointed to the need for an enabling policy environment in order for ESD to become successful. It is hoped that the National Strategy will provide such a framework.

Resources

There was broad consensus that the National Strategy needs to be resourced, monitored and include specific commitments. It was mentioned earlier that this is a challenge in the current climate.

Coordination and collaboration

The submissions highlighted the considerable amount of existing activity relating to ESD (as outlined in Appendix 2). However, it is clear that there is a need to coordinate this activity. This was recognised in some submissions. For example, the SEAI pointed to the need 'for stakeholders to develop partnerships, pool resources and work together for the benefit of schools, instead of competing against each other'. Worldwide Global Schools pointed to the need for the DES to provide the necessary leadership to facilitate such coordination. St. Patrick's College also advocated the need for more cross-sectoral and inter-government agency collaboration and engagement on ESD, most notably between the Department of Foreign Affairs and the DES. The Environmental Pillar and others also pointed to the need to strengthen the links between the work of NGOs and Government Departments and this was echoed by the CICE who highlighted the advantages to be gained from building on the work of those already in the field rather than seeking to reinvent the wheel.

Data

It is clear that the Strategy needs to be informed by data, particularly in relation to the extent of current provision of ESD related courses and programmes.

Integration of ESD into curricula

The view was clearly expressed that ESD should not be an afterthought but should instead be an integral part of the education system. In schools, ESD should not be a subject, but rather comprise knowledge, skills and values which are embedded across the entire curriculum. Developmenteducation.ie put the case well: 'Ultimately, for ESD to be taken seriously and to be seen as important educationally, it needs to be accorded status similar to that accorded to the key subjects; if it is perceived or strategised as simply another 'add-on' which teachers and educators are to incorporate without additional support or status, then it will not achieve the intended results'.

There is also a desire, identified by Worldwide Global schools, for existing curricula to be updated to ensure that ESD is reflected more clearly. Similarly, CICE recommended that all curricula need to be 'sustainability-proofed' to see if their underlying values promote and support sustainability, and re-oriented where they do not. DCU recommended the same type of approach at third level.

Edmond Byrne in UCC emphasised that ESD at all levels needs to be holistic and interdisciplinary and it needs to avoid silo-isation.

The Ubuntu network also pointed to the need to reflect ESD in assessments to really ensure that it is taken seriously by students and teachers.

The integration of ESD into curricula is an important element of the new Framework for Junior Cycle. The new Framework is underpinned by eight core principles that are intended to be embedded across curricular and subject areas. A number of these principles are relevant to ESD. These include ensuring students' engagement and participation in their learning, fostering creativity and innovation in teaching and learning, ensuring continuity and development in teaching and learning, promoting inclusive education, as well as a focus on the well-being of the students, school and wider community.

The principles are defined further through twenty four 'statements of learning' which students will be expected to acquire during their Junior Cycle. Sustainable Development is reflected in a number of these statements. These include the expectation that pupils will 'understand the origins and impacts of social, economic and environmental aspects of the world around him/her' and 'have the awareness, knowledge, skills, values and motivation to live sustainably'. The other statements of learning are equally important in that they seek to ensure that students develop some of the key skills that have been identified by stakeholders through the consultation process. These include critical thinking, analytical skills, being creative in addressing problems, communicating effectively, respecting diversity, valuing heritage and many others.

Another positive development associated with the new Junior Cycle Framework is the new short course format which will afford opportunities for NGOs in particular to develop ESD resources, using the NCCA template, that will be available to junior cycle students. This specific focus on ESD has the potential to complement and support the broader emphasis on living sustainably and developing key skills which will be embedded across the curriculum through schools fulfilling the 'principles' and 'statements of learning' associated with the new Junior Cycle Framework.

Finally, one further positive associated with the Junior Cycle Framework is that it creates more space for thinking, dialogue and analysis of issues such as sustainable development by reducing the number of formal examinations that students will sit.

Type of ESD skills is important

It was referred to earlier (p. 4) that a myriad of issues were identified in the public consultation process as being relevant to ESD. It will not be possible for any strategy on ESD to address all of these issues. It is therefore suggested by the DES that rather than seeking to tackle each of these issues in turn, the National Strategy on ESD could focus instead on identifying a set of generic key skills that will enable individuals to be able to engage with a range of different issues and challenges.

A number of submissions implicitly pointed in this direction by recognising that in order to be effective, ESD needs to encourage the development of a set of key skills. The type of skills relevant to an Irish context were identified by a number of stakeholders, including CDU/CDET, UCC, CICE, NYCI and QQI, as the following:

- The active engagement of participants. This relates to two areas: how people learn, and also how people contribute to ensuring that their educational institution becomes a sustainable organisation.
- communication, co-operation, team-work, discussion, decision-making, conflict resolution, creativity

- encouraging a democratic and collaborative approach through group work
- systems thinking, critical thinking, critical media literacy, problem solving, decision making and communication.
- active teaching and learning approaches, empowerment of students, young people and civic engagement
- equipping individuals with the ability to think independently

In addition, QQI and CDU/CDETБ both pointed to the benefits for ESD of raising the general standard of education as this will equip individuals to make more informed decision.

It was noted above that the new Framework for Junior Cycle is built upon an approach of assisting pupils to develop key skills, and that ESD is specifically reflected through a number of the ‘statements of learning’ and in some of the key skills that students will be expected to have developed over the course of their Junior Cycle. These skills were identified above. At Junior Cycle, therefore, curricular reform is clearly moving towards placing a greater emphasis on the development of the type of key skills related to ESD that stakeholders have identified as being particularly important.

This is also the approach that has been adopted by the DES to challenges that pupils face in relation to substance abuse, alcohol, addiction, sexual health, peer pressure, bullying and mental health. Rather than seeking to address each issue in turn, the focus in subjects such as SPHE is on assisting pupils to develop the key skills that will enable them to cope with, and be resilient in the face of, all of these challenges.

Behaviour change not just awareness raising

The submissions from stakeholders clearly emphasised that ESD needs to promote positive behaviour change rather than just raise awareness. A number of stakeholders pointed to ESD as being ‘education for social transformation’ (Environmental Pillar). Presentation Ireland highlighted the difference between “education about sustainable development” and “education for or as sustainable development” which is a transformative learning process that leads to deep long lasting change’. CICE pointed to the need for ESD ‘in itself [to] become an instrument for critiquing our current models of practice and developing the creativity needed to envisage and bring about the changes we need to see in our society’.

In seeking to change behaviour it is also important to deliver a positive message. This was emphasised in particular by CICE and An Taisce.

Emphasis on the importance of local context

Submissions from DIT, DCU and CDU/CDETБ all emphasised that in order to be successful, ESD in Ireland needs to take account of the local context.

Involvement of all levels of the formal and non-formal education sector

It was clear from the submissions that there is a need to involve all aspects of the education sector in ESD. As indicated earlier, Trócaire and ECO UNESCO were among the few to identify the importance of the early years sector as ‘the legacy of this early intervention will be long-term and sustainable’.

Another area which was identified by a number of submissions but given considerable prominence by the NYCI was the role of the youth sector in contributing to ESD. The draft

UNESCO global action programme also identifies youth as being particularly important in their role as ‘change agents’.⁹

A number of submissions highlighted the potential role of organisations and agencies beyond the education sector, including farmers organisations, the media, and businesses. From the DES perspective, this raises the difficulty of moving the National Strategy beyond the education sector and has the potential to blur the line between ESD and SD. While it has responsibility for the education sector, the view of the DES is that the engagement of stakeholders in wider society is a role for the D/ECLG. What is important, however, is that both Departments are working together on communicating a clear and consistent message on ESD/SD to stakeholders across society, irrespective of whether they are inside or outside the education sector.

It was noted earlier in the ‘Challenges’ section that the submissions received as part of the consultation process placed considerable expectations on the school sector (cf p.6). While the DES is confident that schools will continue to play an important role in relation to ESD, it is also important that schools are not seen as a panacea for all of society’s challenges. Schools are playing their part in relation to a range of important social issues such as obesity, substance abuse, bullying, racism etc as well as being expected to deliver the full range of subjects, prepare students for examinations and develop key skills such as literacy and numeracy. It is therefore important that the contribution of schools in relation to ESD is complemented by the work of other stakeholders across society, including parents.

Whole institution approach

There is a clear desire for a whole institution approach to ESD and for institutions to put ESD into practice. St. Patrick’s College and the CICE pointed to the need for ESD to be reflected and integrated within the ethos and mission statement of each educational institution.

Teacher education

‘Educating the educators’ in ESD was identified by many stakeholders as a central characteristic of an effective ESD strategy. The positive ‘multiplier effect’ from such an investment was seen to be particularly important. In relation to the schools sector, Ubuntu pointed to the recent example (July 2013) in France where ESD is now reflected in the new competency framework for teachers. Other submissions advocated a similar approach to training of educators in all settings, including non-formal settings.

Resources

Some submissions (such as those from Dalkia, the NYCI, UNICEF, Presentation Justice Network, and Worldwide Global Schools) pointed to the need to provide freely available and locally relevant resource material (perhaps in a go-to reference website) that would be accessible by the general public, teachers and students. This would be an effective means of reducing duplication, and of endorsing the work being undertaken by NGOs and others. ECO-UNESCO suggested the need for a quality mark for ESD resources.

Higher Education

In the higher education sector, the desirable characteristics of an effective National Strategy on ESD were deemed to be fourfold: (i) to consolidate regional centres of expertise which would play a pivotal role in initiating and disseminating good educational practice on SD and

⁹ UNESCO, Proposal for a Global Action Programme on ESD (July 2013)

make links to the business sector; (ii) to promote and disseminate more research on ESD that is meaningful and practical in terms of making links to industry and in terms of informing teaching practice; (iii) to ensure that there is more cross disciplinary provision in ESD, and exploring the potential to develop foundation modules in ESD in those programmes that are most closely linked to ESD; and (iv) to make campuses exemplars of sustainability.

Principles in UNESCO draft Global Action Programme

The recent draft ‘Global Action Programme’ that UNESCO proposed in July 2013 to build upon and continue the momentum of the Decade of Education for Sustainable Development¹⁰ identifies a number of ‘principles’ or characteristics that should inform future action in this area. These characteristics closely resemble the characteristics that were identified through the public consultation process undertaken by the DES.

The UNESCO principles advocate empowering individuals to acquire the necessary skills and knowledge to take informed choices that will assist in reorienting society towards sustainable development ; it involves integrating ESD into teaching practices and learning, with a view to developing key skills such as critical thinking and participatory decision making. The UNESCO principles are also built on a rights based approach to education; they encompass all levels of the formal and non-formal education system, as well as other stakeholders in wider society, and they view ESD as being a lifelong process.¹¹

8. Potential recommendations

The process of identifying areas for potential recommendations was informed by a number of considerations. In the first instance, and in line with the approach advocated in *Our Sustainable Future*, the DES is of the view that the National Strategy needs to be a practical document with recommendations that are challenging but achievable and which will make a difference. It needs to be focussed, and not so wide ranging that it becomes aspirational.

Secondly, cognisance has to be taken of the fact that *Our Sustainable Future* (D/ECLG, 2012) already contains a number of recommendations for the education sector and beyond that will impact on ESD. The DES is committed to fulfilling its commitments under *Our Sustainable Future* but it is not considered necessary to replicate those commitments in the National Strategy on ESD. The DES commitments in *Our Sustainable Future* relate primarily to the further education, skills and training sector.

Thirdly, the submissions received as part of the consultation process were extremely useful in identifying common areas where action is required. Finally, in the current financial climate, there is no significant additional funding available for ESD. There is therefore a need for building on existing provision and addressing gaps where possible.

The recommendations outlined below in draft format are informed by these considerations. It should be made clear that these ‘recommendations’ are very much intended as draft recommendations intended solely to stimulate discussion at the roundtable on 19 November. They are not definitive recommendations and should not be treated as such. As part of the discussion on 19 November it would be very useful to obtain stakeholders’ views on whether there are significant gaps that have not been addressed in the draft recommendations below. In particular it will be noted that there are no recommendations proposed at present in

¹⁰ Cf p.2 for more information

¹¹ UNESCO (2013), Proposal for a Global Action Programme on ESD

relation to the youth sector. (This gap arises solely because responsibility for this area, in policy terms, lies with the D/CYA)

Parameters of the National Strategy for Education for Sustainable Development

1. The National Strategy on ESD will be focussed on educating for positive behavioural change in relation to Sustainable Development. While Development Education and Environmental Education have a role to play in complementing this work, the National Strategy will focus primarily on Education for Sustainable Development.

Data collection

2. DES to integrate questions on ESD provision into the next Lifeskills survey, which will issue to schools in 2015, in order to establish baseline data on ESD provision in the schools sector.
3. The DES, in conjunction with relevant stakeholders (HEA, ETBs, SOLAS, and QQI) to undertake a mapping exercise to identify the number and type of ESD related programmes being delivered at present in the further (adult and community) education and training, and higher education sectors, and the number of participants on those programmes. The results of this mapping exercise will be made available on a specific ESD webpage on the DES website (cf recommendation 5). The mapping exercise will be repeated every 3 years.
4. The DES, in conjunction with relevant stakeholders (HEA, ETBs, SOLAS, and QQI) to aim to increase the number of participants in ESD related programmes in the further (adult and community) education and training, and higher education sectors by X% each year up to 2020?

Coordination

5. An Education for Sustainable Development Advisory Group, to be chaired by the DES, will be established in 2014. The Advisory Group will meet twice a year. It will be a forum for coordinating activity relating to ESD. It will be responsible for, inter alia, sharing information on new ESD resources that have been developed, highlighting developments in ESD, disseminating the findings of ESD research, and highlighting best practice. The group will comprise stakeholders from the pre-school, schools sector, further (adult and community) education, skills and training, higher education, the youth sector, NGOs and the business community. The Advisory Group will report to the High Level Group on Sustainable Development, chaired by D/ECLG, on an annual basis.
6. The DES will provide a specific webpage on its website that will comprise a platform for coordinating and sharing resources on ESD. NGOs and other stakeholders can request to have their resources, or links to those resources, included on this website. In order to provide some quality assurance of material, resources may be subjected to review by an agency nominated by the DES before they will be accepted onto the DES website. The ESD webpage will also highlight developments on ESD.

Mission statements and ethos

7. The DES will ensure that ESD is reflected in its next Statement of Strategy, in future mission statements of the agencies under its aegis, including all further and higher education institutions.
8. Each primary and post primary school will ensure that ESD is reflected in its school plan, and in its everyday activities as far as possible, so that through their ethos and actions each school will become a sustainable community. This process should be undertaken in consultation with pupils through Student Councils or other means. The DES inspectorate

will monitor schools' fulfilment of this commitment as part of future school inspection reports.

Development of key skills

9. The main focus of ESD is to assist individuals to develop the key skills, such as critical and analytical thinking, which will enable them to contribute positively to Sustainable Development. Such skills will be developed through the fostering of active learning approaches and through integration of ESD principles across curricula and subject areas.

Pre-Schools

10. The DES will continue to work with the D/CYA to ensure that *Aistear* and *Siolta*, which have the potential to contribute to ESD in the pre-school sector, are mainstreamed into all early years settings that are participating in the Early Childhood Care and Education scheme.

School curriculum

11. The DES and NCCA will ensure that ESD is integrated into the specifications that are being developed by the NCCA for revised curricula as part of the Junior Cycle Framework, where this is appropriate.
12. The NCCA will work with NGOs and other interested stakeholders who wish to develop short courses on issues relevant to ESD, using the template that has been developed by the NCCA for this purpose.
13. The DES and NCCA will ensure that ESD is integrated into future primary and senior cycle curricula as they are revised by the NCCA, where this is appropriate.
14. The NCCA will continue to work with NGOs and other interested stakeholders to develop Transition Units on issues relevant to ESD as part of the Transition Year Programme.
15. The DES and the NCCA will consider the possibility of introducing a new Leaving Certificate subject entitled 'Politics and Society' by 2020, within the context of available resources.

Parents

16. The DES will work with the National Parents Councils at primary and post primary levels to ensure that parents have access to relevant materials on ESD.

Professional training for teachers and educators

17. The DES will explore with the Teaching Council, the Colleges of Education and other relevant stakeholders, the possibility of strengthening ESD in initial teacher education.
18. The DES will ensure that ESD is included within the professional support available to primary and post primary teachers through the Professional Development Support Service for Teachers.
19. The DES will work with the Education Centre Network to ensure that courses in ESD are included as part of the annual 'summer course' programme for teachers.

Physical infrastructure

20. The DES will continue to adopt innovative designs to ensure that all new building within the education sector is undertaken in a sustainable manner and will continue to provide resources to existing educational institutions to improve their energy efficiency and reduce their carbon footprint so that they can become role models for Sustainable Development in their communities.

21. The DES will work with SEAI to promote the 'energy in education' programme in an effort to improve energy efficiency in schools.
22. The DES will work with An Taisce with a view to extending the 'Green Schools' programme to all primary and post primary schools by 20XX, and to extend the 'Green Campus' initiative into all further, higher education institutions, and education centres by 2020.
23. The DES will work with An Taisce and the Department of Children and Youth Affairs to explore the possibility of introducing a version of the Green Schools / Campuses scheme into early years settings.

Higher Education

24. The DES, in conjunction with the HEA, will map the research that is currently underway, or has been conducted in the past five years, in relation to ESD, and will make access to this research available on the ESD webpage of the DES website. This mapping exercise will be conducted every 3 years.
25. The DES will work with the HEA and the Department of Jobs, Enterprise and Innovation to ensure that ESD is reflected in all future nationally funded research programmes
26. The DES and the HEA will work with third level institutions to build upon existing centres of excellence and to promote their activities within the education sector and wider society.
27. The DES and the HEA will explore the possibility of strengthening the integration of ESD into relevant disciplines at third level.

November 2013
Tony Gaynor and Fátima Mendes,
Department of Education and Skills

Appendix 1: List of those who made submissions as part of the public consultation process

1. Tina Neylon, EcCoWeLL Cork
2. Charlotte Holland, School of Education Studies, Dublin City University
3. Bernadette Connolly Cork Environmental Forum
4. Eddie Conlon and IacovosNicolaou , College of Engineering and Built Environment, Dublin Institute of Technology
5. Mark Coyne, Dalkia
6. Edmond Byrne, School of Engineering, University College Cork
7. Patrick Boylan, Toilet Revolution
8. Rosalind Duke; Orla Kelly, Church of Ireland College of Education
9. Audrey Bryan, St. Patrick's College, Drumcondra
10. Vaughan, Lisa. Enterprise Ireland
11. Anne Dolan, Mary Immaculate College
12. Liam Kilbride, Presentation Education Office
13. Maria Barry, Trócaire
14. Fiona Hennessy, Waterford/Wexford ETB
15. Tony Williams, Irish Landscape Institute
16. Conor Norton, Dublin Institute of Technology
17. Frank Geary, IDEA - Irish Development Education Association
18. Nikita White, UNICEF Ireland
19. Colm Regan, Tony Daly DevelopmentEducation.ie
20. Deirdre Hogan, Ubuntu Network
21. Rodd Bond, Netwell Centre, Dundalk Institute of Technology
22. WorldWise Global Schools
23. Aidan Clifford, CDETBCDU
24. FridaBesong, School of Education Studies, Dublin City University
25. Eamonn Parker, FADA
26. Ferdia Kelly, Joint Managerial Body
27. Amanda McCloat& Helen Maguire, Home Economics Department, St. Angela's College, Sligo
28. Tom Roche, Just Forests
29. David Malone, Environmental Action Alliance-Ireland
30. MagsLiddy, RCE Ireland, University of Limerick
31. Professor John O'Halloran, School of Biological Earth and Environmental Sciences, University College Cork
32. Aoife Cannon, Sustainable Energy Authority of Ireland (SEAI)
33. Heike Vornhagen, Galway One World Centre
34. Valerie Duffy, The National Youth Council of Ireland
35. Siobhan Egan – Birdwatch
36. David Rose, Presentation Ireland
37. Elaine Nevin, ECO-UNESCO
38. Michael Ewing, Environmental Pillar
39. Dr. Michael John O' Mahony/ Birgit O' Driscoll An Taisce
40. Peter Cullen, QQI
41. Rose Kelly, Afri
42. Sr. Maureen O' Connell, Presentation Justice Network

43. Assoc.Prof. Hugh Kelley, Dr. Nadine Jeserich, Department of Economics,NUI, Galway
44. Ruth Collier
45. David O'Brien
46. Sarah O'Malley
47. Senan Gardiner

Appendix 2: current provision in the field of ESD based on the submissions received as part of the consultation process for the development of the National Strategy on Education for Sustainable Development.

Pre-Schools

- There are two national practice frameworks that provide clear guidance for early years practitioners working with young children and for their parents. Both of these frameworks address key issues pertinent to education for sustainable development.
- *Siolta* (meaning seeds) is the national quality framework for early childhood education and comprises a set of national principles, standards and components of quality. These define the vision for and essential features of high quality practice and include a focus on children's rights and citizenship, respectful relationships, enriching environments, community involvement and equality and diversity. The language of *Siolta* supports the view that the environment is central to positive early childhood experiences and that when children are supported to interact positively with their environment from an early age they will become invested in its protection in the present and into the future.
- *Aistear* (meaning journey) is the early childhood curriculum framework and is structured around four main themes; Well-being, Identity and Belonging, Exploring and Thinking and Communication. These themes are built upon 12 principles of early learning and development. As with *Siolta*, the aims and goals associated with these themes and principles are congruent with the vision of sustainable development. For example on nurturing equality and diversity, *Aistear*'s principle is that '*Promoting equality is about creating a fairer society in which everyone can participate equally with the opportunity to fulfil his/her potential. Diversity is about welcoming and valuing individual and group differences, and understanding and celebrating difference as part of life*'.¹² Another important principle is 'Children as citizens' and in this context *Aistear* states that '*Children are citizens with rights and responsibilities. They have opinions that are worth listening to, and have the right to be involved in making decisions about matters which affect them. In this way, they have a right to experience democracy. From this experience they learn that, as well as having rights, they also have a responsibility to respect and help others, and to care for their environment*'.¹³

School sector

- At primary level ESD is covered in subjects such as Social Personal and Health Education (SPHE); History; Geography; Science.
- At post primary level: ESD is reflected in Civic Social and Political Education (CSPE); SPHE; Science; Economic History, Geography, Religion/Philosophy, Business and Enterprise, Agricultural Science, Agricultural Economics, Business Studies, Home Economics, Religious Education and Engineering; Construction Studies (CS); and Environmental and Social Studies (ESS)
- Junior cycle (JC) reform . A number of submissions highlighted the potential of JC reform in strengthening ESD. This will be achieved through three means. In the first instance, there is the integration of SD principles into a number of the 24 statements of learning that comprise the new JC framework. These include statements of learning to the effect that pupils will 'understand the origins and impacts of social, economic and

¹² Aistear: the Early Childhood Curriculum Framework, p8

¹³ Aistear: the Early Childhood Curriculum Framework, p8

environmental aspects of the world around him/her’ and ‘have the awareness, knowledge, skills, values and motivation to live sustainably’. Secondly, the approach adopted in the new JC Framework, of ensuring that pupils develop key skills such as critical thinking that will enable them to make informed decisions about issues that affect them and society, is very much in line with the approach advocated by many stakeholders. Finally, the new short course format will afford opportunities for NGOs in particular to develop ESD resources, using the NCCA template, that will be available to junior cycle students.

- Senior cycle. A number of submissions highlighted the work that had been undertaken by the NCCA in developing a draft syllabus for a Politics and Society subject that was proposed as an optional examinable full subject in the Leaving Certificate. It has not been possible to progress this subject to date due to economic constraints and competing priorities but a number of stakeholders identified it as a potential flagship project for the National Strategy.
- Transition Year (TY) Programme: a number of the optional areas of study that are available to students in TY are relevant to ESD. These include environmental education, peace studies, politics, community initiatives, debating, and voluntary work. In addition, the new Transition Units that are now part of the TY programme allow NGOs an opportunity to work with the NCCA to develop resources that are available to schools. A number of the TUs that have been developed to date relate to ESD. It is up to individual schools to determine the particular composition of their TY programme.
- Leaving Certificate Applied Programme. This includes a Social Education Module which provides opportunities for the students to examine and explore issues and topics related to self-awareness, interpersonal relationships, health care and contemporary social, economic, political and cultural issues.

Resources for schools

- The CDU CDET have developed a number of toolkits for schools, such as ‘Education for Sustainable Development’ and ‘Personal Consumption and Climate Change’, as well as operating an outdoor education programme
- SEAI offer a number of resources such as One Good Idea (which asks students to develop an awareness campaign and deliver it to their peers, primary schools or adults), Energy In Education (run in conjunction with the DES, it offers a range of supports designed to help schools to improve energy management practices, reduce bills and protect the environment), workshops for primary schools. SEAI are also planning a new programme for January 2014 entitled Exploring Our Energy, which is intended to make teaching energy easy for teachers, while also bringing new teaching practices in digital learning and enquiry based science education to the classroom.
- ECO-UNESCO have developed a number of resources including the Primary Schools Toolkit (which helps teachers integrate ESD into their everyday classroom activities), and are currently developing a Module on Environmental Stewardship for CSPE (which will ask students to consider their lifestyles and habits and the consequences of their actions). ECO-UNESCO also support the ECO Sustainability Award, which aims to encourage youth and community organisations to become more sustainable by providing organisations with training, on-going support and a practical toolkit.
- Irish Aid support the WorldWide Global Schools (WWGS) programme, established in 2013. This is the national programme of support for Development Education (DE) at post-primary level.
- An Taisce, in partnership with local authorities, supports the Green-Schools Programme, known internationally as Eco-Schools. This award scheme promotes whole-school action

for the environment. Some 2,700 schools in Ireland participate, and 1116 of these have been awarded a Green Flag. Research indicates that participating schools can reduce their waste to landfill by around 45-50%, reduce electricity consumption by around 17%, reduce gas consumption by 13%, reduce oil consumption by around 2% , reduce water consumption by 38%, reduce private car usage in school travel by around 20%.

- An Taisce also run the Green-Schools Travel Theme, funded by the Department of Transport through the National Transport Authority (NTA), which is contributing to a decrease in unsustainable school travel modes such as the private car and increases in sustainable modes such as walking and cycling.
- UNICEF Ireland are currently developing educational resources on sustainable development called 'It's About Us'. The 8 classroom workshops are designed to enable young people to consider the world they want and how their priorities, actions and responsibilities will contribute towards a world fit for all children. The materials will be formally launched on 20 November, International Day of the Child.
- The Home Economics Department, St Angela's College, Sligo & the CDU in CDETB are currently conducting research to inform the development of an ESD 'Images and Objects' toolkit for use as a tool for teaching ESD and responsible living in Home Economics.
- The EPA has developed a number of resources for schools. This includes a Primary School Resource Pack which is linked to a number of different curricular areas. At post-primary level materials include 2020 Vision: A Closer Look at Ireland's Environment which is a multimedia resource to assist the teaching of environmental issues to students across four subjects in second-level schools. A major EPA funded research project *CONSENSUS: A cross-border household analysis of CONsumption, ENvironment and SUstainability in Ireland* is yielding valuable educational resources for primary, secondary and tertiary education. The CONSENSUS lifestyle survey factsheets have been circulated as an educational resource to all schoolteachers and students through the AGTI¹⁴ website, with a growing number of students taking a sustainable consumption module based on the project's findings. The EPA also sponsors a Special Award at the BT Young Scientist and Technology Exhibition annually.
- Other groups that have developed resources or which make links to schools and teachers include IDEA (the Irish Development Education Association which has developed Good Practice Guidelines on Development Education in differing subject areas, as well as in relation to extra-curricular activities and overall school ethos), the Irish Peatlands Conservation Council who have developed resources for teachers and students that are curriculum linked and also provide training for teachers), Presentation Ireland (who have developed Challenge to Change, a development education project which seeks to bring about a greater understanding of global inequality), the Presentation Justice Network (who have developed a Sustainable Living Programme), Bat Conservation Ireland, the Heritage in Schools programme, Afri, and Birdwatch Ireland.

Non-formal / youth

- NYCI's Development Education Programme supports organisations that work in or wish to undertake development education projects and work in their organisations and with others. NYCI also support One World Week (OWW) which takes place in the 3rd week in November each year. It is a week of youth-led awareness raising, education and action,

¹⁴Association of Geography Teachers of Ireland

during which young people learn about local and global justice issues and take action to bring about change.

- ECO-UNESCO run a Green Pathways programme which began in March 2013. The aim of the Programme is to progress young people aged 25 or under onto paid employment in the green economy, or on to further and higher education with institutions such as Institutes of Technology. ECO-UNESCO also support the Young Environmentalist Awards which is an all-island programme for young people between the ages of 12 and 18 in schools and youth clubs, aimed at honouring young people who protect, conserve and enhance the environment. There were over 330 projects in 2013. Another ECO-UNESCO programme is ‘Youth for Sustainable Development - Global Youth Leaders for Change’. This is a youth empowerment and ESD programme. ECO-UNESCO has also developed a new award called the ECO-Sustainability Award which aims to encourage organisations to become more sustainable by providing organisations with training, on-going support and a practical toolkit.
- With a number of partners Cultivate are about to start a three year EU funded project called ‘School for Resilience’ that will target formal and non-formal youth learners. The project aims to design a set of teaching materials aimed to approach environmental education from the point of view of community sustainability and resilience.
- Other organisations that are active in this area are the Irish Wildlife Trust, Amnesty International, Trocaire and Concern

Community education

- An Taisce organises a number of programmes such as National Spring Clean, Neat Streets, Irish Business Against Litter (IBAL) All-Ireland Anti-Litter League; Greening Communities - SECAD Green Your Community ;the International Blue Flag Programme; and the Clean Coast Programme
- The EPA has worked with An Taisce and the Department of Environment to develop the *Greening Communities Programme* to enhance coordination and collaboration between the public, private, non-governmental and voluntary sector organisations in the area of sustainable development in Ireland. The EPA also works with An Taisce to promote the Green Home module of the Green Schools Programme. The EPA has also actively supported the production and broadcast of television series such as *EcoEye* and the *Science Squad*.
- Community education initiatives are offered by Cultivate (in particular the Community Power-down Training and a new learning resource called “Surfing the Waves of Change”); GAP; CELTS; and Sustainable Projects Ireland’s immersive sustainable community education offerings in Cloughjordan Ecovillage.

Further Education, Skills and Training

- FETAC accredited courses are offered by Cultivate and ECO-UNESCO (in Sustainable Development, Peer Education for Sustainable Development and ECO Community Development)
- SOLAS (formerly FAS) provides training programme for jobseekers and unemployed persons across a range of sectors including sustainable energy. Existing provision includes programmes in energy efficiency and renewable energy systems. Sustainable skills are also a feature of the SOLAS apprenticeship curricula. Currently, SOLAS is systematically reviewing the apprenticeship trade curricula and the relevant developments in energy efficiency and renewable energy systems have been or will be incorporated in the curriculum as appropriate. SOLAS is also a member of the BUSI (Build Up Skills

Ireland) steering committee, which is tasked with bringing together all relevant stakeholders on training and qualification of the Irish building workforce on energy-efficiency and renewable energy in order to develop a national qualification roadmap to achieve Ireland's sustainable energy policy objectives for 2020.

- Skillnets support and fund networks of enterprises to engage in training under the Training Networks Programme (TNP). Networks funded by Skillnets include the Summit Finuas Network, which is aligning the needs of the finance sector with training in sustainability. The Summit Finuas Network launched an MSc in Sustainability Energy Finance in association with DCU in 2012; and the IPFMA Skillnet offer sustainable courses to skilled workers.

Third level

(a) Programme provision

- There are a number of courses available in higher education institutions relevant to ESD. DIT, UCC and NUIG all highlighted specific provision in this area. This includes the MSc. in Sustainable Development and the post graduate Certificate in Digital Energy Analysis and Building Retrofit in DIT, a BSc in Rural Development in NUIG which is a multi-university collaboration aimed at providing non-traditional and dispersed students the opportunity to develop the necessary skills to manage and lead all aspects of rural development activities; and a university wide module on Global Climate Change in UCC which is taught by a range of staff from across various disciplines and colleges in the university. DIT highlighted their Sustainability Group portal which includes a list of the thematic Sustainable Development Programmes at DIT. The Green campus forum in UCC plays a similar role.
- There are also a number of other programmes offered at third level where sustainability is a significant element. This includes programmes in the Arts, Tourism, Business, Science and Health. For example, the College of Arts and Tourism in DIT is providing programmes in the area of sustainable tourism. The Tempus RUCAS project (Reorienting University Curricula to Address Sustainability) 2010-2013 involves 11 partner Universities (including DCU) within the EU and Middle East and aims to infuse concepts, themes, principles and practices of ESD within modules and courses across a wide range of disciplines in University level undergraduate and postgraduate courses. UCC are organising workshops to explore how best to incorporate more Environmental aspects into all courses in UCC.
- At a national level, two PhD programmes relevant to sustainable development and the green economy are being funded under cycle 5 of the HEA's PRTLTI programme that covers the period 2011-2016. These programmes commenced in the 2011/12 academic year, and take in new cohorts of students each year. The programmes are the Earth Systems Institute PhD programme which involves UCD, TCD, NUIG, UL and QUB and which will create a cohort of graduates with a strong background in Energy and Environmental studies, and the TCD-UCD Engineering Structured PhD Programme which includes a focus on producing the engineering skills and knowledge to further develop the green economy.
- The Springboard programme strategically targets funding of flexible higher education courses at Certificate, Degree and Masters Level, for unemployed people in areas where there are identified labour market skills shortages or employment opportunities. Approximately 1,500 places have been made available on courses relevant to the green economy under the three rounds of Springboard that have issued to date.

(b) Research and expertise

- Higher education institutions contribute significantly to the sustainable development evidence base through research programmes. For example, DIT conducts research under five broad research themes (including the themes of sustainability and environment and health). Post-graduate research in DIT currently covers a very broad and diverse mix of SD topics ranging from marketing of sustainably sourced products to life cycle analysis of buildings and structures to smart city growth.
- Regional Centre of Expertise (RCE) Dublin, which is going through the final stages of recognition at the UN, is coordinated by DCU and focuses on ESD in the Dublin region. RCE Dublin partners include the Green Way, Dublin City Council, Fingal Leader, Educate Together, JustForests, ECO-UNESCO, & Fightingwords. RCE Dublin aims to raise public awareness of ESD through a number of innovative projects. Other examples of centres of expertise include the Dublin Energy Lab and the Environmental Science and Health Institute in DIT.
- The Green Way is a collaboration between industry, academic institutions including DIT and public/semi-state players in the Dublin region, with a vision to create jobs and unlock trade opportunities, through activation and development of an internationally recognised Cleantech cluster.
- DIT and other institutions also encourage and promote student involvement in ESD activities. Within DIT such initiatives include the ‘Green Day’, the ‘Green Week’ and ‘PARKing Day’.
- Higher education institutions are also active in organising conferences and conventions that promote ESD.

(c) Teacher training

- The Ubuntu Network, which is funded by Irish Aid, supports the integration of DE and ESD into post primary initial teacher education, working across 13 HEIs to plan, deliver and evaluate appropriate DE/ESD interventions in teacher education programmes.
- The DICE Project (integrating Development Education and Intercultural Education into post primary initial teacher education) is also funded by Irish Aid.
- DCU has jointly developed an online ESD eToolkit with partners in the Tempus RUCAS programme which aims to educate the educators in ESD.
- The EPA has supported the development of educational modules for the catering colleges in Ireland and intends to develop educational modules for the agricultural training colleges. The EPA has also worked with Marino College of Education in the past to encourage trainee primary school teachers to teach about environmental issues.

(d) Infrastructure

- The Green-Campus programme is run by An Taisce and is based on the success of the Green-Schools Programme. It has been piloted and amended for implementation in further education and third level educational institutions. At present it has 18 Campuses formally registered on the Programme, with three awarded the Green Flag: GMIT, Castlebar; Coláiste Dhúlaigh College of Further Education, Coolock; and University College Cork, which was the first university in the world to achieve green flag campus status. UCC was also the first university in Ireland to have their total carbon footprint calculated. DIT is currently working towards green flag status.

- DIT highlighted the development of the Grangegorman Campus as an opportunity to put sustainable urban planning and development into practice and to introduce innovative environmental management and technologies. This is in line with using third level campuses as 'Living Laboratories for Sustainability' which was recommended in the submission from the Environmental Pillar and others.
- The 3e project of partner universities between DCU, UCD and Trinity college has enabled these three institutions to reduce their environmental foot prints through reductions in energy consumption. The Dundalk IT wind energy system has helped the institution to reduce its environmental footprint through the use of renewable-wind energy on campus.