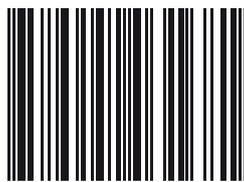


## A PROPOSAL FOR QUALITY ASSESSMENT STANDARDS AND GUIDELINES



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# INTRODUCTION

Sustainable development <sup>1</sup> has been identified as one of the greatest challenges faced by the world today. <sup>2</sup> Over the last few decades, unsustainable practices have increased social and economic inequalities, contributed to greater environmental degradation and detracted from well-being and quality of life. <sup>3</sup> Climate change is now an unquestioned fact and most governments recognise the urgent need to reduce CO<sub>2</sub> emissions into the atmosphere and develop adaptation and mitigation plans. <sup>4</sup>

In 2015, recognising this situation, the UN Assembly approved the 2030 Agenda for Sustainable Development, <sup>5</sup> containing an action plan with 17 Sustainable Development Goals (SDGs) for people, the planet, prosperity, peace and partnership. Although it is not legally binding, most of the United Nations agencies and a large number of governments, <sup>6</sup> businesses, NGOs, youth bodies and civil society in general <sup>7</sup> have adopted the goals and developed action plans to implement them.

Higher education institutions <sup>8</sup> have also expressed their desire to align with this global agenda. <sup>9</sup> In fact, many universities from all around the world have a long history of promoting change for sustainability, and take action towards it. However, there are not many examples of institutions that have managed to incorporate sustainable development systematically into all their activities. The path is therefore new, and more strategic efforts are needed to embed sustainability in all university decisions. <sup>10</sup>

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<sup>1</sup> This document uses the terms sustainable development and sustainability interchangeably.

<sup>2</sup> (United Nations General Assembly, 2015).

<sup>3</sup> (Blewitt, 2008; Sachs, 2015).

<sup>4</sup> (UNFCCC, 2015).

<sup>5</sup> (General Assembly of the United Nations, 2015).

<sup>6</sup> Specifically, the SDGs have been adopted by 193 countries.

<sup>7</sup> See: <http://www.businessfor2030.org/>; <https://sustainabledevelopment.un.org/partnerships/actionnetworks>; <https://ysa.org/>; <http://nayd.org/>; <https://aiesec.org/youth-for-global-goals>

<sup>8</sup> <http://www.businessfor2030.org/>; <https://sustainabledevelopment.un.org/partnerships/actionnetworks>; <https://ysa.org/>; <http://nayd.org/>; <https://aiesec.org/youth-for-global-goals>

<sup>9</sup> (The SDG Accord, 2015).

<sup>10</sup> (GUNi, 2012; Ryan & Tilbury, 2013; Mulà et al., 2017).

The Principality of Andorra, aware of the cultural wealth and unique value of its land, with a desire to create better opportunities and well-being for everyone, has increased its commitment to sustainability by adopting measures to implement the SDGs.<sup>11</sup> The higher education institutions of Andorra are not indifferent to this movement and, although a nascent line of activity, have also expressed the need to build a society that is more just, aware and united.<sup>12</sup> The next step is to agree some strategic guidelines to redirect the universities' activities towards sustainability.

Accordingly, this report presents a proposal to introduce the SDGs into the higher education institutions of Andorra through quality assessment of their teaching. This is a proposal that enables the sustainability challenge to be tackled strategically and promotes systemic changes in universities.

This study has been coordinated by the Andorran Quality Assurance Agency for Higher Education (AQUA) and drawn up by the Complex Research Group (GRC) of the Universitat Autònoma de Barcelona (see boxes 1 and 2). Its preparation has looked at the emerging trends in the improvement of international higher education, the quality assessment standards and guidelines in the European Higher Education Area (EHEA)<sup>13</sup> and the United Nation's Sustainable Development Goals of the Agenda 2030. The work has benefitted from the participation of a group of national and international experts (see Appendix 1), and was presented and debated at the 8th session of the working group for quality higher education in Andorra, on 14 December 2017.<sup>14</sup>

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<sup>11</sup> (Government of Andorra, Ministry of Foreign Affairs, 2016).

<sup>12</sup> (Universitat d'Andorra, 2011).

<sup>13</sup> (European Association for Quality Assurance in Higher Education et al., 2015).

<sup>14</sup> (AQUA, 2017).

### Box 1. The Andorran Quality Assurance Agency for Higher Education (AQUA)

**AQUA**<sup>15</sup> is an institution governed by public law whose purpose is to ensure the quality of higher education in Andorra, to address the constant requirement for quality and rigour and meet the social and labour demands of the Andorran community. Its functions are performed within the framework of guidance, assessment, accreditation, certification and improvement in the quality of higher education and research in universities. Its Management Committee includes the main stakeholders in the Andorran higher education system. It is regulated by Law 9/2016, of 28 June, on the creation of the Andorran Quality Assurance Agency for Higher Education (AQUA).

### Box 2. Complex Research Group (GRC) of the Universitat Autònoma de Barcelona

The **GRC**<sup>16</sup> is a consolidated research group (2017SGR476) attached to the Department of Mathematics and Experimental Sciences Teaching in the Faculty of Education of the Universitat Autònoma de Barcelona. It is internationally renowned for its research, innovation and knowledge transfer activities in the field of sustainability and higher education. This is evident in its participation in national projects, European programmes and international networks in those fields.

In this document, we first contextualise the study and justify the need for higher education institutions to face the challenge of sustainability. Then, the strategic proposal and its validation process is presented. Finally, future directions are proposed that would allow for the continued embedding of sustainability into the quality assessment processes for higher education in Andorra.

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<sup>15</sup> More information about AQUA at: [www.aqua.ad](http://www.aqua.ad)

<sup>16</sup> More information about GRC at: <http://grupcomplex.uab.cat/>

# HIGHER EDUCATION IN ANDORRA

## *Which model of higher education?*

The Andorran higher education system has developed and adapted over the last 30 years, to meet the social needs and challenges of the Principality and considering its particularities as a European microstate. Currently, the main supply of higher education in the country is from two universities: a national public university, the Universitat d'Andorra (UdA), and a private university, the La Salle Open University – Andorra (UOLS) (see boxes 3 and 4). Both institutions offer classroom-based and online courses in subjects such as educational science, nursing, IT and business administration. In the case of the UdA, it has a very broad range of courses and the possibility of obtaining a double qualification thanks to its partnership and agreements with the Universitat Oberta de Catalunya (UOC). Moreover, the Andorra Aviation Academy<sup>17</sup> offers a Bachelor of Aviation, and the Escola Vatel Andorra college<sup>18</sup> offers a French Bachelor and MBA in international hotel management.

### **Box 3. The University of Andorra (UdA)<sup>19</sup>**

The **UdA**<sup>20</sup> is a national public university based in Sant Julià de Lòria. It was created in 1997, emerging from the Nursing School and IT School, founded in 1988. The University consists of the Online Studies and University Extension Centre the Health and Education Science Centre, the Health Sciences and Education Centre, the Business and Technology Studies Centre and the International Doctorate School; it offers classroom-based and online studies in the fields of nursing, educational science, IT, business administration, languages, humanities and law. It takes about 1,300 students (including continuing education students) and has 22 permanent lecturers and 288 collaborators (data for the 2016-2017 academic year). The university's mission is to meet the country's needs, and its values include social responsibility, quality and the spirit of critical thinking and innovation.

<sup>17</sup> More information about Andorra Aviation courses at: <http://www.andorra-aviation.com/>

<sup>18</sup> More information about Escola Vatel at: <http://www.vatel.ad/>

<sup>19</sup> The Law 15/2018, of 21 June, of the University of Andorra, has recently been approved

<sup>20</sup> More information about UdA at: <http://www.uda.ad/>

#### Box 4. La Salle Open University – Andorra (UOLS)

**UOLS**<sup>21</sup> is an online university, part of the Catholic La Salle group, based in La Massana. It was founded in 2010, but did not start to operate until the 2012-2013 academic year. It offers courses in business studies, IT and multimedia, and Lasallian studies, takes 126 students and has 31 teaching staff (data for 2017-2018). The university is flexible and international, with important values such as inclusive education, solidarity and diversity.

In 2003, the Principality of Andorra joined the EHEA<sup>22</sup> to acquire a tertiary education system comparable with the rest of Europe and endow its qualifications with mobility and international recognition. This ambition involved coordinating national policies and legislative reforms to adopt European procedures and standards that the University Law of 30/07/1997<sup>23</sup> did not provide. Notably:

- **Law 12/2008, of 12 June, regulating higher education**,<sup>24</sup> to meet the challenges of the EHEA, such as guaranteeing the quality of higher education, creating a flexible system of qualifications based on three cycles (bachelor, master and doctorate), adopting the ECTS credit system and issuing a European supplement to qualifications (see box 5).

#### Box 5. Law 12/2008, of 12 June, regulating higher education<sup>24</sup>

“The model of higher education, developed since its creation in the Law on the Universitat d’Andorra of 1997, has become fully established. Today, however, we need to define new goals for the future development of our higher education system. The Bologna and Copenhagen processes inspire a new outlook on university studies and higher professional education. To meet the new challenges, it is not enough to progressively adapt the curricula and qualification recognition system to any new requirements. So, these processes of change also require a qualitative transformation in our model of higher education.”

<sup>21</sup> More information about UOLS at: <http://www.uols.org/>

<sup>22</sup> More information about the EHEA at: <https://www.ensenyamentsuperior.ad/45-ensenyament-superior?start=16>

<sup>23</sup> BOPA [Official Gazette of the Principality of Andorra] no. 53, 20 August 1997

<sup>24</sup> This law was recently been modified by Law 14/2018, of 21 June, of higher education. More information at [www.bopa.ad](http://www.bopa.ad)

- **The Andorran Framework of Higher Education Qualifications (MATES)**,<sup>25</sup> approved in 2010, defines the learning requirements and professional and academic competencies for each level of studies in line with the European Qualifications Framework (see box 6).

#### Box 6. The Andorran Framework of Higher Education Qualifications (MATES)

“The aim of creating a common European educational area is not to implant a rigid, uniform system throughout the continent, but to establish flexible, transparent mechanisms to allow citizens to freely access the supply of education and the labour market.

Achievement of this goal is based on the actions envisaged in the successive Bologna declarations, including the creation of a national qualifications framework as a tool to help attain this goal.”

- **The Decree of 14/04/2010 approving the Regulations for organising national university qualifications**,<sup>26</sup> establishing the mechanisms to verify that the curricula comply with legislation and the national social and productive reality (see box 7).

#### Box 7. The Andorran Framework of Higher Education Qualifications (MATES)

“This Decree establishes a model for creating national qualifications according to the premises and recommendations deriving from the Bologna process. Accordingly, the requirements for creating a national university qualification make the production of these qualifications highly transparent and emphasise the rigour taken by universities when preparing the curricula and the Government’s commitment to quality.”

<sup>25</sup> BOPA no. 6, 3 February 2010.

<sup>26</sup> BOPA no. 23, 21 April 2010.

All these regulations have helped to intensify the interrelation between the Andorran higher education institutions and the European environment and create systems that modernise and improve education. Entry into the EHEA has also meant setting up processes to assess the quality of teaching and being accountable and transparent to society.

### **How is the quality of higher education assessed?**

The system for assessing the quality of higher education in Andorra combines a formula that incorporates internal quality assurance, based on the responsibility of each institution, with external quality assurance processes led by an assessment agency.

With regards to internal assurance, some institutions such as the UdA have created a Quality Council to promote a quality culture among the university community and prepare internal self-assessment reports (see box 8). This team is essential for assessing the quality of teaching and internal qualifications, and for implementing the improvements requested by the Quality Agency, to achieve accreditation of the curricula.

#### **Box 8. The Quality Council of the University of Andorra**

“The [Quality Council of the UdA](#)<sup>27</sup> was set up in 2007 and consists of the leader, three representatives of the teaching staff, one representative of the rector’s office, one representative of the administrative and technical staff and one representative of the students. Its purpose is:

- to promote culture and quality among all the members of the university community;
- to foster quality procedures, guidelines and standards in all university activities;
- to draw up internal self-assessment reports for each university field.

The Council has developed the following self-assessment processes:

<sup>27</sup> More information about the Quality Council of the University of Andorra at: <http://www.uda.ad/blog/el-consell-de-la-qualitat/>

- normal self-assessment of teaching quality, both the quality of the teaching staff and the quality of the subjects taught in each course, from the 2008-2009 academic year;
- participation in the US project "Examining Quality Culture in Higher Education Institutions (EQC)", from the 2009-2010 academic year;
- assessment of the University's services, from the 2011-2012 academic year;
- defining and introducing new guidelines and procedures for action, such as the student guide, defining the skills that UdA students must acquire, and the new structure of the teaching plans for all subjects taught at the university;
- internal assessment of the qualifications offered by the University, such as the internal assessment of the business computing and nursing diplomas;
- participation in the creation of new qualifications offered by the university, such as the creation of the new bachelorships;
- the teaching quality assessment is carried out through surveys that all the students of the University answer individually and anonymously. Regarding the services assessment process, this is also carried out through individual, anonymous surveys answered by both the students and the staff of the University."

Externally, the quality assessment is carried out by AQUA, created in 2006 in the spirit of the EHEA, through Law 9/2016, of 28 June <sup>28</sup> (see box 9). The Agency provides processes and creates systems aimed at improving education and higher education institutions, the teaching staff and research. It is responsible for managing, among others, the teaching assessment process and validating staff who do not meet the minimum requirements <sup>29</sup> specified in the Law regulating higher education.

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<sup>28</sup> BOPA no. 42, 20 July 2016.

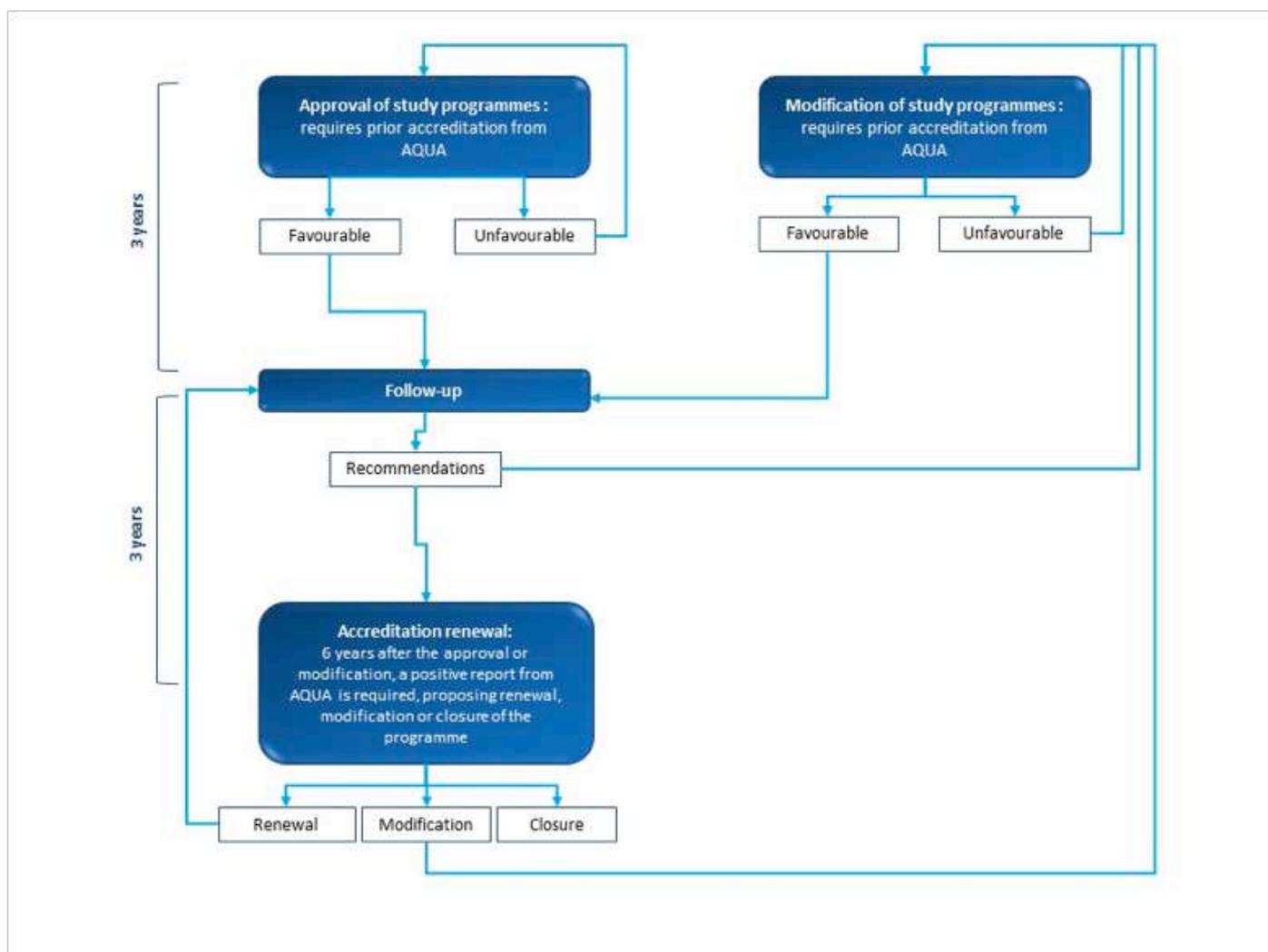
<sup>29</sup> According to Law 12/2008, of 12 June, for teaching bachelor's or master's degrees, academic staff must have a master's or higher qualification. To teach or manage research projects in a doctorate programme, the teacher must have a doctorate. More information at:  
<http://www.aqua.ad/qualitat-del-professorat>

**Box 9. Law 9/2016, of 28 June, on the creation of the Andorran Quality Assurance Agency for Higher Education (AQUA)**

**Article 3. Quality and assessment** – “The Andorran Quality Assurance Agency for Higher Education supervises the quality of higher education in Andorra with the constant requirement for quality and rigour deriving from social and labour demands. The assessment system is the tool for adapting higher education to the framework of the European Higher Education Area, and must aim for constant improvement of its processes in higher education.”

Quality assessment of national qualifications is established at different points, as indicated in figure 1:

**Figure 1. Higher education assessment process** <sup>30</sup>



<sup>30</sup> Source: <http://www.aqua.ad/contingut/qualitat-dels-ensenyaments>

- **Approval:** the curricula are approved by Government decree with prior accreditation by AQUA. Each university prepares its curricula based on the requirements set out in the Decree creating the qualification.
- **Modification:** modifications in the curricula are approved by the University and must then be notified to the competent ministry and AQUA, for accreditation.
- **Monitoring:** after three years, institutions may ask AQUA to monitor implementation of the curricula
- **Renewal:** approved curricula are valid for six academic years. Renewal of accreditation requires an assessment by AQUA, which will propose its renewal, modification or closure.

In relation to teaching staff, the assessment considers the training and work experience of the candidate, within the context of the subjects to be taught. The University sends a letter of application to AQUA, with the CV of the person concerned and the teaching plan for the subjects s/he plans to teach. AQUA assesses the information and issues a report that accredits the person or not.

Adopting these quality systems has been a decisive step for the future of higher education in Andorra and needs to be accompanied by a broader process of building a culture of quality. This has consisted of creating committees, working groups and forums on quality, and special training for the main stakeholders in Andorran higher education. This year, a new stage has begun, marked by the desire and need to contextualise the assessment system in Andorra. Consequently, embedding sustainability into the assessment framework represents a unique opportunity to promote the most important teaching and learning processes, and highlight Andorra's commitment to achieving the SDGs.

# THE SUSTAINABLE DEVELOPMENT GOALS IN HIGHER EDUCATION

## What are the SDGs?

On 25 September 2015, the General Assembly of the United Nations unanimously adopted the Agenda 2030 “Transforming the world: the 2030 Agenda for Sustainable Development”,<sup>31</sup> one of the most ambitious international agreements in history. The Agenda proposes a new road map, containing 17 SDGs and 169 guidelines, which is inclusive and encompasses economic, social and environmental dimensions (see box 10).

### Box 10. The 17 Sustainable Development Goals



1. **No poverty:** to end all forms of poverty everywhere.
2. **Zero hunger:** to end hunger and famine, achieve food security, improve nutrition and promote sustainable agriculture.
3. **Good health and well-being:** to guarantee healthy lives and promote well-being at all ages.
4. **Quality education:** to guarantee inclusive education for all and promote lifelong learning opportunities that are of quality and equitable.
5. **Gender equality:** to achieve gender equality by empowering young and adult women.
6. **Clean water and sanitation:** to guarantee the availability and sustainable management of water and sanitary conditions.
7. **Affordable and clean energy:** to guarantee access to affordable, reliable, sustainable and renewable energy sources to all.

<sup>31</sup> (General Assembly of the United Nations, 2015).

8. **Decent work and economic growth:** to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
9. **Industry, innovation and infrastructure:** to build resilient infrastructure; promote inclusive, sustainable industrialisation, and foster innovation.
10. **Reduced inequalities:** to reduce inequality among countries and within countries.
11. **Sustainable cities and communities:** to create sustainable cities and towns that are inclusive, safe and resilient.
12. **Responsible production and consumption:** to guarantee sustainable consumption and production models.
13. **Climate action:** to urgently combat climate change and its effects.
14. **Life below water:** to conserve and use sustainably the oceans, seas and marine resources for sustainable development.
15. **Life on land:** to protect, restore and promote the sustainable use of terrestrial ecosystems, manage the forests sustainably, combat desertification, stop and reverse soil erosion, and halt the loss of biodiversity.
16. **Peace, justice and strong institutions:** to promote peaceful, inclusive societies to achieve sustainable development, provide all people with access to justice and develop efficient, responsible, inclusive institutions in all fields.
17. **Partnerships for the goals:** to strengthen the means of implementation and revitalisation of global associations for sustainable development.

The SDGs are the result of a process of negotiation that lasted three years, ending in the Rio+20 Conference (2012),<sup>32</sup> and are based on the experience acquired from implementing the Millennium Development Goals (MDG) (2000-2015).<sup>33</sup> Unlike the MDGs, the SDGs have a much broader scope and consider fundamental issues such as climate change and decent work. They are also universally applicable, understanding that problems are interconnected and must be approached globally, with collaboration from all stakeholders. Despite its universality, the 2030 Agenda specifies that each government must set its own targets to meet its own specific challenges.

The Principality of Andorra is committed to sustainable development (see box 11) and was one of the 193 countries to adopt the SDGs during the General Assembly of the United Nations. Currently, the Ministry of Foreign Affairs is working to link the Government's actions

<sup>32</sup> (United Nations, 2012).

<sup>33</sup> More information on SDGs at: <http://www.un.org/es/millenniumgoals/>

to each SDG and present an annual assessment of compliance.<sup>34</sup> The Ministry has also updated its master plan for international development cooperation<sup>35</sup> to align the lines of strategy with the SDGs, and organised a communication campaign about the SDGs in 2017. In 2016, the Government dedicated the 35th Andorra Summer University to the 2030 Agenda. For four days, conferences were offered on climate change, biodiversity, road safety, human rights, educational policy and innovation funding.

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<sup>34</sup> (Government of Andorra, Ministry of Foreign Affairs, 2016).

<sup>35</sup> Government of Andorra, 2017).

### Box 11. Andorra's commitment to sustainable development

As a Pyrenean country, close to nature, the Principality of Andorra has always striven to conserve the environment and fight climate change. Since the 2030 Agenda, Andorra has signed other international agreements on sustainability, such as the UN Framework Convention on Climate Change (2011),<sup>36</sup> The Convention on Biological Biodiversity (2015)<sup>37</sup> and the Paris Agreement on Climate Change (2015).<sup>38</sup>

The Ministry of the Environment and Sustainability annually publishes national sustainability indicators<sup>39</sup> and has strategies and actions on water, energy, waste, biodiversity and landscape, among others.<sup>40</sup> Public communications on all these aspects are made via the Centre Andorra Sostenible (Sustainable Andorra Centre),<sup>41</sup> an initiative by the Ministry intended to be an information and documentation point.

The importance of education for sustainability is apparent in the diversity of initiatives and projects coordinated by the Ministry of Education and Higher Education. One of the most ambitious programmes is the "Escola Verda" project ("Green School"),<sup>42</sup> a transversal proposal with the Ministry of Environment and Sustainability, which embraces 17 schools working to become more environmentally-friendly.

Outside the public domain, a notable example is the Andorran Sustainability Observatory (OBSA),<sup>43</sup> the main purpose of which is to carry out research to support policy planning and decision-making on various issues of priority to the country.

On the other hand, civil society has traditionally appeared very active in sustainability matters. Apart from several groups involved in defending the land, the ecological footprint calculation adapted to Andorra is a notable example, devised by the environmental association Associació per la Defensa de la Natura, and the campaign "For a sustainable Andorra, now!"<sup>44</sup>

<sup>36</sup> More information on implementation of the Convention at: <https://www.mediambient.ad/canvi-climatic/conveni-marc-de-les-nacions-unides>

<sup>37</sup> More information on implementation of the SDGs at: <https://www.mediambient.ad/biodiversitat>

<sup>38</sup> More information on this agreement at: <https://www.mediambient.ad/canvi-climatic/acord-de-paris>

<sup>39</sup> See the latest results at: [https://www.mediambient.ad/images/MiniSites/indicadors\\_2015/](https://www.mediambient.ad/images/MiniSites/indicadors_2015/)

<sup>40</sup> See: <https://www.mediambient.ad/>

<sup>41</sup> More information on the Sustainable Andorra Centre at: <http://www.sostenibilitat.ad/>

<sup>42</sup> More information on the Green School programme at: <http://www.escolaverda.ad/escoles-verdes-dandorra/>

<sup>43</sup> More information on OBSA at: <http://www.obsa.ad/>

<sup>44</sup> This campaign is organised by the environmental associations Associació per la Defensa de la Natura and Col·lectiu per la Protecció del Patrimoni Muntanyenc. See: <http://www.andorrasostenible.org/>

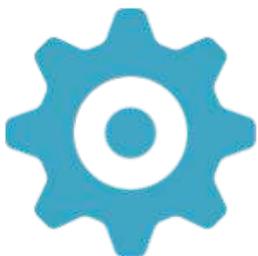
## How can universities help to achieve the SDGs?

Historically, higher education institutions have played a major role in leading the processes of social transformation through scientific research, the creation of innovative solutions and the education of intellectuals and agents of change.<sup>45</sup> The 2030 Agenda explicitly recognises that certain goals and objectives can only be achieved with the collaboration of higher education institutions and research centres. Specifically, universities can help to implement SDGs via:



### **Governance – incorporation of the principles of the SDGs into governance and institutional culture**

Sustainable development must be an institutional commitment and be reflected in campus management, the curriculum, research and university extension. Achieving the SDGs cannot depend on the efforts of the few but requires the creation of an institutional culture that values sustainability, and also the development of policies that foster partnership towards it.



### **Management – fostering sustainable campus management and university operations**

To achieve the SDGs, higher education institutions must acknowledge their impact on the environment and minimise their carbon footprint via new campus management models, making the most of resources and risk reduction. Actions for environmental management of water, energy, waste or transport are common in most universities.



### **Teaching and learning – training the students to implement and assess the SDGs**

The main mission of higher education institutions is to provide quality education to students in the competencies that current society demands. Therefore, universities have a major role in training the students to lead processes of change and improvement of their communities and foster implementation of the SDGs in their personal and professional spheres.

<sup>45</sup> (UNESCO, 2015; SDSN Australia/Pacific, 2017).

### Research – promoting responsible research and the creation of alternative pathways for the future



Through research, universities can contribute to the SDGs, defying paradigms, defining conceptual frameworks, developing new insights, creating alternatives, influencing policy, creating areas of participation, etc. Research staff also have the opportunity to analyse the approaches and processes of implementation of the 2030 Agenda and determine which are most effective.

### Partnerships and community engagement – fostering the well-being of communities and creating new partners for change



Universities have an active role in improving the well-being of the communities they serve and in creating networks, partnerships and areas of collaboration for change. They can contribute to knowledge transfer and providing sustainability services to society.

For several decades, many universities have been working on sustainability in all these fields. The progress is notable, above all in environmental management of the campus, and has been documented in a great number of international reports and academic publications.<sup>46</sup> Nevertheless, experts continue to insist on the need to embed Education for Sustainable Development (see box 12) more effectively into the university teaching or curriculum.<sup>47</sup> This concern has also become evident in recent times among employers and students, who see sustainability as a stake in the future and want it to be regarded more highly in university courses (see box 13).

#### Box 12. Education for sustainable development

Education for Sustainable Development is an educational approach with the aim of reorienting students' learning experiences so they can understand their professional responsibilities in the field of sustainability and develop skills to face an uncertain, complex future. It is based on a critical, transformative perspective to pursue changes in the educational curriculum and forms of learning, towards negotiating knowledge transfer

<sup>46</sup> (UNESCO, 2014; Barth et al., 2016; UNECE, 2016).

<sup>47</sup> (GUNI, 2012).

and based on empowering the students. It gives priority to the use of established and new pedagogical principles such as futures thinking, critical and creative thinking, complex thinking, interdisciplinarity, learning for change and participation.

### Box 13. Employment and sustainability

As more organisations adopt the innovative models of social responsibility and incorporate sustainability as a strategic business model, so the number of employers looking for professionals with sustainability skills increases, even in jobs not directly linked to sustainable development.<sup>48</sup>

Recent studies also indicate that the future in jobs is green jobs, with a tendency to see a rise in jobs in renewable energy, permaculture, sustainable architecture, electric vehicles, etc.<sup>49</sup>

It is not surprising then, that the students, also concerned about the current models of unsustainable development, have shown interest in topics and processes associated with sustainability while studying at university.<sup>50</sup>

In most universities, Education for Sustainable Development has been approached mostly through the enthusiasm of some members of the teaching staff, in a fragmented and optional manner. In most cases, new content has been introduced into specific materials, mostly connected to environmental science and geography, or new subjects have been designed for students interested in following a professional career in this field.<sup>51</sup> Most university programmes have seen no changes and the impact on students has been minimal.<sup>52</sup>

In the last decade, these reductionist approaches in Education for Sustainable Development have been challenged thanks to international initiatives such as the UN Decade of Education

<sup>48</sup> (BITC, 2010).

<sup>49</sup> (AASHE, 2017; Environmental Entrepreneurs (E2) and E4 The Future Energy, 2016; Sayce, Clements & Cowling, 2009).

<sup>50</sup> (REFEDD, 2014; Drayson, 2015).

<sup>51</sup> (Mulà et al., 2017).

<sup>52</sup> (Ryan & Tilbury, 2013).

for Sustainable Development (ESD, 2005-14)<sup>53</sup> and UNESCO's Global Action Programme on Sustainable Development (GAP, 2014).<sup>54</sup> These movements demand that universities consider sustainability as a strategic priority and work on the principles and approaches systematically and transversally.<sup>55</sup>

In the Principality of Andorra, sustainability in higher education has grown in importance, especially around the adoption of the 2030 Agenda<sup>56</sup> and recently, initiatives in this direction have been planned (see box 14). To meet the challenge more effectively, national universities find themselves at a crucial point to start coordinating more strategic processes to incorporate sustainability into their activities, paying special attention to the process of teaching and learning.

#### Box 14. The Sustainable Tourism Exhibition of the Uda

Within the programme of acts to celebrate its 30th anniversary, the Uda will host the travelling exhibition "Sustainable Tourism" from 15 January to 9 February 2018, a display of thirteen boards explaining various actions related to sustainable tourism on a global and national scale. Among other themes, it will explain the impact of tourism on climate change and the environment; globalised culture and gentrification, and show global data.

<sup>53</sup> More information on ESD at: <https://en.unesco.org/themes/education-sustainable-development/what-is-esd/un-decade-of-esd>

<sup>54</sup> More information on GAP at: <https://en.unesco.org/gap>

<sup>55</sup> UNESCO (2005, 2014).

<sup>56</sup> More information about the exhibition at: <http://www.uda.ad/blog/uda-sostenible/>

# QUALITY ASSESSMENT AND SUSTAINABLE DEVELOPMENT

## *What do we understand by quality and what are the European trends in assessment?*

The concept of quality is controversial and can have various meanings according to the actor and context in which it is used.<sup>57</sup> Basically, it is a series of principles and processes that regulate how higher education institutions operate and influence the design, implementation and assessment of academic programmes.<sup>58</sup>

The quality assessment of higher education has significantly raised its profile over the last two decades, due to the need to guarantee quality education, be accountable to society and internationalise education.<sup>59</sup> At first, quality management models had the purpose of assessing the programmes and teaching and emphasised control and efficiency. In many cases, they were used as marketing, rating and differentiation tools for the institution.<sup>60</sup> Over the years, the implemented quality systems have become vital processes for learning and constant improvement of institutions. Currently, the trend is to create a shared culture of quality in higher education and make a more holistic assessment of the whole institution.<sup>61</sup>

In Europe, the need for quality assurance in education arose, above all, from the emergence of the EHEA. The need to create a common vision of quality and encourage mutual trust between countries to accept qualifications and training led to the adoption of European Standards and Guidelines (ESG) in 2005. These standards and guidelines, reviewed and updated in 2015, state agreed and accepted quality assurance practices in higher education in the EHEA (see box 15) and, specifically:<sup>62</sup>

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<sup>57</sup> (Harvey, 1995).

<sup>58</sup> (Schindler et al., 2015).

<sup>59</sup> (Ryan, 2015; Ríos, 2015).

<sup>60</sup> Harris, N. (2017). El papel de las agencias de evaluación en el contexto internacional: Tendencias y resistencias. ANECA en el horizonte 2020: una Agencia de Evaluación al Servicio de la Comunidad Universitaria Española. Santander, 11-12 setembre del 2017.

<sup>61</sup> (Harris, 2017).

<sup>62</sup> (European Association for Quality Assurance in Higher Education et al., 2015)

- provide guidance on the most essential aspects for guaranteeing success in the quality of higher education without stipulating how quality is to be assessed in each institution or country;
- focus on assuring quality in learning and teaching in higher education, including the learning environment and relevant links to research and innovation, and
- are applicable to all higher education offered in the EHEA, irrespective of the study mode or where it is taught.

### Box 15. European Standards and Guidelines (ESG) <sup>63</sup>

<b>1.1. Policy for quality assurance</b>	Institutions should have a policy for quality assurance that is made public and forms part of their strategic management. Internal stakeholders should develop and implement this policy through appropriate structures and processes, while involving external stakeholders.
<b>1.2. Design and approval of programmes</b>	Institutions should have processes for the design and approval of their programmes. The programmes should be designed so that they meet the objectives set for them, including the intended learning outcomes. The qualification resulting from a programme should be clearly specified and communicated, and refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.
<b>1.3. Student-centred learning, teaching and assessment</b>	Institutions should ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.
<b>1.4. Admission, progression, recognition and certification of students</b>	Institutions should consistently apply pre-defined and published regulations covering all phases of the student “life cycle”, e.g. student admission, progression, recognition and certification.
<b>1.5. Teaching staff</b>	Institutions should assure themselves of the competence of their teachers. They should apply fair and transparent processes for the recruitment and development of the staff.

<sup>63</sup> (European Association for Quality Assurance in Higher Education et al., 2015)

<p><b>1.6. Learning resources and student support</b></p>	<p>Institutions should have appropriate funding for learning and teaching activities and ensure that adequate and readily accessible learning resources and student support are provided.</p>
<p><b>1.7. Information management</b></p>	<p>Institutions should ensure that they collect, analyse and use relevant information for the effective management of their programmes and other activities.</p>
<p><b>1.8. Public information</b></p>	<p>Les institucions han de publicar informació clara, rigorosa, objectiva, actualitzada i de fàcil accés sobre les seves activitats, incloent-hi els programes.</p>
<p><b>1.9. On-going monitoring and periodical review of programmes</b></p>	<p>Institutions should monitor and periodically review their programmes to ensure that they achieve the objectives set for them and respond to the needs of students and society. These reviews should lead to continuous improvement of the programme. Any action planned or taken as a result should be communicated to all those concerned.</p>

In Andorra, quality assessment of higher education is based on the ESG and, as mentioned previously, the key stakeholders in Andorra's higher education have expressed their desire and the need to better contextualise these standards within this country's reality. This study aims to be a tool to carry out this review task.

### **Why introduce sustainability into quality assessment in Andorra?**

The Principality of Andorra has a key interest in building an educational model that fosters social, cultural and economic sustainability and helps to achieve the SDGs. While experiences at school age are significant,<sup>64</sup> the work of universities in this direction is still at an early stage. The universities of Andorra could start to meet this challenge by designing a strategic sustainability plan or an innovative Education for Sustainable Development programme, as has been done by most universities committed to a sustainable future. However, experience tells us that that is not enough to ensure continuous, effective, productive embedding of sustainability.<sup>65</sup> Experts in this field highlight the need to link

<sup>64</sup> Vegeu, per exemple, activitats coordinades pel programa d'Escoles Verdes: <http://www.escolaverda.ad/>

<sup>65</sup> (Scott, G., 2015).

sustainability to quality assessment systems, to guarantee change and continued improvement in higher education. The reality, however, is that not many institutions or countries have met this challenge, <sup>66</sup> perhaps because of its complexity.

On first impressions, sustainable development and quality have very different origins, different goals, work in a different way and use different languages. However, if analysed more closely, it can be seen that they share key concerns. The two fields use systematic approaches and influence all university activities and studies; they are concerned about the value, utility and relevance of education and are dynamic and in constant evolution. <sup>67</sup> In fact, movements have recently begun to emerge in the field of quality that consider that sustainability will be a future trend in quality assessment systems in the international arena. <sup>68</sup>

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<sup>66</sup> Some of the countries that have started to explore the connections between sustainability and quality are Lithuania, the United Kingdom and Australia. None of them have drawn up a system of standards and goals as ambitious as the one proposed in this study.

<sup>67</sup> (Ryan & Tilbury, 2012).

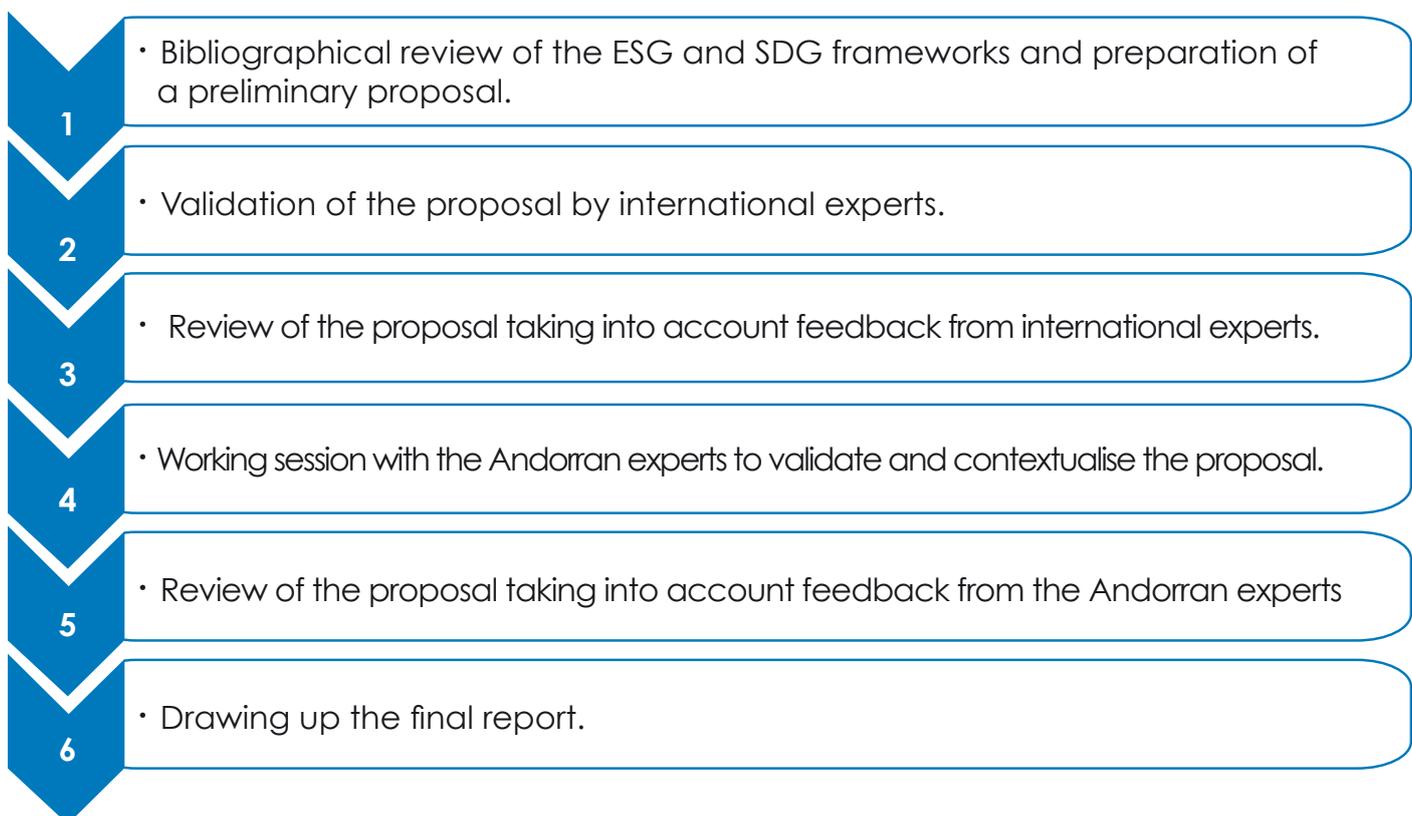
<sup>68</sup> (Harris, 2017).

# PROPOSAL TO INTRODUCE SDGs INTO THE QUALITY ASSESSMENT OF HIGHER EDUCATION IN ANDORRA

## *How was the proposal drawn up?*

To consider quality assessment from the perspective of sustainability, this study is proposed on the basis of the relationship between the ESG and the SDGs. This process has caused new quality standards to emerge that integrate the sustainability perspective and have taken the form of guidelines that help us to understand its importance and application. Figure 2 details the methodological process of the study.

**Figure 2. Methodology and validation of the study**



The proposal presented here has been validated first with a group of international experts in Education for Sustainable Development and quality in higher education (see appendix 1). The research team held an online conference with all the experts and with one of them face-to-face, in November 2017. The experts brought their views about the incorporation of sustainability into the management and quality assessment processes; they validated the

relevance, quality and appropriateness of each defined standard and provided examples of good practices to clarify each standard and goal.

Taking into account the feedback from the international group, the proposal was reviewed and shared with Andorran experts in sustainability, quality and higher education (see appendix 2) in a working session in Andorra on 14 December 2017. The session was organised to revalidate and contextualise the proposal, and empower the main stakeholders in Andorra in these matters. The meeting was structured in two parts: in the first, the theoretical framework of the study was presented and, in the second, discussion forums were created to debate and validate each of the defined standards and goals. Participants in the session had the opportunity to identify challenges, questions and proposals linked to the application of standards in the Andorran higher education institutions.



**Photographs. Working session in Andorra**

### ***Sustainability standards and guidelines***

Below, we present a summary table that lists each ESG with the SDGs (see table 1). Then, sustainability standards are described as guidelines, and examples of good practices are provided. It is important to note that the proposed standards and guidelines do not try to dictate how to introduce sustainability into quality assessment processes, but offer guidance on what kind of activities and processes could be encouraged. Just like the ESG, these standards focus on learning and teaching, including the learning environment and relevant links to research and innovation. Institutions must also have policies and processes

that foster sustainability in the rest of their activities, such as governance, management, research and knowledge transfer, and university extension.

Table 1. Embedding the sustainability perspective into the ESGs		
ESG	Related SDGs	Standard with sustainability perspective
1.1. Policy for quality assurance	 	The policy for quality assurance supports the strategic decisions of the institution and fosters transformative actions relating to sustainability.
1.2. Design and approval of programmes	 	The programme establishes goals, competencies, methodologies, learning results and assessment systems relating to sustainability and considers society's needs, concerns and motivations.
1.3. Student-centred learning, teaching and assessment		Students adopt an active role in creating their sustainability learning process and their assessment reflects this approach.
1.4. Student admission, progression, recognition and certification	 	The institution guarantees access, admission and progression to all students and assures, recognises and certifies their sustainability activities and training.

<p><b>1.5. Teaching staff</b></p>		<p>The teaching staff has the capability to embed the sustainability perspective into the curricula and lead processes of change institutionally.</p>
<p><b>1.6. Learning resources and student support</b></p>		<p>The resources and services promote the principles of sustainability, guarantee the necessary accessibility conditions and foster equal opportunities and gender equality.</p>
<p><b>1.7. Information management</b></p>		<p>The institution incorporates sustainability information into its documentary management system.</p>
<p><b>1.8. Public information</b></p>		<p>The institution publishes clear, thorough, objective and updated information about its commitment and sustainability actions and adapts it to the stakeholders concerned.</p>
<p><b>1.9. On-going monitoring and periodic review of programmes</b></p>		<p>The institution monitors and periodically reviews the programmes it offers, to guarantee that it achieves the planned sustainability goals and meet society's needs.</p>

## ESG 1.1. Policy for quality assurance



The policy for quality assurance supports the strategic decisions of the institution and fosters transformative actions relating to sustainability.

The policy for quality assurance and the internal quality assurance systems form part of the strategic management of the institution and are, therefore, an essential tool for fulfilling the institution's commitment and being accountable to society in relation to sustainability.

A policy for quality assurance that fosters sustainability:

- sets goals and actions to facilitate implementation of the institution's strategic decisions relating to sustainability;
- has an impact on governance, teaching and learning, research, knowledge transfer and community engagement;
- facilitates transformative learning in all areas of the institution;
- promotes innovative processes and curricular changes that respect academic freedom;
- focusses on improving the professional and personal prospects of the students;
- promotes education that considers society's needs;
- fosters the participation and collaboration of the whole educational community.

### Box 16. The integration of sustainability into the internal quality systems of five universities in the United Kingdom

Between 2010 and 2012, five universities in the United Kingdom took part in the project "Leading Curriculum Change for Sustainability: Strategic Approaches to Quality Enhancement"<sup>69</sup> (2010-12) financed by the Higher Education Funding Council for England (HEFCE) with the aim of incorporating education for sustainability into the quality assurance and improvement processes. Led by the University of Gloucestershire, each institution carried out a series of actions according to their own context and strategic priorities. Some of those actions are presented below<sup>70</sup>:

- **Aston University:** sustainability and social responsibility were identified as one of the

<sup>69</sup> More information on this project at: <http://efsandquality.glos.ac.uk/>

<sup>70</sup> The complete list of actions of each university can be seen here: [http://efsandquality.glos.ac.uk/toolkit/Pilot\\_Outcomes](http://efsandquality.glos.ac.uk/toolkit/Pilot_Outcomes).

eight priority goals of the university's strategy.

- **University of Brighton:** sustainability was more specifically and extensively integrated into postgraduate teacher training.
- **University of Exeter:** the internal quality assurance manual incorporates the need to introduce sustainability into programme design and review.
- **University of Gloucestershire:** a CPD programme on education for sustainability was introduced for the teaching staff.
- **Oxford Brookes University:** global citizenship and sustainability education were embedded into every university programme description

### Box 17. Academic standards of environmental studies and sustainability in Australia

The definition of these standards is the result of the project “*Learning and teaching academic standards: environment and environmental sustainability*” (2014),<sup>71</sup> financed by the Department of Education and Training of the Australian Government. The standards describe the minimum learning results that university graduates in environment and sustainability are expected to achieve in their university studies. They are also a curricular framework for designing, implementing and assessing programmes in those subject areas.

### Box 18. Sustainability Plan of the University of Melbourne

The Sustainability Plan of the University of Melbourne (2016-2020)<sup>72</sup> defines the institution's commitment to creating new forms of governance, training and management in a world ever more marked by the effects of climate change. The plan was published after a long participatory process with students, teaching staff, administrative staff, former students and other stakeholders through forums, workshops and email consultations.

The ambitions of the plan are:

- To help to create a sustainable world through university research.
- To inspire and provide support through the programmes so that students become agents of change.

<sup>71</sup> More information on this project at: <http://environmentlltas.gradschool.edu.au/>

<sup>72</sup> Read the Plan here: <https://ourcampus.unimelb.edu.au/sustainability-commitment>

- To create forums so that staff and students can lead processes of sustainability.
- To embed sustainability principles into the university's campus management and operations.
- To integrate the sustainability perspective into decision-making and governance processes.

## ESG 1.2. Design and approval of programmes



**The programme establishes goals, competencies, methodologies, learning results and assessment systems relating to sustainability and considers society's needs, concerns and motivations.**

The curricula are at the heart of the academic mission of higher education institutions and a unique opportunity to provide the students with knowledge and competencies to understand and question the current development models and create more positive alternatives for the future.

A programme that introduces the sustainability perspective:

- Reflects on the four aspects of sustainable development: environmental protection, social justice, economic well-being and cultural diversity;
- Unpacks the need for and value of incorporating the sustainability perspective;
- Is designed with the participation of the students, stakeholders and professional associations, taking into account social needs and concerns;
- Considers the local sustainability needs and priorities;
- Defines competencies that favour the creation of more sustainable and just forms of development in personal and professional life;
- Anticipates and favours emerging and interdisciplinary areas;
- Anticipates learning results that define the specific sustainability knowledge and abilities that students must acquire by the end of their training;
- Defines assessment systems that allow assessment of not only the acquired knowledge but also the development of defined sustainability competencies.

## Box 19. Sustainability competencies

UNESCO defines the following competencies for achieving the SDGs:<sup>73</sup>

**Systems thinking competency:** the ability to recognise and understand relationships; to analyse complex systems, and to deal with uncertainty.

**Anticipatory competency:** the ability to understand and evaluate multiple futures – possible, probable and desirable; to create one's own visions for the future; to apply the precautionary principle; to assess the consequences of actions; and to deal with risks and changes.

**Normative competency:** the ability to understand and reflect on the norms and values that underlie one's actions; and to negotiate sustainability values, principles, goals, and targets, in a context of conflicts of interests and trade-offs, uncertain knowledge and contradictions.

**Strategic competency:** the ability to collectively develop and implement innovative actions that further sustainability at the local level and further afield.

**Collaboration competency:** the ability to learn from others; to understand and respect the needs, perspectives and actions of others (empathy); to understand, relate to and be sensitive to others (empathic leadership); to deal with conflicts in a group; and to facilitate collaborative and participatory problem solving.

**Critical thinking competency:** the ability to question pre-established norms, practices and opinions; to reflect on own one's values, perceptions and actions; and to take a position in the sustainability discourse.

**Self-awareness competency:** the ability to reflect on one's own role in the local community and (global) society; to continually evaluate and further motivate one's actions; and to deal with one's feelings and desires.

**Integrated problem-solving competency:** the overarching ability to apply different problem-solving frameworks to complex sustainability problems and develop viable, inclusive and equitable solution options that promote sustainable development, integrating the above-mentioned competences.

<sup>73</sup> (UNESCO, 2017).

## Box 20. The Sustainability Attributes of graduates at the University of British Columbia

The University of British Columbia defines the attributes of its students on graduation:<sup>74</sup>

**Holistic systems thinking:** the graduate uses a holistic approach to critically analyse the phenomena and relate different knowledge, methods and disciplines.

**Sustainability knowledge:** the graduate relates sustainability to his area of specialisation, interests and values.

**Awareness and integration:** the graduate works in an interdisciplinary manner, integrating various disciplines and perspectives of the phenomena.

**Positive change:** the graduate is able to lead and influence changes for sustainability.

## ESG 1.3. Student-centred learning, teaching and assessment



**Students adopt an active role in creating their sustainability learning process and their assessment reflects this approach.**

To foster a student-centred educational experience requires rethinking what is taught, how it is taught, where it is taught and how it is assessed. The embedding of sustainability into curricula represents an opportunity to challenge the power relations between the teaching staff and students and adopt methodologies that encourage student motivation and participation. However, for students to take responsibility for their sustainability learning process, the creation of training opportunities and participation outside the formal curriculum is also required.

<sup>74</sup> More information at: <https://sustain.ubc.ca/campus-initiatives/teaching-learning>

Specifically, the institution must:

- Propose sustainability principles and questions in the courses and subjects in their programmes using interdisciplinary and transdisciplinary approaches;
- Use teaching methods that foster active and participatory learning;
- Offer opportunities to apply knowledge in real contexts and develop sustainability competencies through field work, service learning experience, placements, projects, etc.;
- Define assessment systems that reflect the participatory approach of education for sustainability;
- Adapt the activities, methodologies and assessment systems as needed, so that students who participate appropriately in the learning process achieve the learning results and develop the defined competencies;
- Create areas of institutional policy and participation, and informal, social, sustainability learning experiences for the students.

#### Box 21. Principles associated with education for sustainability

Education for sustainability is based on promoting the following pedagogical principles: <sup>75</sup>

- Envisioning futures
- Critical and creative thinking
- Complex thinking
- Interdisciplinarity
- Empowerment and action
- Participation and dialogue

#### Box 22. Methods associated with education for sustainability

The pedagogical methods used must be open, participatory, diverse and interactive, based on pedagogical strategies such as: <sup>76</sup>

<sup>75</sup> (Tilbury and Wortman, 2004; UNESCO, 2005)

<sup>76</sup> (Sterling, 2012).

- Active learning
- Transformative learning
- Reflection on learning
- Campus as a learning resource

They must foster cognitive, integrated, active and emotional learning. For example: <sup>77</sup>

- Learning based on challenges and problems
- Roleplay
- Debate
- Group discussions and dialogue
- Critical analysis of materials (lectures, videos, photos, newspapers, advertisements, etc.)
- Group presentations
- Scenario building
- Research and action
- Case studies
- Methods of artistic and emotional expression

### Box 23. Approaches for introducing sustainability into various disciplines

All disciplines can help to train the students within the context of sustainability. Climate change, for example, can be addressed in:

**Physics and chemistry:** physical and chemical composition of the atmosphere and its relationship to climate change.

**Law:** climate change and international law.

**Economics:** economic impacts of climate change.

**Geography:** impacts and human adaptation to climate change.

**History:** description and analysis of the historical causes of climate change.

**Languages:** analysis of the discourse and knowledge of climate change.

<sup>77</sup> (Cotton & Winter, 2010).

**Geology:** studying past climate changes on Earth using natural records.

**Health Sciences:** illnesses and injuries caused by the effects of climate change.

**Sociology:** climate refugees; consumption models.

**Education:** climate change education.

**Business management:** corporate environmental and social responsibility.

**IT:** process automation.

#### Box 24. Assessment based on the principles of education for sustainability

The assessment methods regulate learning, promote dialogue between students and teaching staff and foster student participation; for example: <sup>78</sup>

- assessment between equals
- debate
- negotiation or presentation
- problem-based learning
- cognitive maps
- artistic expression
- self-assessment: diaries, portfolios, etc.

#### Box 25. Informal learning and participation initiatives in sustainability at the University of British Columbia

**SEEDS Sustainability:** the aim of this programme is to green the campus through research projects carried out by teams of students, administrative and technical staff and teaching staff. <sup>79</sup>

**Sustainability Scholars:** this programme offers sustainability internships for university graduates through on- and off-campus partners.

**Consultation service:** volunteer students help the teaching staff to incorporate sustainability into the curricula, exploring options, creating resources, planning co-curricular opportunities, etc.

<sup>78</sup> (Sterling, 2012).

<sup>79</sup> More information at: <https://sustain.ubc.ca/get-involved/students>

**Ambassadors:** volunteer students who promote education for sustainability on the university campuses.

**Reads Sustainability:** this initiative consists of organising debates with authors of publications on sustainability.

**Student sustainability network:** a student community that wants to participate in projects and initiatives related to sustainability.

**Sustainability Council:** formed of students who give their opinion on specific projects, programmes and initiatives organised by the university.

**Student groups:** sustainability associations and thematic groups.

**Greenest City Scholars:** this programme works in partnership with Vancouver city council, which funds university graduates to create sustainability projects related to the city's sustainability action plan.

### Box 26. University of Andorra Solidarity Committee

The solidarity committee <sup>80</sup> of the University of Andorra is an example of initiatives that foster social learning for sustainability. Specifically, it has the role of activating solidarity and cooperation in the university community to engage with society. Its main goals are:

- to encourage university volunteering;
- to foster solidarity values, especially among the university community;
- to boost the social function, solidarity and cooperation of the University of Andorra;
- to encourage the participation of the whole university community;
- to stimulate and channel cooperation actions for development and the defence of human rights;

<sup>80</sup> More information here: <http://www.uda.ad/blog/solidaritat/>

- to bring together all members of the university community (students, academic and non-teaching staff), and
- to instil awareness among the students, not only in academic matters but also social, cultural, etc.

### ESG 1.4. Student admission, progression, recognition and certification



**La institució garanteix l'accés, l'admissió i el progrés a tot l'alumnat i assegura, reconeix i certifica la seva activitat i formació en sostenibilitat.**

It is vital to have structures and mechanisms to guarantee that all students can have a quality education. Moreover, it is important to offer them support and advice to achieve the goals proposed in the programmes and for them to develop as individuals and professionals.

For this purpose, considering the sustainability principles, the institution must:

- ensure that all students can access university studies and progress equally;
- offer special grants to students in vulnerable situations;
- certify the acquired sustainability competencies of its graduates;
- assure and recognise off-curriculum sustainability training and learning experiences throughout their university studies.

#### Box 27. Equality Plan of the Universitat de Girona (UdG)

The Equality Plan <sup>81</sup> is based not only on boosting disabled people's access to and participation in the university community, but also the need to contribute to the development of a fairer society, where everyone feels represented. Its general objectives are:

<sup>81</sup> More information on the Equality Plan of the University of Girona at: <http://www2.udg.edu/tabid/11211/default.aspx>

- to promote the actions required to guarantee accessibility (to areas, content, etc.) to disabled people who are or have been part of the university community of the UdG;
- to provide necessary information to partners of the University to favour the inclusion of disabled people;
- to develop programmes to promote necessary training, among all elements of the university community, to ensure full participation of disabled people at the university;
- to ensure the commitment of active agents in the university (governing bodies, services and professionals) to the inclusive policies for disabled people;
- to strengthen collaboration with various associations in the Girona region that act for disabled people;
- to boost and disseminate disability research.

#### Box 28. Higher Education Achievement Record (HEAR)

HEAR<sup>82</sup> supplements UK qualifications by providing a full record of the results obtained by the student, including academic works and prizes, formal off-curriculum activities, voluntary work and association activities previously verified by the institution. Many universities use this document to recognise and certify the student's sustainability activities.

#### ESG 1.5. Teaching staff



**The teaching staff has the capability to introduce the sustainability perspective into the curricula and lead processes of change institutionally.**

The role of the teaching staff is essential for creating quality learning experiences and enabling the students to acquire sustainability knowledge and competencies. Therefore, it is important to guarantee the motivation and training of this group and foster decent, healthy working conditions.

<sup>82</sup> Per a més informació sobre el HEAR, vegeu: <http://www.hear.ac.uk/>

Specifically, institutions should:

- value the sustainability competencies and merits of candidates in the selection processes;
- guarantee decent working conditions, paying attention to the remuneration, dedication and training of the teaching staff;
- guarantee that the teaching staff is treated in the work place according to their merits, without discrimination on gender, age, background or social class;
- foster a pleasant, healthy working environment and safe working conditions;
- offer resources to the teaching staff for training in education for sustainability and certify this training;
- encourage links between research and education for sustainability, such as encouraging the teaching staff to participate in research projects on educational innovation.

#### Box 29. University Educators for Sustainable Development (UE4SD)

UE4SD<sup>83</sup> is a European project, carried out between 2013 and 2016, and involving 53 university institutions in 33 countries. The project emerged with the aim of offering opportunities for professional development to university teaching staff in education for sustainability and identifying the professional competencies that could improve the quality of academic practices in the field of sustainability. One of the key aspects in this project was the establishment of an Academy to provide support to university educators to develop their own competencies in education for sustainability.

#### Box 30. Teaching Innovation in Education for Sustainability of the Universitat Autònoma de Barcelona (IDES)

L'IDES<sup>83</sup> (Innovació Docent per a l'Educació per la Sostenibilitat)<sup>84</sup> és un grup de treball interdisciplinari de professorat de diverses àrees de coneixement de la Universitat Autònoma de Barcelona, creat el 2016 amb la finalitat de definir, implementar i dissenyar pràctiques docents innovadores d'educació per la sostenibilitat. Forma part dels projectes de suport a la innovació docent i està liderat pel grup de recerca Còmplex. El projecte té els antecedents en el projecte UE4SD, detallat anteriorment. A través d'una metodologia col·laborativa, activa i reflexiva, els participants comparteixen marcs teòrics, recursos en sostenibilitat i en competències professionals en educació per la sostenibilitat, així com les seves experiències i reptes d'incorporar-la en la seva pràctica docent.

<sup>83</sup> More information about UE4SD on: <https://www.ue4sd.eu/>

<sup>84</sup> More information about IDES on: [grupcomplex.uab.cat](http://grupcomplex.uab.cat)

## ESG 1.6. Learning resources and student support



**The resources and services promote the principles of sustainability, guarantee the necessary accessibility conditions and foster equal opportunities and gender equality.**

The management of the campus, its areas, resources and services is a unique opportunity to display the institution's commitment to sustainability and create quality educational environments. Sustainable management of material resources helps to minimise the carbon footprint, increase social value and reduce the financial costs of the institution. The campus itself is a resource and a learning laboratory for sustainability, where the educational community can plan and solve social, economic, environmental and cultural challenges.

It is important for the institution to:

- have a system of environmental management and certification or a sustainability plan for the campus;
- manage the installations and resources based on sustainability criteria and minimising all potential impacts;
- guarantee the necessary accessibility conditions so that everyone can enjoy the areas, buildings, means of transport, products, services, resources and communication processes with equal opportunities;
- consider the use of ICTs to foster accessibility to learning for the whole student population, everywhere and at all times;
- ensure the diversity of learning resources, the use of non-sexist language and incorporate social and historical contributions irrespective of gender;
- have support services for education for sustainability;
- offer opportunities to the administrative and technical staff to train in sustainability and provide support to related academic activities.

### Box 31. Campus Bizia Lab, University of the Basque Country

The Campus Bizia Lab<sup>85</sup> programme plans to implement a collaborative process to meet the sustainability challenges within the university. The programme is aligned with the institution's strategies and educational model and is promoted by the Department of Sustainability and Educational Assessment Service.

The call for the programme is aimed at training work teams made up of teaching staff, administrative and service staff and students who are keen to do a dissertation or masters which, in a transdisciplinary manner, would meet one of the sustainability challenges identified by the educational community:

- **Energy transition.** Actions to minimise energy consumption and promote the use of renewable energies, among others.
- **Circular economy.** Actions to foster responsible use of natural resources, promote reuse, recycling and other forms of waste recovery and management, responsible purchasing and promoting alternative forms of consumption, among others.
- **Urban gardening on campus.** Actions to create and use university plots as a resource and learning environment to encourage educational processes of change towards sustainability.
- **Mobility and campus planning.** Actions to maximise the use of public and carbon-free transport, to improve the spatial allocation and balanced distribution of campus activities, and help to increase the quality of life on campus, among others.
- **Healthy university.** Actions to promote healthy eating and lifestyle habits, support food sovereignty and security, and create healthy environments and enabling work environments, among others.
- **Sustainable culture and university community.** Actions to increase awareness of sustainability among the university community, encourage environmental volunteering, explore its application and use culture to enable sustainability and part of identity (cultural heritage and creative identity), among others.
- **Education for the transformation.** Actions to develop critical thinking, responsibility and commitment among the public, and promote solidarity and diversity, inclusion, gender equality and interculturality to transform the current situation, among others.
- **Other challenges.**

<sup>85</sup> More information about the Campus Bizia Lab programme here: <https://www.ehu.es/es/web/iraunkortasuna/campus-bizia-lab>

### Box 32. Examples of actions to integrate sustainability into university management

- Promote sustainable mobility.
- Reduce waste production and encourage reuse and recycling.
- Foster and preserve biodiversity on campus.
- Foster ethical investment in the institution.
- Offer sustainable eating options in the institution's cafe and vending machines.
- Produce food on campus and introduce measures to reduce organic waste.
- Integrate the gender perspective into all university communication materials and services.
- Implement energy-saving measures and contract and generate green energy.
- Incorporate sustainable and ethical considerations into purchase management and sourcing.

### Box 33. “Campus Saludable” – “Healthy Campus” of the Universidad de Granada

Campus Saludable<sup>86</sup> aims to promote the culture of well-being by involving all university sectors in actions to promote health and quality of life. It carries out activities with a high level of interconnection and promotes environments and habits to establish a healthy lifestyle and a university that is sustainable and respects the environment.

Campus Saludable intends to implement the following actions:

- Include the University in the Spanish Network of Healthy Universities;
- Improve the environmental management system with improved waste management;
- Foster sustainable mobility and environmental quality;
- Promote an active health plan;
- Acquire healthy habits and active aging;
- Develop programmes for occupational risk prevention and radiation protection, invest in preventing accidents at work, professional illnesses and any harm related to the institution's activities.

<sup>86</sup> More information on Campus Saludable at: <http://csaludable.ugr.es/>

## ESG 1.7. Information management



**The institution incorporates sustainability information into its documentary management system.**

Embedding sustainability into the institution's activities involves creating processes that enable monitoring and deciding the level of achievement of the proposed goals. Knowing the starting point is the first step to more effective programmes. This will involve creating participatory processes to define criteria and gather and analyse data.

The following processes can be useful:

- carrying out audits to know the situation and monitoring the integration of sustainability principles at the institution;
- defining sustainability indicators in governance, management, research and knowledge transfer, education and community engagement at the institution;
- establishing participatory processes and mechanisms to gather and analyse sustainability data and plan monitoring activities.

### Box 34. Sustainability assessment indicators at universities in Latin America

The RISU project, funded by the Latin American Studies Centre of the Universidad Autónoma de Madrid and Santander Bank defined indicators, in partnership with a group of Latin American universities, to assess the sustainability commitment of higher education institutions in the region. The assessment tool consists of 114 indicators grouped into 14 dimensions or topics that can be applied to sustainability at universities:<sup>87</sup>

<sup>87</sup> The indicators for each topic and the results can be found here: [http://www.pnuma.org/educamb/documentos/GUPES/Proyecto\\_risu\\_Final\\_2014.pdf](http://www.pnuma.org/educamb/documentos/GUPES/Proyecto_risu_Final_2014.pdf)

- Sustainability policy (15 indicators)
- Awareness and participation (12 indicators)
- Socio-environmental responsibility (10 indicators)
- Teaching (13 indicators)
- Research and knowledge transfer (13 indicators)
- Town planning and biodiversity (7 indicators)
- Energy (10 indicators)
- Water (10 indicators)
- Mobility (8 indicators)
- Waste (11 indicators)
- Responsible sourcing (5 indicators)

### Box 35. Sustainability audits at the University of Manchester

The University of Manchester carries out audits <sup>88</sup> on its management and processes, on a regular basis:

- **Food waste management:** an audit was done to determine the quantity of food waste that is generated, based on kitchen waste and remains from plates.
- **Mobility:** every two years, the University carries out a survey of the mobility of students and teaching staff.
- **Energy:** energy audits on more than 100 buildings in the University.
- **Construction:** environmental sustainability advisors carry out audits at specific points during construction to ensure that the sustainability goals set during the design stage are achieved.
- **Biodiversity:** various audits have been carried out, of pollinators, trees, assessment of green spaces, etc.

<sup>88</sup> More information on the environmental audit process of the University of Manchester at: <http://www.sustainability.manchester.ac.uk/strategy/auditing>

## ESG 1.8. Public information



**The institution publishes clear, thorough, objective and updated information about its commitment and sustainability actions and adapts it to the stakeholders concerned.**

The decisions of higher education institutions have risks and impacts that affect the whole educational community and, therefore, it is important to generate a culture of trust. Accountability and sharing information on sustainability is important to improve the decision-making and increase the institution's transparency. Information that is published must be useful to enrolled and incoming students, the teaching staff and administrative and service staff, the graduates and other stakeholders or the public in general.

For this purpose, the institution:

- publishes the results of the defined sustainability indicators and their impact on the management, research, education and social commitment of the institution;
- shares information about its institutional commitment and the sustainability actions carried out;
- names the sustainability considerations that are taken into account and applied to the curricula;
- adapts the information to the stakeholders concerned, considering their knowledge and interests.

### Box 36. UI Green Metric

The Green Metric <sup>89</sup> is the World University Rankings, coordinated by the University of Indonesia, which aims to value the progress in sustainability of universities and their commitment to the environment. In 2016, it compared more than 516 institutions in 74 countries. The participants receive recognition of their efforts and have the opportunity to continue working on specific sustainability goals.

<sup>89</sup> More information on Green Metrics at: <http://greenmetric.ui.ac.id/>

The criteria are as follows, valued as percentages:

- Environment and infrastructure: 15%
- Energy and climate change: 21%
- Waste: 18%
- Water: 10%
- Transport: 18%
- Education: 18%

### Box 37. Sustainability report of the University of Gothenburg

The University of Gothenburg<sup>90</sup> publishes annual reports on its sustainability activities. The 2016 report includes information about several areas and dimensions, such as:

- **Research:** results and influence of sustainability research on sustainability.
- **Education:** percentage of programmes incorporating sustainability into their description.
- **Student participation:** activities, collaborative projects and student sustainability associations.
- **Interaction:** sustainability initiatives and collaborative experiences.
- **Professional development:** training in leadership for sustainability.
- **Purchasing and sourcing management:** percentage of sustainable purchases.
- **Waste management and recycling:** recycling percentage.
- **Environmental risks:** number of dangerous products and number of activities aimed at reducing environmental hazards.
- **Climate impact:** CO2 emissions and mitigation, adaptation and offsetting initiatives.
- **Energy and buildings:** electricity consumption and renewable energy generation.
- **Mobility:** emissions caused by teaching staff mobility.

### Box 38. Environmental information and communication of the Autonomous University of Barcelona

15 environmental information points<sup>91</sup> have been installed at the Autonomous University of Barcelona, located at strategic points on the University campus with high levels of students, teaching staff and administrative and service staff.

These are boards containing environmental information, both institutional - about environmental actions carried out by the University - and environmental awareness campaigns on various topics related to the environment and sustainability at the University.

<sup>90</sup> More details about the results of the report on: [http://www.medarbetarportalen.gu.se/digitalAssets/1638/1638618\\_sustainability-results-2016-170508\\_final.pdf](http://www.medarbetarportalen.gu.se/digitalAssets/1638/1638618_sustainability-results-2016-170508_final.pdf)

<sup>91</sup> The posters published at the information points can be seen here: <http://www.uab.cat/web/siguem-sostenibles/informacio-ambiental-1274423719915.html>

## ESG 1.9. On-going monitoring and periodic review of programmes



**Institutions monitor and periodically review the programmes they offer, to guarantee that they achieve the planned sustainability goals and meet society's needs.**

To guarantee a relevant, quality education, it is necessary to review the programmes, considering the sustainability component. It is important to involve the students and other stakeholders in this process to ensure that various perspectives and approaches are included that can enhance the programme.

It is important to assess the following elements:

- the content of the sustainability programmes, considering the most recent research and most innovative sustainability practices;
- the concerns and changing needs of society;
- the relevance of the methodologies;
- the efficiency of procedures for assessing students' sustainability competencies;
- the expectations, needs and satisfaction of students, employers and professional associations relating to the sustainability approach to the programme;
- the students' professional prospects conveyed by curricular greening of the programme.

### Box 39. Self-assessment questionnaire for teaching staff on curricular greening

This questionnaire has been prepared by the working group on Creating Sustainable Curricula of the Sectoral Sustainability Committee of the Conference of Spanish University Rectors (CRUE).<sup>92</sup> The questionnaire is intended to become a useful tool for the teaching staff, and enable research on the introduction of sustainability into universities.

<sup>92</sup> The questionnaire is available at: <https://goo.gl/forms/100MdpLc6zXla7tG2>

#### Quadre 40. Seguiment i revisió dels programes en matèria de sostenibilitat a la Universitat de Plymouth

“Sowing seeds: How to make your modules a bit more sustainability oriented”<sup>93</sup> is a document by the University of Plymouth that aims to guide teaching staff on incorporating sustainability into the process of modifying or creating a course. It is a tool that contains ideas and practical examples to integrate principles, methodologies, pedagogical approaches, learning results and assessment systems associated with sustainability.

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<sup>93</sup> This document is available here:

<https://www.plymouth.ac.uk/uploads/production/document/path/2/2633/SowingSeeds20June2008.pdf>

## FUTURE DIRECTIONS

This study provides a theoretical framework on sustainable development and quality and presents a proposal for quality standards to integrate the sustainability perspective. It is a first step in exploring the connections between two distinctive fields which are so essential in higher education. Some guidelines are presented below to continue working in this direction and realise the Goals of the 2030 Agenda within the context of higher education in Andorra:



### **Create forums for discussion and debate, to progress in terms of sustainability through quality assessment systems**

to be able to decide which sustainability standards are most relevant in the Andorran context and define its process of implementation and assessment. This process will empower and involve the stakeholders in a more significant way.



### **Prepare guides and materials on sustainable development and quality in higher education**

This study presents short guidelines for each standard but, in order to progress in this direction, guides and materials are needed to develop the standards chosen by the university community in Andorra more comprehensively, taking into account the responsibilities of each actor in the process.



### **Train the actors involved in higher education**

Closely linked to the previous proposal, it will be necessary to create forums for dialogue and continuous development to empower those with responsibilities in terms of the implementation and assessment of sustainability standards (external advisors, senior positions in higher education, teaching staff, technical and administrative staff, etc.).



### **Foster institutional initiatives to integrate sustainable development into all areas of the universities**

Higher education institutions should not limit themselves to achieving established standards, but should develop plans, programmes and innovative initiatives that go further and promote sustainable development in university activities, paying special attention to the teaching and learning process.



### **Share and disseminate the work carried out in sustainable development and quality within the international arena**

Andorra is a global pioneer in a growing area of interest that has yet to be developed. Therefore, it is important to share the work that is carried out and lessons learned from incorporating the SDGs into the assessment frameworks, in international forums on both quality and sustainability. This can help to bring visibility and recognition to the efforts made in Andorra and help other countries wanting to follow the same path.

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# APPENDICES

## APPENDIX 1. GROUP OF INTERNATIONAL EXPERTS

Name	Position(s)	Country
<b>Daniella Tilbury</b>	<p>Vice-Chancellor, University of Gibraltar</p> <p>Director of the project “Leading Curriculum Change for Sustainability: Strategic Approaches to Quality Enhancement”</p>	Gibraltar (United Kingdom)
<b>José Gutiérrez Pérez</b>	<p>Professor, University of Granada</p> <p>Head of the technical committee for assessment and accreditation, in the Andalusian Knowledge Agency (Agencia Andaluza del Conocimiento)</p>	Spain
<b>David Alba</b>	<p>Consultant, temporary</p> <p>Former expert in ANECA</p>	Spain
<b>Laima Galkute</b>	<p>Professor, University of Vilnius</p> <p>Co-editor of the book <i>Sustainable Development and Quality Assurance in Higher Education</i></p>	Lithuania
<b>Geoff Scott</b>	<p>Professor Emeritus, University of Western Sydney</p> <p>Former Director of Sustainability and Vice-Chancellor of Quality at the university</p>	<b>Australia</b>

## Annex 2. Grup d'experts d'Andorra

Person	Institution	Position
<b>Members of the working group on quality in higher education in Andorra</b>		
<b>Rosa Maria Mariño</b>	University of Andorra (UdA)	Coordinator for the management of quality and teaching
<b>August Climent</b>	La Salle Open University (UOLS)	Rector
<b>Meritxell Gallo</b>	Ministry of Education and Higher Education (MEES)	Director of the Department of Higher Education, Research and Study Grants
<b>Mar Martínez</b>		Head of the Department of Higher Education, Research and Study Grants
<b>Guests as external experts and interest groups</b>		
<b>Alba Reguant</b>	UdA	Doctorate student
<b>Betlem Sabrià</b>		Coordinator of university extension at the Andorran Centre for Online Studies and University Extension
<b>Josep Fortó</b>		Director of the Business and Technology Studies Centres
<b>Gemma Andreu</b>	UOLS	General Secretary
<b>Helena Prieto</b>	National Youth Forum of Andorra	Member of the Forum and a doctorate student at UdA
<b>Marc Pons</b>	Sustainability Observatory of Andorra (OBSA)	Director
<b>Oriol Travasset</b>		Researcher
<b>Natàlia Rovira</b>	Ministry of the Environment, Agriculture and Sustainability	Head of Strategy and Communication
<b>Javi Gómez</b>	Centre Andorra Sostenible (Sustainable Andorra Centre)	Manager
<b>Jean-Michel Amengol</b>	Andorran National Commission for UNESCO	General Secretary