



POLITÉCNICA



UNIVERSIDAD POLITÉCNICA DE MADRID
ESCUELA TÉCNICA SUPERIOR DE
INGENIEROS INDUSTRIALES

IMPLEMENTING THE GLOBAL COMPACT AT THE SCHOOL OF INDUSTRIAL ENGINEERING (TECHNICAL UNIVERSITY OF MADRID)

(ETSII-UPM)

**Following the Practical Guide set by the United Nations Global
Compact for Higher Education Institutions**



POLITÉCNICA



UNIVERSIDAD POLITÉCNICA DE MADRID
**ESCUELA TÉCNICA SUPERIOR DE
INGENIEROS INDUSTRIALES**



PRME

This is our **Sharing Information on Progress (SIP)**
Report on the Implementation of the **Principles for
Responsible Management Education**



POLITÉCNICA

TABLE OF CONTENTS

ETSII-UPM SOCIAL RESPONSIBILITY PROJECT

STRATEGIC PROJECTS

Accountability /

Participation of Stakeholders /

BEST PRACTICES:

Human Rights /

Labor /

Environment /

Anti-Corruption /

WHAT ARE THE PLANS FOR THE NEAR FUTURE?



POLITÉCNICA



UNIVERSIDAD POLITÉCNICA DE MADRID
**ESCUELA TÉCNICA SUPERIOR DE
INGENIEROS INDUSTRIALES**

The aim of the Social Responsibility (SR) Project at the School of Industrial Engineering is to incorporate the SR principles into the management system. Specifically we are including SR values to offer the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context. On the other hand, we are incorporating mechanisms to orientate our research to solve current global challenges, such as sustainability, energy access or poverty alleviation.

As we are aware that it is not easy to achieve these objectives alone, we have joint several initiatives including Principles for Responsible Management in Education (PRME) and the Global Compact. We have collaborated in the development of the guide to the United Nations Global Compact for Higher Education Institutions and we have applied it to our institution.

This report shows our strategy on Social Responsibility and the main steps followed during the process. However, we are still working on the continuous improvement cycle to become a reference on sustainably and Social Responsibility in Higher Education.

Jesús Félez
Dean of the School of Industrial Engineering
Technical University of Madrid



POLITÉCNICA



UNIVERSIDAD POLITÉCNICA DE MADRID
ESCUELA TÉCNICA SUPERIOR DE
INGENIEROS INDUSTRIALES

ETSII-UPM SOCIAL RESPONSIBILITY PROJECT

The **School of Industrial Engineering** (Escuela Técnica Superior de Ingenieros Industriales - ETSII), integrated with other Schools of Engineering, into the **Technical University of Madrid** (Universidad Politécnica de Madrid - UPM) in 1971, is a reference of Industrial Engineering education in Spain. Industrial Engineering Degrees in Spain, not only comprises management issues but also energetic, mechanical, electrical, electronics, material science, chemical, and environmental engineering aspects.

Founded in 1845, ETSII offers official bachelor and master degrees on Industrial Engineering and Chemical Engineering along with Master Degrees on 13 engineering fields (Energy, Electronics, Management, Environment, Innovation, Mechanical, Nuclear, etc.).

With 4.500 students, 155 members of staff, 313 teachers and 789 R&D project researchers, ETSII is the only Public University Centre of Industrial Engineering whose master degree is accredited by the US **Accreditation Board for Engineering and Technology (ABET)** and with a Social Responsibility Report verified by the **Global Reporting Initiative (GRI)**.

The enforcement of a social responsibility strategy is motivated by the need to have ethical and professionally trained engineers aware of the implications of their activities and their responsibilities. Within the engineering field, we focus on integrating social and environmental criteria as well as ethical and responsible management to the organizations in which engineers work.




























ETSII-UPM understands the Social Responsibility in the university as a "**voluntary integration of social and environmental concerns in its operations as well as in the relationship with its partners**".

Trying to achieve this objective, social responsibility has been integrated into the four areas of the university: Teaching, Research, Management and University Extension.

The Social Responsibility project is based on the **participation of stakeholders and the transparency**. Thus, different channels were enabled to allow stakeholders to participate in the project by selecting the improvement areas to work on and the consequent actions to be done. The accountability is done by a social responsibility report that serves as a communication tool, as it explains the different initiatives and informs stakeholders about the progress that was made in fulfilling the objectives. The first report included the commitments for the period 2010-2011, while the second report assessed the degree of compliance.

The following table shows the summary of the **commitments** and their degree of compliance. The color of the circle represents the level of compliance (green for values above 60%, salmon for values below 40%, yellow for values between 40% and 60%). Our goal for the next year is to implement activities to improve commitments compliance.



	Line of action	Commitment	Compliance degree
2. Students	Commitment to Quality Learning / Comprehensive training	Objective 1: To develop a comprehensive training	
		Objective 2: To improve the quality of learning	
	Results of training	Objective 3: To know the opinion of companies and organizations on the engineers from the ETSII-UPM	
		Objective 4: To communicate the results of the employability study that is being conducted by the employee office (<i>Induempleo</i>)	
3. School Staff	Professionalism and training	Objective 5: To conduct an analysis of the training needs of the School staff and the available channels	
	Human resources policy	Objective 6: To analyze forms to recognize the professional tasks	
		Objective 7: To develop a policy that rewards motivated individuals who strive for excellence in their daily performance (awards)	
		Objective 8: To support initiatives implemented by the different stakeholders to reward staff effort	
4. Teaching	Quality of teaching and Faculty Staff	Objective 9: To improve the involvement of teachers with students and vice versa	
	Quality and teaching plan	Objective 10: Strengthen curriculum content of the different degrees through coordination tools	
		Objective 11: To encourage the revision and improvement of lab practices	
		Objective 12: To promote the upgrade of subjects including the latest developments related to them	
5. Research	Research relationship with social problems. Humanization of research	Objective 13: To analyze the alignment of the research topics with contemporary challenges	
		Objective 14: To improve the information research channels	
		Objective 15: To involve students in research	
	Resources for Research	Objective 16: To analyze the software accessibility for the staff and to disseminate the results	
		Objective 17: To study and report resources that can be used for research	
		Objective 18: To communicate and advise on activities to promote research	
6. Society	Cooperation and dialogue with the business sector	Objective 19: To implement a collaborative strategy to improve the efficiency of collaboration mechanisms	
	Awareness and commitment (voluntary accessibility)	Objective 20: To promote awareness and voluntary groups	
7. Environmental	Minimizing ecological impacts as an institution (ETSII-UPM)	Objective 21: To ensure correct recycling system for materials used in the ETSII-UPM	
		Objective 22: To improve energy efficiency	
		Objective 23: To raise environmental awareness	
	Environmental Teaching Plan	Objective 24: To increase the number of subjects that promote this awareness	
8. Economic	Investment Responsibility	Objective 25: To analyze continuously the needs of stakeholders regarding the infrastructure and services of the Centre	
		Objective 26: To inform about the various scholarships offered by the ETSII-UPM in a more direct and centralized way	
	Control and management efficiency	Objective 27: To promote accessibility to the Economic Report	



POLITÉCNICA



UNIVERSIDAD POLITÉCNICA DE MADRID
ESCUELA TÉCNICA SUPERIOR DE
INGENIEROS INDUSTRIALES

Further information on the main steps of the Social Responsibility Project and the different commitments and objectives are available at http://www.etsii.upm.es/responsabilidad_social/documentacion.es.htm

This report covers the main **commitments of the School, strategic project and best practices related to Social Responsibility** carried out during the period of 2009//11 and mainly focuses on centralized School's activities. The information contained in this report shows the implementation of Global Compact and PRME Principles with which ETSII-UPM is committed.

Besides that, ETSII-UPM belongs to THE UN GLOBAL COMPACT ACADEMIC INSTITUTIONS WORKING GROUP and has collaborated in the design of The Practical Guide to the United Nations Global Compact for Higher Education Institutions: Implementing the Global Compact and Communicating on Progress (COP).

In the course of the collaboration in this working group, ETSII-UPM has analyzed its contribution to the Global Compact Principles through the achievement of its commitments and initiatives related with: labor, human resources, environmental and anticorruption principles as shown in Table1.

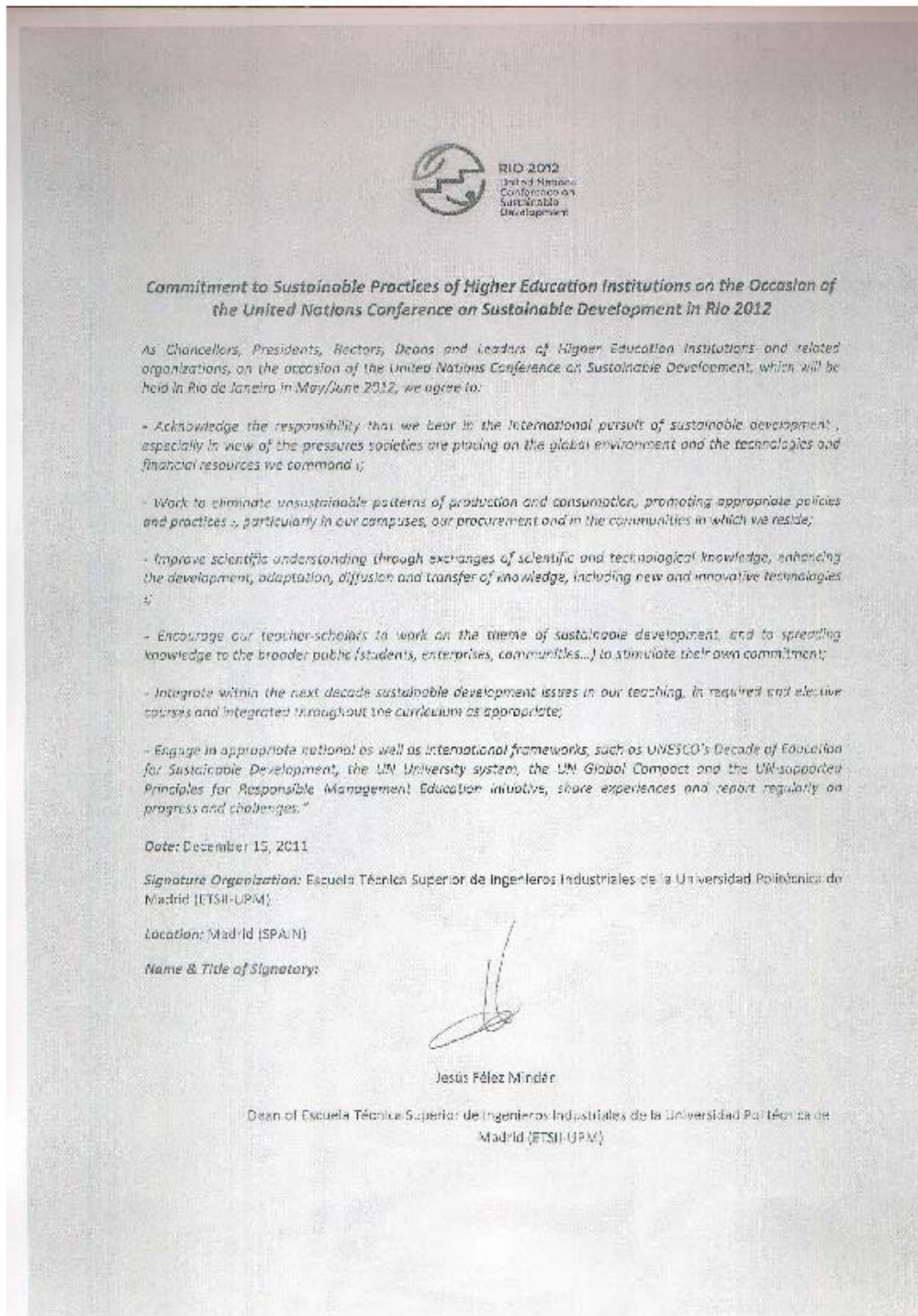
Table 1: The relationship between ETSII-UPM commitments and Global Compact Objectives

Commitment		The Ten Principles of Global Compact									
		HH.RR		LABOUR				ENVIRONMENT			ANTI-CORRUPTION
		1. Respect the HH.RR	2. Not complicit in HH.RR abuses	3. Freedom of association and collective bargain	4. Elimination of forced and compulsory labor	5. Banning child labor	6. Elimination of discrimination	7. Precautionary approach to environmental challenges	8. Greater environmental responsibility	9. Development /diffusion of environmentally friendly technologies	10. Work against corruption
Students	Objective 1: To develop a comprehensive training										
School Staff	Objective 5: To conduct an analysis of the training needs of the School staff and the available channels										
	Objective 6: To analyze forms to recognize the professional tasks										
	Objective 7: To develop a policy that rewards motivated individuals who strive for excellence in their daily performance (awards)										
	Objective 8: To support initiatives implemented by the different stakeholders to reward staff effort										
Research	Objective 13: To analyze the alignment of the research topics with contemporary challenges										
	Objective 14: To improve the information research channels										
Society	Objective 19: To implement a collaborative strategy to improve the efficiency of collaboration mechanisms										
	Objective 20: To promote awareness and voluntary groups										

Commitment		The Ten Principles of Global Compact									
		HH.RR		LABOUR				ENVIRONMENT			ANTI-CORRUPTION
		1. Respect the HH.RR	2. Not complicit in HH.RR abuses	3. Freedom of association and collective bargain	4. Elimination of forced and compulsory labor	5. Banning child labor	6. Elimination of discrimination	7. Precautionary approach to environmental challenges	8. Greater environmental responsibility	9. Development /diffusion of environmentally friendly technologies	10. Work against corruption
Environmental	Objective 21: To ensure correct recycling system for materials used in the ETSII-UPM										
	Objective 22: To improve energy efficiency										
	Objective 23: To raise environmental awareness										
	Objective 24: To increase the number of subjects that promote this awareness										
Economic	Objective 26: To inform about the various scholarships offered by the ETSII-UPM in a more direct and centralized way										
	Objective 27: To promote accessibility to the Economic Report										



In addition, as a proof of commitment to social responsibility, the Dean has signed the **Declaration of Higher Education Institutions (HEI)** (Commitment to Sustainable Practices of Higher Education Institutions on the Occasion of the United Nations Conference on Sustainable Development 20-22 June 2012, Rio de Janeiro)





This Pilot Guide analyzes the strategic projects started in this period that were focused on encouraging the participation of stakeholders and the accountability, along with the best practices carried out and the results obtained.

STRATEGIC PROJECTS

Accountability

The Report is a tool that sets off a series of actions to promote the integration of social responsibility in the management of ETSII-UPM. The project aims to transform the School into a sustainable organization in its four areas of activity: teaching, research, management and university extension.

The Report consists of the issues that are most relevant to stakeholders and are aligned with the objectives and strategies of the organization. The participation of stakeholders is a must for the project to succeed. For this reason, different channels have been enabled to allow them to participate in the project, giving influence to the different groups in selecting the issues of importance where improvements can be made.

At the same time, the Report serves as a communication tool, as it explains the different initiatives, and informs stakeholders about the progress that was made in fulfilling the objectives. It is published every two years

The preparation of this report has followed the principles of the "Guide for the preparation of sustainability reports of the Global Reporting Initiative (GRI-G3)," (the description of each stage is included on pages 17 to 23 of the Social Responsible Report 2009//10). With the adaptation of this methodology, the Report has been verified by GRI at level C

Participation of Stakeholders

One of the principal ways to achieve the goal of integration of Social Responsibility in the management system of the ETSII-UPM has been the creation of a strong two-way communication bond with stakeholders. This allows everyone to identify their needs and expectations and, as far as possible, through the Social Responsibility in ETSII-UPM in order to give them the best answers.

To identify and classify the various interest groups, the Social Responsibility team followed the methodology indicated by the standard AAA1000s (www.accountability21.net/AA1000SES). Based on the previous classification system made for the internal quality assurance, this methodology allowed a more thorough identification of stakeholders and determined how to relate to them.

Firstly, the Management Team defined the General Communication Plan and has implemented the following communication channels:

- Newsletter: Aimed at all stakeholders internal ETSII-UPM
- CONTACT PHONE: 91 336 30 43
- CONTACT EMAIL: responsabilidadsocial@etsii.upm.es
- SOCIAL RESPONSIBILITY WEBSITE: www.industriales.upm.es/responsabilidad_social



POLITÉCNICA



UNIVERSIDAD POLITÉCNICA DE MADRID
ESCUELA TÉCNICA SUPERIOR DE
INGENIEROS INDUSTRIALES

In the first period of the project, the participation of stakeholders was made through focus group, workshops, and surveys. The objective was to select the improved actions related to the relevant issues identified by the stakeholders. The methodology used was the relevance and maturity matrix.

Prioritization, through consultations, resulted in the selection of the most important ("relevant" in the terminology of RS) for different people as part of the ETSII-UPM. Stakeholders who were consulted to determine the relevance of the issues were: Students, Teachers and Researchers, PhDs', Administration, Services and support staff.

Having defined the relevant aspects of the interest groups for their appearance in the Report, we proceeded to look at their "maturity", which means, the degree of development that are the actions related to the relevant aspects.

Applying the Accountability methodology adapted for ETSII-UPM, the material issues were selected and the continuous improved actions were defined.

In the second period, with the aim of encouraging the participation of staff and students, a project called "**Sustainability Antennas**" was launched. The objective of this initiative was to permeate the social responsibility values to the organization, identifying their needs and expectations and communicating the improvement actions. Representatives from each of the stakeholders form part of these groups. At the same time, our stakeholders have their say in the 2.0 spaces that ETSII-UPM has in different **social networks** where it shares knowledge and concerns of interest with the rest of the community.

Every step that have been carried out by the Management Team of the School for integrating social responsibility in its working areas are described in the Social Responsibility Reports which are made according to GRI methodology and are published in the following link:

http://www.etsii.upm.es/responsabilidad_social/documentacion.es.htm



BEST PRACTICES:

The initiatives carried out by ETSII-UPM are described below following the methodology defined by Global Compact Pilot Guide for Higher Education. This report collects the activities related to the centralized services of ETSII-UPM linked to the Management Team. The scope will gradually be extended to cover other initiatives developed by different areas and departments of the School.

The initiatives are grouped into the four dimensions defined by Global Compact Pilot Guide for Higher Education:



Human Rights /

In this area, Higher Education Centres have the responsibility to uphold Human Rights in their campuses and in their sphere of influence. That means to promote and allow each person to enjoy his/her human rights without distinction as race, colour, sex, language, religion, politics or other opinions, national or social origin, property, birth or other status.

ETSII-UPM has developed the following actions:

- Call for elections every 4 years to form the management team
- Students admission by transparent process (numerus clauses in a nationwide exam), and book off 5% of the places for people with disabilities.
- Infrastructure adapted to diversity (e.g. toilettes for men, women and people with disabilities, tables for left-handed persons).
- Freedom of expression and associations (e.g. trade unions, students associations, etc.)
- Betting on student exchange with universities in other countries, pledging their commitment to programs such as Erasmus Seneca, Magalhaes and other types of university exchanges etc .

The **best practices** related to this area are:



Comprehensive training:

One of the fundamental pillars in which teaching is supported is the comprehensive training. The main objective of our School is to prepare our engineers with a strong technical education. Also, this education is completed with cross-curricular skills. That training tries to achieve professionals with: judgment; capability to successfully confront present and future challenges; the ability to adapt to the technological and social changes; integrity; and creativity to find imaginative practical solutions to problems.

To achieve this objective, our School has defined educational outcomes based on Accreditation Board of Engineering and Technology (ABET) methodology.

ABET is an accreditation that provides assurance that a college or university program meets the quality standards established by the profession for which the program prepares its students. It emphasizes the training on outcomes and skills required for engineers.

Otherwise, the comprehensive training is powered by some activities managed by different areas and departments of the Centre like: free elective subjects; skilled workshops; awareness seminars organized by NGOs; etc.

The following table shows the students participation in these activities:

Comprehensive training activities	2008/09	2009/10	2010/11	2011/12
Students that participated in the organization of job fair (Induforum)	109	50	50	50
Students that coursed Cybertech Subject (Students from others Schools of the UPM are included in this indicator)	52	50	47	26
Students that participated in UPM Racing (Students of others Schools of the UPM are included in this indicator)	49	44	56	N/A
Students that participated in training seminars organized by the Psychology Unit (Emotional intelligence, teamwork, communication, etc.)	149	218	201	196
Students that participated in training seminars organized by Induempleo Unit (professionalism skills)	276	110	238	296

Cooperation for development and sustainable development:

The management team has promoted a project that tries to embed the social responsibility values in the culture of the organization. These values have to be reflected in the main areas of activity of the Center (teaching, research, management and university extension)



Teaching: Our School is trying to promote social responsibility awareness including concepts as sustainable development and environmental care across course syllabus. This is made through education in outcomes as:

- An understanding of professional and ethical responsibility
- The broad education necessary to understand the impact of engineering solutions in a global and societal context

The chosen indicator to monitor the awareness that students have for these aspects is the number of Final Degree Course Projects that include these issues:

INDICATOR	2008/09	2009/10	2010/11
Total Number of Final Project Presented	344	429	415
Percentage of Final Projects that include aspects related to social responsibility	27,03%	29,84%	26,75%

Research:

The Management Team is trying to promote the alignment of the analysis of challenges of today's society with research in the ETSII-UPM, in order to focus the research on solving problems that are relevant to the society.

The general knowledge generated by this center can be measured by the below figures:

	2008	2009	2010	2011
Research Projects	355	388	393	374
Research fellowships and contracts	178	261	312	N/A
Stays and Sabbatical years	14	4	22	32
Theses	34	18	36	15
Books	11	14	16	17
Book Chapters	49	45	70	68
Papers in journals	157	194	276	353
Communications in congresses	275	275	357	363
Patents	16	35	35	30
Software	11	6	6	10
Reports for the Public Administrations or their dependent organisms	4	7	18	3
Courses, seminars and tutorials	44	32	57	39
Conferences invited in International Congresses	21	24	44	39

*Source: Observatorio I+D+I (UPM <http://www.upm.es/observatorio/vi/index.jsp>)

The school has been working in identifying the challenges to which industrial Engineering can propose some solutions, which are:

- Human development, inequality and poverty
- Globalization, governance and geopolitical



- Technology innovation
- Energy
- Sustainable Human mobility
- Sustainability and social responsibility in organizations
- Communication and information technologies and networks

Furthermore, some structures to promote cooperation actions have been created by the Rectorate of the University. These structures have been denominated “Development Cooperation Groups”. These groups are composed by faculty and staff members and are the active university agents to implement development cooperation initiatives.

Management:

Many actions are being set off in order to raise awareness about the impact of the organization in society and environment. Some examples of communication activities are:

- E-mails that communicate actions to save energy
- Newsletter with news about best practices or actions implemented by the organization
- Guides specialized in issues related to social responsibility and sustainable development
- Intranet for staff, faculty and students
- Etc.

During 2009 and 2010, ETSII-UPM has developed some activities to raise awareness and encourage volunteering. Some of these actions are described below:

- Organizing awareness conferences: roundtable talks about Social Responsibility, presentation of ETSII-UPM social responsibility project (ETSII-UPM Social Responsible Report), etc.
- Supporting workshops on cooperation, development and sustainability organized by the NGO Engineers Without Borders
- Encouraging ETSII-UPM Students’ Associations to promote activities related with awareness and corporate volunteering (AVI)
- Coordinating a Photographic exhibition on "Wood Fair" at the Library
- Lending the ETSII-UPM Infrastructure to hold the blood donation campaign organized by the Community of Madrid (Madrid Health Centre)
- Publishing, in the ETSII-UPM Social Responsibility web space, updated information on volunteering and RS

Besides that, ETSII-UPM is designing a new plan to promote volunteering by publishing a volunteering guide and creating the necessary structure to inform and advise people about different types of volunteering. All these actions impact on society.



Labor /

Institutions of higher education must comply with the principles set by the Global Compact relating to the standards published by the International Labor Organisation..

The relevant issues for the ETSII-UPM are health and work place safety, self- protection plans, and the balance between work and family life.

The **best practices** in this area are:

Disability compliance: Disability Support Unit

The unit of attention for disability was created to promote a university free of barriers, which ensures equal opportunities and non discrimination for persons with disabilities.

To achieve this goal,the university is developing programs such as:

- Improve the accessibility in the Centres and remove architectural barriers
- Develop awareness programs in the university community.
- Provide the necessary technical and human resources for each student (sign language interpreters, adaptations and computer reading signs)
- Provide teacher-mentors to advise students with disabilities
- Promote labour programs and practices designed to promote the employability of students and graduates with disabilities.
- Set relationships with other public administrations and social organizations in the handicapped area. Cooperate with other universities to promote services in this area.

This is a centralized service for the entire university, but there is a person responsible for these issues in each centre (<http://www.upm.es/institucional/UPM/CompromisoSocial/UnidadAtencionDiscapacidad>)

Besides that, an Accesibility Report of the Center and a Relationship Guide with handicapped people has been developed by ETSII-UPM.

Human Resources Training:

One of the strategic factors of our organization is the people that compose it. Trained professionals who make up the organization is one of the fundamental pillars to guarantee its excellence. One of the main lines of action of the SR Project is to analyze possible tools to train, motivate and recognize School Staff efforts when developing their professional activities.



Indicators that check these aspects are:

Table for recognition		
		2009
Faculty	Recognition of Research Work	3,27/6
	Recognition of Management Work	2,78/6
	Recognition of Teaching Work	2.58/6
Staff	Recognition of their work done by the person in charge	3,87/6

Source: Satisfaction Surveys (UPM- 2009)

Table for recognition		
		2011
Faculty	Recognition of Research Work	-
	Recognition of Management Work	-
	Recognition of Teaching Work	-
Staff	Recognition of their work done by the person in charge	5,86/10

Source: Satisfaction Surveys (UPM- 2011)

Satisfaction assessment with		
		2011
Faculty	Possibilities offered by the UPM to develop their teaching	7,07/10
	Possibilities offered by the UPM to develop their teaching	5,80/10
	Management Work	5,71/10
Staff	Satisfaction with their Work	6,37*/10

* Synthetic indicator

Source: Satisfaction Surveys (UPM-2011)

These tables reflect the need to implement initiatives to improve them, such initiatives are:

- Conduct an analysis of staff training needs and the various channels for training
- Analyze the various forms that exist today to recognize professional task
- Develop a policy that rewards motivated individuals who strive for excellence in their daily performance (awards)
- Support initiatives implemented by the different groups to reward School Staff effort

With such a strict centralized Human Resource Policy at the university, this makes it difficult to implement major improving actions in the Center. However, it is planned to implement some simple initiatives that can improve tables such as: Congratulation letters signed by the Dean, management team courses for the managers of each area, project of "Sustainability Antennas", etc.



Environment /

Besides ensuring that their activities do not cause harm to the environment of their neighbors, High Education Institutions must ensure that the future professionals take into account the impact on the environment and society in their decisions and in their labor activities.

Minimize the environmental Impact

One of the main objectives of our Center is to minimize its environmental impact. We monitor the following indicators to evaluate our impact:

- Waste generated by ETSII-UPM

Waste ¹		Unit	2008	2009	Unit	2010	2011
Waste Type	Electric & Electronic Device Waste	kg	765	3.171	kg	2.650	164
	Strip lights	kg	125	198	kg	201	217
	Oils	kg	1.080	720	kg	620	820
	Chemicals	kg	1.890	1.454	kg	1.411	899
	Construction and demolition waste	m ³	132	144	kg	29.320	28.830

¹ Dangerous waste is collected by an authorized person

³ Since 2010, the company gave data in kg instead of m³

- Water consumption:

Water					
	2007	2008	2009	2010	2011
Consumption (m ³)	21.952	20.191	14.087	14.111	14.409
Difference with the previous year (%)	2,8%	-8,0%	-30,2%	0,2%	2,1%
Difference since 2004 (%)	-1,2%	-9,1%	-36,6%	-36,5%	-35,2%

- Energy Consumption:

	Total energy consumption (GJ)				
	2007	2008	2009	2010	2011
Natural Gas	611,25	691,30	510,52	557,41	736,58682
Fuel Oil	3.135,20	3.397,69	2.654,39	2.914,03	2.793,06546
Power	10.437,72	10.282,11	11.129,05	11.175,22	10.363,302
Total	14.184,17	14.371,10	14.293,96	14.646,66	13.892,9543

- Emissions (monitoring air pollution gases, particulates, and greenhouse gases):

	ACIDIFIERS, OZONE PRECURSORS AND GREENHOUSE GASES							
	SO_x (t)	NO_x (t)	COVNM (t)	CH₄ (t)	CO (t)	CO₂ (kt)	N₂O (t)	CO₂ eq (Kt)
2004	12,493	6,180	0,310	0,127	0,556	1,858	0,033	1,871
2005	11,767	6,143	0,329	0,134	0,547	1,892	0,034	1,905
2006	10,023	5,476	0,308	0,133	0,484	1,564	0,031	1,576
2007	9,631	5,441	0,304	0,133	0,486	1,569	0,030	1,581
2008	2,459	3,289	0,163	0,369	0,808	1,430	0,030	1,447
2009	2,565	3,499	0,175	0,395	0,824	1,333	0,031	1,351
2010	2,599	3,528	0,176	0,397	0,839	1,140	0,031	1,158
2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	HEAVY METALS								
	As (kg)	Cd (kg)	Cr (kg)	Cu (kg)	Hg (kg)	Ni (kg)	Pb (kg)	Se (kg)	Zn (kg)
2007	0,049	0,027	0,094	0,093	0,041	0,896	0,050	0,030	0,516
2008	0,036	0,024	0,080	0,070	0,034	0,830	0,042	0,027	0,449
2009	0,039	0,026	0,086	0,076	0,037	0,898	0,045	0,029	0,486
2010	0,039	0,026	0,087	0,076	0,037	0,902	0,046	0,029	0,488
2011	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	PARTICLES		
	PM_{2,5} (t)	PM₁₀ (t)	PST (t)
2007	0,138	0,232	0,313
2008	0,077	0,113	0,140
2009	0,081	0,118	0,147
2010	0,082	0,120	0,149
2011	N/A	N/A	N/A

Ensure correct recycling system for materials used in the ETSII-UPM

One of the action lines is to improve waste management. A big effort is done to remove each waste class separately. In this sense, there are 14 recycling points where people can place: paper, metal and plastic packaging and other waste separately. There is a glass container in outdoor the School.

There are two collection points for batteries, ink cartridges and tonner. Mobile phones are collected in the library to be donated to the "Jane Goodall Institute" that collects mobile phones, to recycle the Coltan inside, in order to reduce the Coltan extraction and minimize illegal mining and habitat disappearance. In this way the African Ecosystem is protected.

The rest of dangerous wastes are collected by an authorized person to deal with them in compliance with current legislation, following a centralized procedure at the UPM.

In addition, a procedure to reuse furniture has been put into practise by the institution. This initiative is where departments that have furniture that they do not use or need, offer it to the other departments that can take advantage of it. This initiative promotes the culture of reusing and recycling.



Improve energy efficiency of the Centre: low-energy consumption lighting

Nowadays, there are more than 1700 fluorescent tubes in corridors and classrooms at the School. These lights are working twelve hours in a normal activity day. Therefore, the consumption reaches 220.000 kWh per year, that represents an important economic and energy expenditure that could be reduced through the use of new available technologies.

For this reason, 798 fluorescent tubes are being replaced by Light Emitting Diode (LED) tubes. The management team of the School has decided to make a gradual replacement of the lights in the corridors in order to save energy. This way energy saving will reach 62.000 kWh/year, reducing CO₂ emissions by 11.200 Kg (calculated according to the 2010 Spanish **energy mix** that takes into account the losses in transmission and distribution).

Green responsible purchasing practices /Fair Trade: “Paper & Wood Fair” Agreement

One of the main environmental impacts in a High Education Centre is the use of paper. Therefore, one of the ETSII-UPM lines of action is to reduce the environmental impact caused by the use of paper. This improvement will consist of the collaboration between two organizations: Forest Stewardship Council (FSC) & Copade Foundation.

FSC is an organization that certifies that the paper is produced by a sustainable and responsible forest management in response to environmental and social criteria. Copade Foundation is a NGO that promotes “Fair Trade”.

ETSII-UPM hopes to promote the use of fair wood & paper, i.e. wood obtained from sustainable managed forest and commercialized through a trading system that seeks greater equity and justice in trade.

Some actions that are already in place are:

- Use of FSC paper for exams and the student surveys
- Organized a conference related with "Fair trade and fair wood" within a cycle of conferences organized by Engineers without Borders. The person responsible for explaining fair trade and FSC certified paper was a member of COPADE.
- Set up photo exhibition "Wood Fair" in the Library. This exhibition was composed of 20 images related to the consumption of wood and paper produced through sustainable and responsible forest management applying environmental and social criteria.

ETSII-UPM will continue promoting and working on these actions within its fields of activity and influence.

In addition, the management team is making an effort to increase paper recycling. The table that reflects the results of the initiatives is the following:

Paper recycled by ETSII-UPM members (kg)	2007	2008	2009	2010	2011
	7.920	11.040	12.960	11.300	12.480



Anti-Corruption /

In this dimension, Higher Education Institutions promise to be transparent and to deal with corruption, bribery and extortion in the management of their campuses and in their sphere of influence.

In this sense, the best practices of the ETSII-UPM are:

- Transparency and accountability of economic management, publishing the main figures of budget and expenses
- Recruiting of faculty and staff through public announcements
- Admission of students according to the results of an exam realized nationwide (numerus clausus)
- Responsible purchasing management and subcontracting through public competition

Best practices in this area are:

Improvement of Infrastructures according to stakeholders' needs

The School has an Infrastructure Committee which develops the necessary initiatives to identify the stakeholders' needs, by studying the information and, according to the available resources, carry out the necessary improvements in infrastructures.

During the period (2009-2010):

- Dining Areas have been increased
- Library has been reformed to increase and improve the available seats for studying
- Accessibility to one of the laboratories has been improved thanks to a construction of a ramp.
- Some reforms have been carried out following the recommendation of a health and workplace safety plan.

Some figures that reflect the investment in improvement and care of infrastructures are:

	2008	2009	2010	2011
Percentage of expenditure intended to improve and care infrastructures	7,99%	10,96%	7,12%	5,42%

Monitoring Economic Management

Our school is committed to ensure transparency in accountability to both society and organization stakeholders.

For this reason, in recent years, the school has tried to make economic data more accessible through its publication in different reports published by the School.

At present, these figures can be found on the ETSII-UPM Economic Report available in the Economic Issues Section or : ETSII-UPM in figures and Social Responsibility reports.

What are the plans for the near future?

This Pilot Guide briefly describes the various initiatives implemented to fulfill the commitments set out in matters of social responsibility, which were chosen from the alignment of the needs and expectations of stakeholders with the objective and strategy of the ETSII-UPM. In the following period we will continue to work to complete the implementation of these commitments and fulfill additional objectives which have been proposed.

In this new period, our center will work with the aim of encouraging the participation of staff and students in the Sustainability Antennas project. The success of this initiative will be essential to permeate social responsibility values to departments and students. At the same time, our stakeholders have their say in the 2.0 spaces that ETSII-UPM has in different social networks where it shares knowledge and concerns of interest with the rest of the community.

We will work with the same enthusiasm we have had so far, not forgetting our mission: to prepare high-level professionals with extensive capabilities to generate, integrate and apply scientific knowledge, technology and business in the industrial field, contributing to economic and environmental development of society.