# THE ROLE OF UNIVERSITIES IN ADDRESSING CLIMATE CHANGE: EDUCATION, TRAINING, RESEARCH AND SOCIAL RESPONSIBILITY

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# What is Social Responsibility?

 CORPORATE SOCIAL RESPONSIBILITY (CSR): the impact made by business or industry on society: how a business takes responsibility for corporate actions, encouraging a positive impact on the environment and stakeholders including consumers, employees, investors, communities, and others.

#### **QS Stars Development Roadmap:**

- A) CORE CRITERIA:
  - 1. Teaching
  - 2. Employability
  - 3. Research
  - 4. Internationalization

### **QS Stars Development Roadmap:**

B) LEARNING ENVIRONMENT:

#### **Facilities:**

Sporting facilities; students accommodation; IT infrastructure; library facilities; medical facilities; and student societies.

BUT for a university to aspire to being truly world-class, its mission and its impact must extend further than the basics. The following selection of criteria looks at important factors that a university with a solid foundation in the core criteria might target to advance to a higher level of performance and recognition.

These are the ADVANCED CRITERIA:

#### **QS Stars Development Roadmap:**

- C) ADVANCED CRITERIA:
  - 1. Arts and Culture
  - 2. Innovation
  - 3. Social Responsibility
  - 4. Inclusiveness

# Social Responsibility for QS Stars Development Roadmap

In the majority of cases, universities own a great deal of property; are significant employers within their local context; and have significant responsibilities to their local, regional and often national economies and communities. In the 21st century universities can no longer draw the line at the conventional missions of teaching and research but have to also embrace the "third mission".

# QS 4 Criteria for measuring SR

#### 1. Community investment and development:

Financial or in-kind contributions to community projects within 200 km of any campus or affiliated facility.

#### 2. Charity work and disaster relief:

Financial or in-kind contributions to national or international causes and charities.

# QS 4 Criteria for measuring SR

#### 3. Regional human capital development:

Proportion of graduates employed in the region OR proportion of students from the region.

#### 4. Environmental impact:

Performance against a checklist of environmental indicators.

#### CRUE SUSTAINABILITY COMMITTEE



- 2002: Working Group on Sustainability.
- 2009: "Committee for Environmental Quality,
  Sustainable Development and Risk Prevention"
  within the Conference of Rectors or Presidents
  (Vice Chancellors) of Spanish Universities, known
  as CRUE, which we now call simply, for the sake
  of brevity, CRUE SUSTAINABILITY.
- **CRUE**: association of 76 Universities (a total of 81 in Spain).



### **Objectives:**

- the strengthening of environmental awareness;
- the management of Spanish universities, in an attempt to reduce and minimize their impact on activities upon local and global environments.



### **Working Groups:**

- 1. University Sustainability Assessment
- 2. Environmental Improvements in University Buildings
- 3. Environmental Participation and Volunteering
- 4. Risk Prevention
- 5. Curricula and Sustainability
- 6. University and Sustainable Mobility
- 7. Health Promoting Universities
- 8. University Planning and Sustainability



#### **INSTITUTIONAL DECLARATIONS:**

- the declaration on ESD, with the proposals to introduce sustainability in curricula: DECLARATION ABOUT EDUCATION FOR SUSTAINABLE DEVELOPMENT, with the design of cross-curricular contents and the definition of competences (presented in 2005 and updated in 2015);
- the declaration on preventive culture; and
- the declaration on sustainable purchasing measures.



#### Some significant advances: Reports on

- the incorporation of renewable energy infrastructures into Spanish universities (2008);
- actions in favour of sustainable mobility in Spanish universities (2009), and more specifically on the use and promotion of bicycles on campus (2011);
- waste management (2010);
- the use and management of paper at the university (2011).



**Another Report** (in collaboration with the Energy Saving and Diversification Institute, IDEA):

➤ a thorough analysis of the evolution of electric consumption of Spanish universities:

universities had reduced their consumption between 2010 and 2011 from 1,300 kWh/scholar to less than 1,150 kWh/scholar. That is, a reduction of around 12% of the overall electricity consumed by Spanish universities altogether in just one year, an amount which also implies a saving of 10 to 15 million euros.



# A SYSTEM OF INDICATORS TO ASSESS UNIVERSITY SUSTAINABILITY:

- 176 INDICATORS, 3 AREAS AND 12 ANALYTIC SECTIONS
- **3 AREAS**:
  - A. organization and administration
  - B. teaching and research
  - C. environmental management



#### A. AREA OF ORGANIZATION AND ADMINISTRATION:

- 1. Policy of environmental sustainability
- 2. Rising awareness and implication of the academic community
- 3. Social responsibility, relationships and implication with society

#### B. AREA OF TEACHING AND RESEARCH

- 4. Teaching
- 5. Research and technology transfer





#### C. AREA OF ENVIRONMENTAL MANAGEMENT:

- 6. Urban planning and biodiversity
- 7. Energy
- 8. Water
- 9. Mobility
- 10. Waste
- 11. Green purchasing
- 12. Assessment of environmental impact of university activities



# BEST PRACTICES RELATED TO MOBILITY AND ACCESSIBILITY:

- document containing more than 100 items (CRUE website) on a diversity of technical tools for the implementation of mobility policies;
- Autonomous University of Barcelona and the University of Granada are very active in this group;
- the constitution of a European network of universities for the management of mobility;
- a first Conference on the subject at the Autonomous University of Barcelona in the spring of 2017.

# Environmental Improvements in University Buildings Group



- Report with proposals for the application of a Plan of Rationalization of the universities expenditure related to energy and natural resources consumption.
- A document of best practices is now ready, comprising 11 different areas and numerous issues: the implementation at the university of an environmental management system ISO 14001, the implementation of management systems based on the Agenda 21 Framework...

# Curricula and Sustainabillity Working Group



- "DECLARATION ABOUT EDUCATION FOR SUSTAINABLE DEVELOPMENT", (2005, updated in 2015)
- a training course for university educators, entitled "Introduction of Sustainability in University Teaching", with the support of different activities, including meetings, seminars, a blog, videos, as well as guidance documents for ESD at the University.

#### **GREENMETRIC WORLD UNIVERSITY RANKING 2015**



CRITERIA	%
Setting and Infrastructures	15
Energy and Climate Change	21
Waste	18
Water	10
Transportation	18
Education (Research is included)	18
	100

100

More than 400 universities worldwide were ranked in 2015:

22 in Spain; 21 in the UK; 16 in Italy; 11 in Germany...

#### **GREENMETRIC WORLD UNIVERSITY RANKING 2015**

RANKING	SPANISH UNIVERSITIES
20	Autonomous University of Barcelona
37	University of Alcalá
62	Autonomous University of Madrid
64	Technical University of Valencia
86	University of Oviedo
99	University Jaume I
112	University of Barcelona
126	University of Zaragoza
148	Rey Juan Carlos University
152	University of Valencia
174	University of Castilla-La Mancha
203	University of Salamanca
209	University of Vic
210	University of Santiago de Compostela
237	University of Granada
239	University Miguel Hernández
245	University of Las Palmas de Gran Canaria
259	University of Rovira i Virgili
289	University of Valladolid
298	University of La Laguna

- SOME RECENT BOOKS:
- The Sustainable University: Progress and Prospects.
   Routledge (2013).
- Sustainable Development and Quality Assurance in Higher Education. Springer (2014).
- Routledge Handbook of Higher Education for Sustainable Development (2015).
- JOURNALS:
- International Journal of Sustainability in Higher Education.
- Sustainability and University Life.
- Journal of Education for Sustainable Development.

# Many thanks!

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