



**Technologies for Sustainable  
Development**

Grant Agreement 2014-0871/ 001-001  
EM Action 2 Partnership



# What is Sustain-T?

**The Erasmus Mundus programme SUSTAIN-T is an Erasmus Mundus Action 2 (EM2) Partnerships project.**

The EU Erasmus Mundus 2009 – 2013 programme was a cooperation and mobility programme in the field of higher education that aimed to enhance the quality of European higher education and to promote dialogue and understanding between people and cultures through cooperation with Third Countries. In addition, it contributed to the development of human resources and the international cooperation capacity of higher education institutions in third countries by increasing mobility between the European Union and these countries. Partnerships in the Action 2 framework of Erasmus Mundus 2009 – 2013 provided:

- Support for the establishment of cooperation partnerships between European higher education institutions and higher education institutions from targeted Third Countries with the objective of organizing and implementing structured individual mobility arrangements between the European and Third Country partners.
  - Scholarships of various lengths - depending on the priorities defined for the Third Country concerned, the level of studies or the particular arrangements agreed within the partnership - for European and Third-Country individuals (students, scholars, researchers, professionals). SUSTAIN-T is an ERASMUS MUNDUS Partnership (EMA2 strand1) project funded by the European Commission in July 2014, for 4 years.

The SUSTAIN-T Project was jointly coordinated by Politecnico di Milano, Italy and by Universidade Federal do Rio de Janeiro, Brazil and it consisted of 20 members: 7 EU partners from Czech Republic, France, Italy, Portugal and Spain, and 13 Latin American partners from Argentina, Bolivia, Brazil, Colombia, Ecuador, Panama, Paraguay, Peru, plus 17 associated partners. The 20 partners acted as home and host institutions for students, PhD, postdoc and staff benefiting from the SUSTAIN-T project. The SUSTAIN-T consortium also included several associate partners. The management team consisted of academic and administrative staff of Politecnico di Milano. They ensured the good management of all the aspects of the SUSTAIN-T project: definition of the objectives and of the milestones of the project, organization of the meetings, launching of the calls for applications for fellow scholarships, management of the implementation of the mobility, financial management, reporting to the European Commission. All partners actively contributed to a few Committees focusing on some major cornerstones of the project during its whole duration: communication, capacity building, quality control. They monitored the quality and reliability of the project and assured permanent communication between all partners, fellows and potential fellows. At each institution, a “local SUSTAIN-T office” was set up in order to manage the projects smoothly and efficiently. All the local coordinators were in constant contact with the coordinator during the project life in order to discuss the key issues of the EMA2 programme, to perform the selection meetings and to make sure that the programme was going in the right direction respecting the goals of SUSTAIN-T and EMA2 regulations.

In 3 successive cohorts, SUSTAIN-T enabled 166 Latin American and European undergraduate, graduate and PhD students, Postdoc and staff, to attend the best HEIs in the other continent. Then 166 SUSTAIN-T Latin American and European fellows from socially and ethnically diverse backgrounds, including those who were lacking in financial means, had the opportunity to participate in an international experience. It was an extremely strong experience in order to enrich their curriculum in an increasingly global economy and interdependent world, for developing adaptation skills, for addressing local and global challenges, and consequently for raising their profiles as active members in their communities and the future world. Students, PhD, PostDoc and staff from the partner institutions composed the Target Group 1: this group, which had to represent at least 50% of the mobility according to the rules of the EMA2 programme, was the uttermost importance to achieve one of the goals of the programme: gradually learning how to have a smooth exchange of students with a transparent exchange of credits and recognition of studies into the curricula. Nationals from the eligible countries studying or working in other HEI composed the Target Group 2, which enabled the consortium to open opportunities for mobility and to disseminate good practices. Target Group 3 was composed of disadvantaged fellows suffering from various situations of injustice and discrimination. During the project, all the partners had to implement the mobility and to ensure a real impact of the SUSTAIN-T project on the individuals, institutions and system in a sustainable way at the end of the 4-year-programme.

# SUSTAIN-T Consortium: LATIN AMERICAN Partners



# EUROPEAN Partners



## SUSTAIN-T Associated Partners

### ITALY:

Ingegneria Senza Frontiere - Milano (ISF-MI)  
 Rotary Club Milano Sempione  
 Rotary Club Milano San Babila  
 Rotary Club Busto-Gallarate-Legnano «Castellanza»  
 Soren s.r.l

### FRANCE:

T.I.M.E. Association

### CZECH REPUBLIC:

Nemetschek Scia r.s.o.

### COLOMBIA:

Universidad Tecnica Bolivariana  
 Schlumberger Surencó S.A.  
 Fundación Instituto Geofísico  
 Rotary Club Cartagena de Indias

### BRAZIL:

COMPESA

### PARAGUAY:

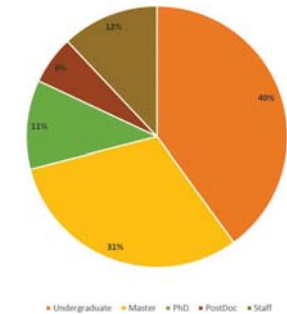
Municipalidad de Encarnación

### BOLIVIA:

SAMI SRL  
 INCOL  
 CILA SRL

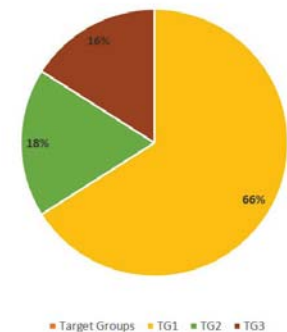
## Types of Mobility

Undergraduate	66
Master	51
PhD	18
PostDoc	10
Staff	21
tot.	166

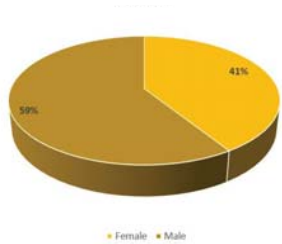


## Target Groups

TG1	110
TG2	29
TG3	27
tot.	166

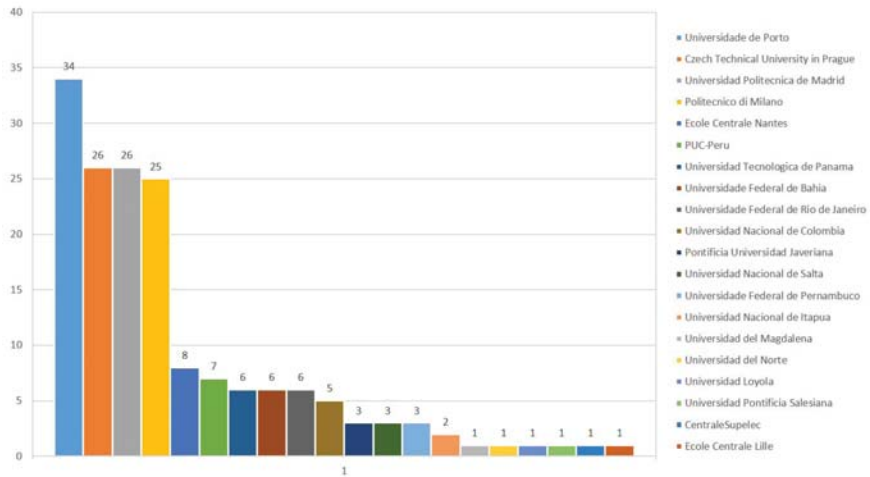


## Gender Distribution

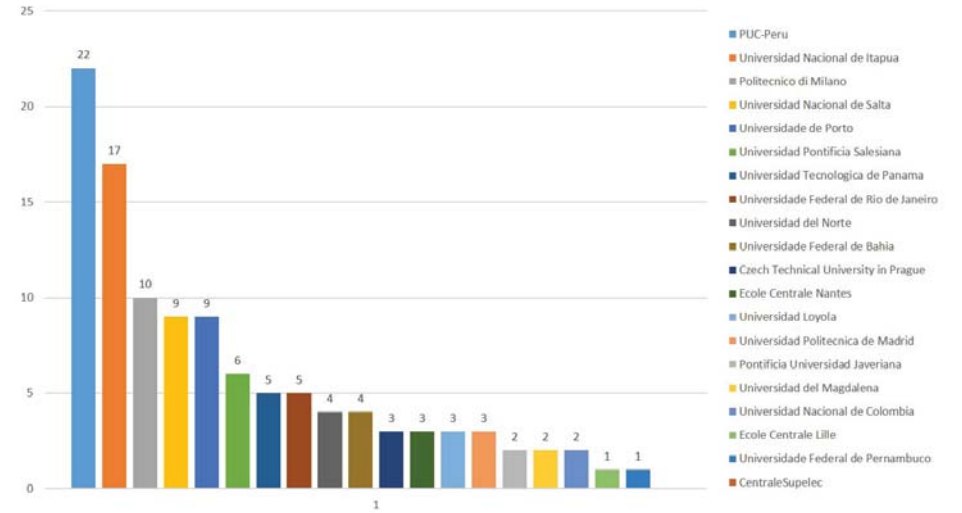


Female	68
Male	98
tot.	166

## Host Institution



## TG1 - Home Institution



# Politecnico di Milano



The Politecnico di Milano is one of the most outstanding technical Universities in Europe. Founded in 1863, in many disciplines, it is regarded as a leading research institution worldwide. Nowadays, it covers the 17th position in the QS ranking for Engineering and Technical universities worldwide (6th in Europe). Politecnico di Milano has three main campuses located in Milan (Milano Leonardo and Milano Bovisa), economic capital of Italy, the heart of fashion and design industries. Many important scientists and architects studied and taught here, among them Achille Castiglioni, Gió Ponti, Renzo Piano and Aldo Rossi, both Pritzker Prize in 1990 and 1998 respectively, and Giulio Natta, Nobel Prize in Chemistry in 1963.



The Politecnico di Milano offers innovative programs at all levels within its schools of Engineering, Architecture and Design. Thanks to a strong internationalization policy, almost all programs at the master levels are taught entirely in English, attracting an ever-increasing number of talented foreign students, which now form a diverse community from more than 100 different countries.

Teaching is increasingly related to research, a key commitment that enables to achieve results of high international standards, while creating connections with the business world. Strategic research is carried out mainly in the fields of energy, transport, planning, management, design, mathematics and natural and applied sciences, ICT, built environment, cultural heritage, with more than 130 laboratories, among which a Wind Tunnel and a Crash Test center.



**44.269 students enrolled in A.Y. 2017/2018**



**7.402 foreign students in A.Y. 2017/2018**



**40 Master of Science programmes (36 taught in English)  
28 Bachelor  
42 PhD**



**829 agreements with EU and non-EU partners  
96 Double Degrees  
23 Erasmus + projects  
241 research projects financed by EU (H2020)**

# Czech Technical University in Prague



The Czech Technical University in Prague (CTU) is the oldest and largest technical university in the Czech Republic.

It was founded on the basis of a decree issued on January 18th, 1707 by Emperor Josef I. Nowadays, CTU has 8 Faculties covering all engineering disciplines and 6 constituent Institutes and specific Research Centres. As an example, the Czech Institute for Informatics, Robotics and Cybernetics (CIIRC) founded in 2013, aims to become an international-level scientific and research workplace as well as an excellent education centre

for doctoral and post-doctoral studies.

To achieve excellence both in education and research, CTU permanently improves teaching and research trying to motivate talented students to participate in research projects. CTU has been successful in gaining international grants to support research and keeps extending the offer of full degree courses taught in English, which brings increasing numbers of international degree seeking and mobility students coming to CTU on the basis of Erasmus+ and other programmes.



**Number of students:**  
18 500+



**Percentage of international students:**  
16.4%



**Number of faculties:**  
8



**Number of international agreements:**  
732  
**EU projects:**  
65 (as of 2017-18)

# CentraleSupélec

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CentraleSupélec, result of the merger of the École Centrale Paris and Supélec in January 2015, is an internationally reputed Higher Education and Research Institution. Its excellence lies in its combination of fundamental and applied sciences for innovation with societal impact. For almost two centuries, CentraleSupélec's top engineers have been practicing their skills and knowledge for the development of corporate institutions and public organizations.

CentraleSupélec has three campuses in France, one located at the south of Paris (campus of Paris Saclay), one in Metz

(Lorraine) and one in Rennes (Brittany). CentraleSupélec has also three campuses abroad: in China with École Centrale Beijing, India with Mahindra École Centrale in Hyderabad, and Morocco with École Centrale Casablanca. In the long term, CentraleSupélec will be the "heart" of a worldwide network of interconnected organizations, in developed and emerging countries, within which professors, researchers and students will circulate.

CentraleSupélec leads the École Centrale Group with École Centrale Lyon, Lille, Marseille and Nantes.



**Students: 4300**



**International students 30%**



**3 campus in France (Paris-Saclay, Metz and Rennes) and 3 campus overseas in Beijing, Hyderabad, Casablanca**



**176 partners universities in 45 countries  
80 double degree agreements**



# École Centrale Lille



Centrale Lille is a leading institution of higher education and scientific research, founded in 1854. Centrale Lille provides three engineering programs, national and international master programs, and PhD. Centrale Lille is closely involved in national and international networks and works in collaboration with various higher education and research stakeholders at national, European and worldwide level.

Centrale Lille welcomes about 1600 students and 25% of the students come from more than 20 different countries.

Centrale Lille is fortunate to have

an innovative and dynamic research environment through all the laboratories contained in the School, some of which have experimental equipment that is unique in Europe, and even in the world. This environment is also supported by a large network of institutional and corporate partners, which benefit from the training of our future engineers and students in master programs.



**Number of students:**  
1600



**Percentage of international students:**  
25%



**Number of faculties:** 96



**Number of Agreements:** 90  
**EU Research Projects:** 6

# École Centrale Nantes



In keeping with the traditions of French Engineering schools (grandes écoles d'ingénieurs), Centrale Nantes, founded in 1919, trains versatile engineers to a very high scientific and technical level.

As a member of the Écoles Centrales Group (Lille, Lyon, Marseille, Nantes and Paris), Centrale Nantes delivers a teaching programme of the highest quality to rigorously selected students. Over 2000 students are present on the Nantes campus.

Our extensive links with the world's top universities opens up international study opportunities.

Beyond this renowned training, with the support of numerous strong institutional and industrial partnerships Centrale Nantes produces world-class academic and applied research. Research and education have always gone hand in hand at the school. The scientific courses fall within the research areas of the school's teaching staff and they conduct their research in the school laboratories.



**Number of students:**  
2000



**Percentage of international students:**  
47%



**176 academic partners and 25 EU projects over the last 10 years**

# Universidad Politécnica de Madrid



**POLITÉCNICA**

Universidad Politécnica de Madrid (UPM) was founded in 1971 through the integration of the Higher Technical Schools, which until then made up the Higher Technical Institutes. The University Schools joined the following year.

However, the origin of the institution dates back much further. Teaching in the majority of the Centres was established during the reign of Carlos III in the 18th century. During these years, the Schools were practically the only ones in our country linked to the teaching of Architecture and Engineering. For this

reason it is no exaggeration to state that a large part of the history of Spanish technology has been written by the Schools of Engineering and Architecture. As set out in its statutes, Universidad Politécnica de Madrid has, among its objectives, the creation, development, transmission and criticism of science, technology, and culture. To this end it also works from its Institutes and Research Centres, assimilating the changes taking place in our society and maintaining its vocation for excellence, which is why it has both national and international recognition.

Universidad Politécnica de Madrid holds double recognition as a Campus of International Excellence, a distinction that refers to the quality of its research and teaching activity.



17 schools  
52 undergraduate programmes  
83 master programmes



Number of students:  
2000



1570 Higher Education Partners agreements  
69 double degree agreements



Percentage of international students:  
47%

# Universidade do Porto

**U. PORTO**

U.PORTO, founded in 1911, is one of the largest higher education institution in Portugal and the best positioned Portuguese University in national and international rankings. It has 14 Faculties, 1 Business School and 35 Research Units. U.PORTO is the leading producer of science in Portugal, responsible for 23% of the scientific articles produced in the country. Being a truly international University, with students from 167 nationalities, internationalisation is one of U.PORTO's strategic pillars and objectives, allowing the development of existing collaborations, as well as the establishment of innovative cooperation through the creation

of active links with institutions from approximately 150 countries all over the world. In recent years, U.PORTO has coordinated and been involved in several projects, namely under Erasmus+ and Erasmus Mundus Programmes, consolidating its internationalization process.



**Number of students:**  
32236



**Percentage of international students:**  
14 %



**Number of faculties:**  
14 + 1 Business School



**Number of international agreements:**  
2217 in 107 countries

# Universidade Federal do Rio de Janeiro



UNIVERSIDADE FEDERAL  
DO RIO DE JANEIRO

The purpose that justifies the existence of the Federal University of Rio de Janeiro and its strategic objectives is to provide Brazilian society with the means to dominate, expand, cultivate, apply and disseminate the universal patrimony of human knowledge, empowering all its members to act as a transforming force. More specifically, the university is designed to complete the student's comprehensive education, preparing:

- pursue higher-level occupations;
- to value the multiple forms of knowledge and expression, technical and scientific, artistic and cultural;
- exercise citizenship;

- reflect critically on the society in which he lives;
- participate in efforts to overcome social and regional inequalities;
- commit to the construction of a society that is socially just, environmentally responsible, respectful of diversity and free from all forms of oppression or discrimination of class, gender, ethnicity or nationality;
- strive for the universalization of citizenship and the consolidation of democracy;
- contribute to national and international solidarity.



**Number of students:**  
67329



**Percentage of international students:**  
14 %



**53 units, spread between faculties, institutes and schools, distributed in 6 centers and 1 forum**



**Number of valid agreements 264  
Number of EU agreements 178**

# Universidad Nacional de Salta



The National University of Salta (UNSA) is a public university in the north of Argentina, with headquarters in the city of Salta. It was founded on May 11, 1972. It has about 32087 students. It has regional offices in Tartagal, San Ramón de la Nueva Orán, Rosario de la Frontera and San José de Metán as well as the headquarters in Salta. It is subdivided into six faculties:

- Faculty of Economic, Legal and Social Sciences
- Faculty of Exact Sciences
- Faculty of Natural Sciences
- Faculty of Humanities
- Faculty of Engineering
- Faculty of Health Sciences.

It works with Joint Research Institutes with CONICET, such as INENCO and INIQUI.

It also has a secondary school, a radio station (LRK317 Radio Universidad Nacional de Salta), a rugby club, dining rooms and gyms. It offers a wide cultural offer and museums.



**Number of students:**  
32.087



**Percentage of international students:**  
1.5%



**Number of faculties: 6**  
**Number of departments: 21**  
**Number of schools: 16**



**International Agreements: 61**  
**EU Projects: 6**  
**Horizon 2020**

# Universidad Loyola



The mission of Universidad Loyola is promoting a comprehensive culture, capable of training people who stand out for the firmness of their beliefs, their deep scientific, humanistic, and social knowledge; moreover, it is committed to the create a fairer and more fraternal society.

It is determined to train conscious, committed professionals, able to provide their knowledge in order to achieve beneficial transformations for our time.

It aspires, thanks to its professionals' leadership and moral behavior, to improve the quality of the Bolivian society life in order to achieve a community made by men and women

committed to work with other people; that is why we shall remember that.

“Universidad Loyola is a High Education institution, created to train professionals with a comprehensive culture, under Ignacio de Loyola principles, renewed scientific and humanistic knowledge, with the ability of promoting a fairer and more fraternal society.”



**Number of students:**  
600



**Percentage of international students:**  
14 %



**Number of faculties: 6**  
**Number of departments and schools: 11**



**Number of international agreements and EU projects: 6**

# Universidade Federal da Bahia

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The numbers of UFBA are significant, particularly when seen in a historical series. In its 70 years of existence, turned in 2016, approximately 105000 students graduated, around 3000 had their Doctorate degrees, and 12000 had their Master's degrees, making UFBA the most important Higher Education Institution in Bahia, both for its position in society, and its academic excellence.

Universidade Federal da Bahia is an institution dedicated to education, research, and extension encompassing, today, approximately 45000 students in its undergraduate courses and graduate programs (specialization, Masters, and Doctorate).

Although having campuses also outside de metropolitan area of Salvador, and in other regions in the state, Universidade Federal da Bahia holds a deep identity with the first capital of Brazil, founded in 1549, and declared a World Heritage Site by the United Nations Educational, Scientific and Cultural Organization (UNESCO), in 1985.

The history of the institution began in 1808, with the setting-up of the Surgery School of Bahia (Escola de Cirurgia da Bahia), the first higher education course in Brazil. Today, we have 99 Undergraduate courses, and 129 Post-Graduate programs (Master's, Professional Master's and Doctorate degrees).

The undergraduate courses are diverse encompassing the schools of Businesses/Management, Fine Arts, Dance, Nursing, Veterinary Medicine, Music, Nutrition, Engineering, Drama, Architecture, Economics, Accounting, Communication, Law, Education, Pharmacy, Philosophy and Human Sciences, Medicine, Odontology, Biology, Information Sciences, Health Sciences, Physics, Geosciences, Letters, Mathematics, Psychology, Chemistry, Public Health. The same diversity applies to the Post-Graduate Programs.

As a University committed to Internationalization we hold 436 agreements of cooperation with a series of universities across the globe, thus allowing the development of research conducted in many areas of knowledge. We also hold co-tutelle agreements with international higher education institutions, allowing our doctorate students to experience life in other cultures, and advance in their research findings. Undergraduate students also experience university life abroad (in average 150 students/year), and in average 200 foreign undergraduate students come to UFBA yearly.





# Universidade Federal de Pernambuco



Located in the Northeast of Brazil, the Universidade Federal de Pernambuco (UFPE) is one of the most traditional institutions in the country and its history goes back to the establishment of the first Law School in the country, in 1827. Today we are considered one of the top universities in the country: both QS University Rankings 2018 and Times Higher Education World University 2018 have placed UFPE as the 14th best University in Brazil. UFPE is also one of the top 3 most sought-after universities in Brazil. We have already received 1300 students and sent over 4100 students abroad.

Our courses are distributed among the most diverse areas: Arts and Communication, Health Sciences, Law, Human Sciences, Applied Social Sciences, Education, Technology and Earth Sciences, Nature and Exact Sciences, Biological Sciences and Computer Science.

Strategic Research Areas - Information and Communications Technology, Engineering, Biomedicine/Health, Ocean and Maritime Science, Natural Science, Creative Industries, Energy, Urban and Socioeconomic Development, Environment.



**Number of students:  
43 375**



**Percentage of  
international students:  
0.6 %**



**Number of faculties:  
105**



**Number of international agreements:  
170 +**

# Universidad del Norte



Universidad del Norte (Uninorte) is a private non-profit higher education institution located at the north of Colombia, founded in 1966 in the Colombian Caribbean Coast region. We are a fully nationally accredited university that encourages scholarly research and creativity of faculty and over 16,000 students at the undergraduate and graduate level. Uninorte strives for the assimilation of

a global institutional culture and the development of academic processes of the highest international quality. Thus, it is recognized as the most outstanding institution in the region and one of the top in the country.



**13.361**  
**undergraduate**  
**students**  
**2.415 graduate**  
**students**



**Academic Programs:**  
**Bachelor: 26**  
**Master: 52**  
**PhD: 15**



**274 agreements with**  
**institutions around the**  
**globe**  
**10 EU projects**  
**participation**

# Pontificia Universidad Javeriana



Pontificia Universidad Javeriana is a private higher education institution, founded in 1623. It is one of the oldest and most prestigious universities in Colombia, with its main campus in Bogotá and a branch campus in Cali. It is one of the 114 universities that exist around the world, entrusted to the Society of Jesus. Among them we can find Georgetown University, Boston College, Fordham University, the Pontifical University of Comillas and the Pontifical Catholic University of Rio de Janeiro, to name a few.

Pontificia Universidad Javeriana, Bogota has 18 faculties, 62 departments, 14 institutes and

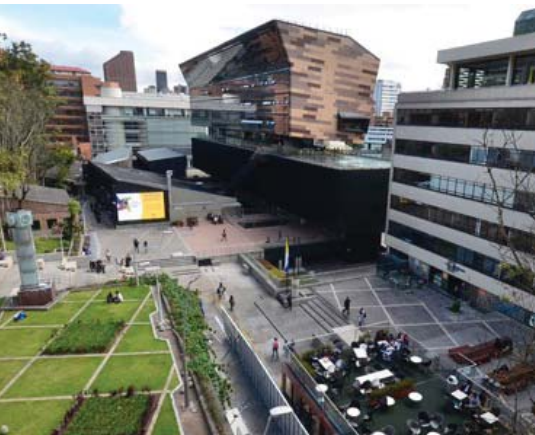
202 undergraduate and graduate academic programs. These programs address different areas of knowledge, which grants the University a multidisciplinary nature. The main campus has a modern infrastructure and a master plan for the development of its facilities in the next 20 years. Currently, it has 46 buildings constructed over 18 hectares of land and is located in a strategic part of the city which is easily accessible. The university has more than 26000 undergraduate students and 5000 graduate students. The teaching staff is composed of 3450 professors. The University has more than 1600 administrative employees.



**19916 undergraduate students**  
**4287 graduated students**



**Percentage of international students:**  
**14 %**



**18 faculties**  
**62 departments**  
**14 institutes**



**49 international agreements**

# Universidad del Magdalena



Universidad del Magdalena (UNIMAGDALENA) is located in the city of Santa Marta, capital of the department of Magdalena, Colombia. Its campus is one of the largest in the region. It received high quality institutional accreditation from the Ministry of National Education, being the second public university of the Colombian Caribbean region to obtain this distinction.

The university is a public institution offering a wide range of well-established undergraduate and graduate programs, with a history of research excellence and a tradition of public

service. It is the oldest, largest and most comprehensive university in a state distinguished for its extraordinary natural, historical and cultural heritage and is known worldwide as the birthplace of the Nobel Laureate Gabriel García Márquez.

It has been classified as one of the top ten research universities in Colombia, according to the National System of Science and Technology.



**18.225 students**



**250 international students (1% approx.)**



**Number of faculty: 1100+ professors.**

**Number of departments and schools: 23 undergraduate and 36 graduate programs including four (4) PhD programs and nineteen (19) Master's degree programs**



**Number of international agreements and EU projects: 144 international agreements in total, and 15 EU projects including Erasmus Mundus Action 2 partnerships, Erasmus+ KA107 Agreements and Erasmus+ Capacity building projects.**

# Universidad Nacional de Colombia



Established in 1867 by an act of the Congress of Colombia, the Universidad Nacional de Colombia is an autonomous independent entity of superior education linked to the Ministry of National Education, with a special and defined regime as a National and Public University. It is the largest higher education institution of the country with more than 50000 students, the largest number of graduated professionals per year, and number of academic programs at undergraduate and graduate levels.

The National University of Colombia is one of the best universities in Colombia and Latin America, for its high degree of education and research achievement in several rankings of universities in Latin America and around the globe.



**6296 undergraduate students, 20 graduate students, 97 doctoral students, 567 master students**  
**200 foreign students (undergraduate / postgraduate)**



**1685 students (2007-2017) have joined an international exchange experience**



**450 international agreements with 130 countries.**



# Universidad Politécnica Salesiana

UPS is part of a network of more than 42 Salesian institutions of Higher Education worldwide that enables feedback in experience and development as well as social and academic experiences. This university has three college campus in three of the largest cities in Ecuador: Cuenca, (where the main headquarters are located), Quito and Guayaquil. Geographic diversity is related to the socio-cultural reality of the students, a source of knowledge and wealth. Since its inception, the University has been characterized by its approaches to traditionally excluded social sectors, whether economically, politically or

culturally, to offer academic programs in terms of their human development and professional needs. UPS has promoted the expansion of traditional majors, but also innovative proposals, which respond to social change. The University is a structure that creates, manages and communicates with appropriate knowledge and rigorous academic requirements through research, teaching and links with the community. This institution has 25.545 students nationwide for whom we work with 1.008 teachers. We have more than 60 research groups in areas such as: life sciences, science and technology, agricultural sciences, management sciences, social sciences, and human behavior, among

others. By 2017, we carried out more than 160 research projects. Moreover, in 2017 we have done 232 social projects all over Ecuador with a total of 44.786 beneficiaries. The university has laboratories in all its branches, with renewed and equipped laboratories since 2012. Some of them are electricity, electronics, materials, automotive, mechanical, telecommunications, high voltage, electronic design, physics, chemistry, instrumentation automation, mechatronics, combustion engines, process control, telematics, power electronics, polymers testing laboratories, etc. Currently, UPS is paying attention to the ecosystem of innovation and entrepreneurship known as "STARTUPS".



**Number of students:**  
25 545



**Percentage of international students:**  
0.14%



Guayaquil

Cuenca  
HEADQUARTER

Quito



**Number of faculties:**  
7



**Number of international agreements  
and EU projects:**  
80

# Universidad Tecnológica de Panamá



The Technological University of Panama, Universidad Tecnológica de Panamá (UTP) in Spanish, is the second largest university in Panama. It comprises six faculties in seven campuses nationwide.

The Universidad Tecnológica de Panamá (UTP) is the highest hierarchy public institution, regarding higher education in Panama. It was formerly the Engineering School of the University of Panama, which in 1975 became Polytechnic Institute and, due to the need of a new model of university, it became the Universidad Tecnológica de Panamá, by means of Law 18 of August 13, 1981.

Its current academic offer is the best evidence of institutional growth. There are 131 careers at different levels, as follows: 2 Doctorate studies, 40 master degrees, 26 postgraduate courses, 1 Professor Career, 4 Specializations, 8 Diplomas, 14 Bachelor degrees in Engineering, 14 Bachelor Degrees, 8 Bachelor Degrees in Technology and 14 Technical careers. Regarding demand, it has increased from 5,735 students on 1981 to 18,000 on 2011.



**Number of students and percentage of international students: 826 international students.**



**Number of departments and schools: 6 schools**



**Number of EU projects: EU Projects: Erasmus: 5 projects, Eranet: 1 projects International Agreements: 42**

# Universidad Nacional de Itapúa



Universidad Nacional de Itapúa was created as a Higher Education Institution on December 03, 1996 and was officially inaugurated on February 15, 2003. It has 7 faculties and one school of postgraduate. Faculties of: Sciences and Technology, Law, Agricultural and Forestry Sciences, Engineering, Medicine, Economic sciences and administration, Humanities. The university has 4,933 undergraduate students, and 1106 postgraduate students. It has 6 branches distributed in the department of Itapúa: María Auxilidora, Cnel. Bogado, Mayor Otaño, Natalio, Gral. Artigas and San Pedro del Paraná. The central campus is in Encarnación.

Through its department of university welfare has several scholarships and opportunities programs for low-income students. The scholarship programs are various, ranging from those granted by the university itself and the others through agreements with public and private functions.

In the International framework, the UNI is part of prestigious international projects and networks such as Erasmus mundus, Zicosur, AUGM, Paulo Freire, MARCA, among others.



**4933 undergraduate students**  
**1106 postgraduate students**



**7 faculties**  
**1 postgraduate school**  
**25 undergraduate programs and 44 postgraduate programs.**



**Number of international agreements and EU projects**  
**- Erasmus +: 10**  
**- Erasmus mundus: 7**  
**- Regional programs: 4**



# Pontificia Universidad Católica del Perú



The Pontificia Universidad Católica del Perú (PUCP) defines itself as a plural and tolerant academic community, based on ethical, democratic and Catholic principles. Our essential foundations are based on academic rigor, a plurality of scientific and humanistic perspectives, Catholic values and ethical principles, a culture of discrepancy and tolerance, and a commitment with the development of Peru and its people.

Consequently, our model seeks to serve the country and the world through our students' comprehensive training, the development of knowledge and our commitment with society.

Hence, PUCP offers a humanistic, scientific and moral education. This stress on imparting comprehensive and civic education to our students is part of our university's tradition. Therefore, we look for our students to entirely grow their intellectual, critical, reflective, artistic, spiritual and physical capacities.

PUCP understands that it is not possible to advance these overarching objectives without constantly engaging in collaboration initiatives with partners and institutions around the world.



**27000 + number of students**



**1.85% international students**



**5 undergraduate double degrees, 25 graduate double degrees  
15 academic departments, 1 graduate schools, 1 business schools**



**400 + international agreements, 1 Erasmus+ CBHE project, 9 Erasmus+ KA107 projects since 2014, 5 Erasmus Mundus projects since 2009**



# Meetings

# KICK-OFF MEETING

## **Pontificia Universidad Javeriana November 6-7 2014**

Politecnico di Milano applied as project coordinator of the SUSTAIN-T project in March 2014 within the frame of the Erasmus Mundus Action 2 –Strand 1 – Lot 7 call for applications.

After the communication from the European Commission in July 2014 that the project had been funded, the Central Sustain-T office started to organize the Kick-off meeting, the first fundamental step for the implementation of the activities.

Pontificia Universidad Javeriana had already offered to host the meeting during the preparation of the application and the location was confirmed when the planning of the meeting started.

When the Consortium was setup, not all the partners had previous experiences in working with each other and not all of them had already had experiences in EMA2 project. Therefore, the first goal was to know

each other in order to better work with each other. In addition to set up the basis and the tools for a fruitful collaboration in order to reach the project objective, the aim of the kick-off meeting also was to create a SUSTAIN-T community.

After the necessary discussions about the management processes, the administrative and financial rules and the actions to put in place the implementation of the mobility, the meeting focused on finding a common way to work together. The discussion thus switched to some key issues such as quality assurance, monitoring and credit recognition. Discussions were not always easy but they set up the pillars for a common understanding among the partners for the success of the consortium.

At the end of the meeting, everyone returned to their respective home institution being proud to be part of SUSTAIN-T, ready to face the challenges of the project and to set up the necessary steps to support the promotion and the implementation of the mobility.

## **Objectives of the meeting**

- Set Up the consortium agreement
- Share the project target numbers for the mobility.
- Set-up the tools for the promotion and the selection processes
- Discuss some key topics
- Create a community

# SELECTION MEETING

## Milano May 4-5 2015

Based on the decisions taken during the Kick-Off Meeting, the Central Sustain Office at the coordinating institution gathered all the academic offers of the partner institutions, by using dedicated templates. The offers were then published on the SUSTAIN-T website together with the call for applications. At that point, the promotional campaign started and all the partners contributed to disseminate the SUSTAIN-T opportunities through their networks.

The results of the first call for applications were quite good, with more than 300 eligible applications. After the application deadline, the evaluation process of the applications could start, as agreed during the kick-off meeting.

In parallel, the Central Sustain Office organized the selection meeting, which took place in Milano at the coordinating institution.

This meeting also was an opportunity to get feedback from partners about the promotional campaign, the application process and the communication during the first months of the project in order to

identify best practices and introduce new actions were needed. It was also possible to set-up the next actions: the preparation of the 1st cohort mobility, the procedures, the credit recognition, the quality control and the monitoring tools. The consortium had not plan to meet again in person until the end of the project so this was the perfect opportunity to further strengthen the relationships and to provide all the partners with the necessary tools to face the remaining 3 years of the project.

## Selections

SUSTAIN-T MOBILITY AS IN THE APPLICATION				
	TG1 (min 50%)	TG2 (min 10%)	TG3 (min 20%)	TOTAL
Undergraduate (30-40%)	50	-	16	66 (39%)
Masters (25-35%)	27	17	9	53 (31%)
Doctorates (10-20%)	6	11	1	18 (12%)
Post doctorate (5-15%)	8	1	1	10 (6%)
Staff (5-15%)	20	1	-	21 (12%)
Total	111 (66%)	30 (17%)	27 (22%)	168

Latin American Countries	At least 50% of the mobility from Latin American countries (A+B)
Group A	62 (51%)
Group B	59 (49%)
Total	121

The Consortium received a high number of applications after each call, in particular after the third one, as shown in the tables. Each application was checked by the Central Sustain Office in order to create the list of eligible applications from an administrative point of view, based on the eligibility rules and the required documents previously defined by the consortium. After the administrative check, the list of eligible applications was sent to the host institutions, in charge of the academic evaluation based on well-defined criteria indicated on the SUSTAIN-T website. At the end of the process, each host institution inserted its evaluation on the website so that the CSO could prepare the selection lists

and provide the Selection Committee with them before each selection meeting. Finally, the Selection Committee gathered either in presence or via teleconference for each cohort in order to issue a Main List, a Reserve List and a Non-Selected List, based on the academic evaluations performed by the host institutions.

After the announcement of the results, the management of the Reserve List, the preparation of mobility and the identification of the late drop-outs, the SUSTAIN-T fellows started their mobility.

The following tables show the final results achieved by the consortium.

### COHORT 1

Number of closed applications				
Type of Mobility	TG1	TG2	TG3	Tot.
Undergraduate	85	-	9	94
Master	59	94	9	162
PhD	18	18	-	36
PostDoc	1	3	-	4
Staff	12	4	-	16
Tot.	175	119	18	312

SUSTAIN-T Fellows				
Type of Mobility	TG1	TG2	TG3	Tot.
Undergraduate	19	-	3	22
Master	13	7	4	24
PhD	4	5	-	9
PostDoc	-	1	-	1
Staff	8	1	-	9
Tot.	44	14	7	65

### COHORT 2

Number of closed applications				
Type of Mobility	TG1	TG2	TG3	Tot.
Undergraduate	70	-	28	98
Master	84	87	17	188
PhD	10	4	-	14
PostDoc	4	5	-	9
Staff	26	1	1	28
Tot.	194	97	46	337

SUSTAIN-T Fellows				
Type of Mobility	TG1	TG2	TG3	Tot.
Undergraduate	5	-	7	12
Master	4	1	-	5
PhD	1	-	-	1
PostDoc	3	-	-	3
Staff	8	-	-	8
Tot.	21	1	7	29

### COHORT 3

Number of closed applications				
Type of Mobility	TG1	TG2	TG3	Tot.
Undergraduate	466	-	76	542
Master	57	86	14	157
PhD	22	20	4	46
PostDoc	9	13	2	24
Staff	67	36	3	106
Tot.	621	155	99	875

SUSTAIN-T Fellows				
Type of Mobility	TG1	TG2	TG3	Tot.
Undergraduate	26	-	6	32
Master	9	8	5	22
PhD	1	6	1	8
PostDoc	5	-	1	6
Staff	4	-	-	4
Tot.	45	14	13	72

## FINAL MEETING

### Milano May 10-11 2018

The final meeting was the opportunity to gather the consortium together again before the official conclusion of the grant agreement. It was a key meeting in order to verify the achievements of all the objectives, to analyze the impact of the project and to discuss about the project sustainability.

During the meeting, the coordinating institution gave an overview of the final figures of the mobility while all the partners presented the project results in terms of impact in their respective institutions at local and, when possible, regional and national levels. They also showed the developments in terms of mobility management. The key topics focused on the internationalization of the partners, the recognition of studies and the quality of the project.

A few grantees on the verge of finishing their mobility also participated to the meeting and told the partners about the academic and personal achievements reached thanks to their SUSTAIN-T experience.

### Objectives of the meeting

- Share the project outcomes
- Get feedback from the coordinator, the partners, the fellows
- Discuss about the future



# Events



Every partner institution organized welcome events for the incoming fellows. The events were a valuable opportunity for the students and the staff to know the functioning of the host institution. Since the Sustain-T mobility was the first experience abroad for the majority of the fellows, the host institutions gave them their warmest welcome to make them feel at home!

### ERASMUS 30 YEARS

On the 30 years anniversary of Erasmus in 2017, the European Union delegation in Paraguay organized an event celebration at the EU headquarters in Asunción. The event reunited a group of former fellows, members of their universities, national authorities, and EU representatives, which discussed together about the successes of the cooperation of EU and Paraguay in the academic framework.

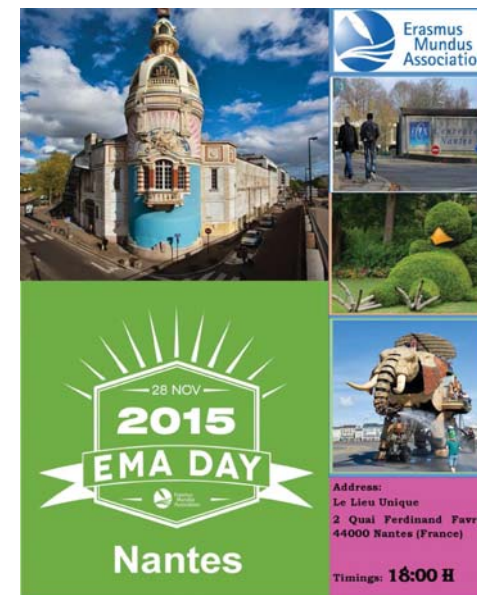
Thanks to their involvement in the Erasmus Mundus programmes, including the Sustain-T project, the staff of the partner institution Universidad Nacional de Itapúa was invited to participate.

### EXCHANGING CULTURES

More than one partner institution organized activities during which the students were able to share their home culture and tradition. Here two successful initiatives that involved the Sustain-T fellows:

#### Aulas sem Fronteiras

In collaboration with the local authorities, among which Porto City Hall, the partner institution Universidade do Porto developed the initiative “Aulas sem Fronteiras” (Classes without borders). As part of the project, international students went to public high schools in the city to share not only their mobility experience but also the tradition and culture of their home countries. The Sustain-T fellows took an active part in this initiative.



### **International Student Club**

Czech Technical University International Student Club organized monthly social events during which students from different countries and universities gave an overview about their national cuisine and culture. The national traditions of the Sustain-T fellows were shared during the meetings thanks to their involvement.

### **PRE-DEPARTURE EVENT 2017**

The European Union delegation in Peru organized a pre-departure event for Erasmus Mundus and Erasmus+ fellows in collaboration with the Sustain-T partner institution Pontificia Universidad Católica del Perú. The Sustain-T fellows were also present at the event.

### **ERASMUS MUNDUS ALUMNI DAY 2015**

In November 2015, the Erasmus Mundus Alumni Day was celebrated like every year. The event occurred in more than 70 cities, including Nantes. Many alumni and grantees, including Sustain-T fellows at École Centrale de Nantes, shared the experience and had the occasion to know each other.

The organization of the day is an idea of the Erasmus Mundus Association, which in this way, aims to promote the EM programmes and to raise awareness about the belonging to the projects.

### **CÁTEDRA EUROPA**

Cátedra Europa is an institutional annual event hosted and organized by Universidad del Norte since 1997. Throughout the years, it has become a reference scenario to present trends in higher education and different academic and scientific areas, as well as a tool to understand and properly access the wide range of opportunities that Europe and other countries offer. During the life of the project, Cátedra Europa hosted Sustain-T project related activities that not only promoted the scholarship opportunities, but also contributed to the visibility of the project and its members.





# **Activities and Results**

# COMMUNICATION TOOLS

The Sustain-T project relied on three main communication and information tools, regularly updated:

1. The Sustain-T website
2. A Skype channel entirely dedicated to the project
3. An online open course on YouTube

[www.sustain-t.eu](http://www.sustain-t.eu)



**Sustain-T Project**  
Technologies for Sustainable Development  
Erasmus Mundus Programme  
Email: [sustain-t@polimi.it](mailto:sustain-t@polimi.it)

English  
Central European Time (CET)  
11:53:34

Home General information Institutions Courses Apply Contacts



## The Sustain-T website

The Sustain-T website has been the main tool not only for the initial promotion but also for the entire duration of the project. All the general information about the available scholarships, the admission criteria, the detailed academic offer, and the information about all the universities partners as well as an overview of the project were shared on the website.

Sustain-t.eu was regularly updated with news and information about the calls for applications and the results, but also with documents regarding insurance, benefits and every other useful information for both the fellows and the involved institutions.

The website also included a private area dedicated to the partner institutions, in which they could have access to the applications

posted from/for their own institution and to the documents of the selected fellows. Every fellow was given a username and a password to login on the website and access to their personal folder, containing all the mobility documents such as the application data, the certificates, the questionnaires, and the reports.

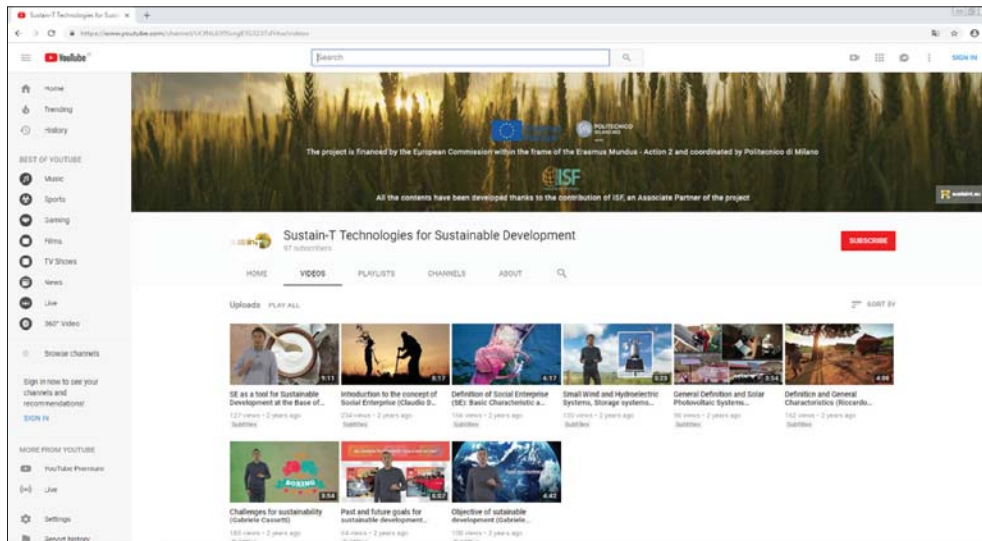
Moreover, an instant messaging service was available for all the fellows and partners: their messages were directly forwarded as emails to the Central Sustain Office.

The website was designed and implemented by Universidade do Porto, partner of the project.

## The YouTube open course on sustainability

The project coordinator institution developed an open online course on sustainability in collaboration with the Associate Partner “Engineering without Borders” (<http://ewb-international.com/>). Engineering without Borders was in charge of the videos contents while the project coordinating institution managed all the technical features.

The course consists of three main sections: sustainable development, social enterprise and appropriate technologies for energy. This last section focuses on one of the specific needs in sustainability in the region involved in the project. Each section contains three videos that include both a theoretical part and a practical part with some specific examples.



## The Skype channel: sustain.t

In order to guarantee an easier communication between all the involved subjects in the project, the Central Sustain Office created a Skype account dedicated exclusively to the Sustain-T project. The account was intended to be a user-friendly ICT tool for a quick and immediate communication.

The Skype channel functioned also as an additional point of contact for potential applicants in need of information, instructions, guidance during the application process. The selected fellows could also use this service during their mobility.

## Additional communication tools

Facebook, Twitter and other social media were widely used by each partner to promote the call. Posters and flyers were spread all around each partner campus and meetings with students, researchers, and faculty members were organized in each institution. Whenever possible, EMA2 grantees on all levels and TGs were invited as testimonials during the information events organized on campus. Moreover, the project and its website were also publicized at the students' fairs, through promotional and educational organizations such as Campus France, and at the diplomatic

representatives of the countries involved in the project. Latin American partner institutions involved, wherever possible, Indigenous Students Associations to promote the project to potential TG3 candidates.

Information were also sent to international networks of institutions of which partner institutions are members, such as T.I.M.E., Magalhaes, FAUBAI, Cátedra Europa and other EMA2 consortia within Latin America. The project co-coordinating institution visited other universities in their countries, where it held promotional events, talked to potential candidates and distributed leaflets.

Rio de Janeiro Network of International Offices (REARI-RJ), Colombia Challenge your Knowledge-CCYK members, the Peruvian Network of Universities by the Latin American partners were also widely involved in the promotional activity.

Some Latin American partners of the Consortium used local newspapers, magazines, radios and TV to promote the project and they decided to disseminate the information also in Spanish to reach a much bigger pool of potential applicants.

# IMPACTS OF SUSTAIN-T

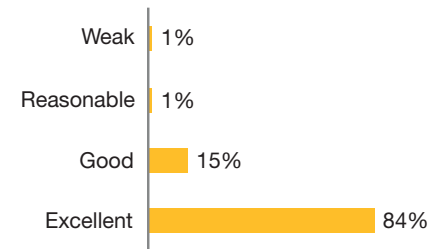
## Introduction

During the Sustain-T project period, various surveys were launched to both the fellows and the partners in order to monitor the development of the project, the smooth execution of the mobility and the outcomes within each partner institution. These initiatives allowed to measure the impact of the project in several respects.

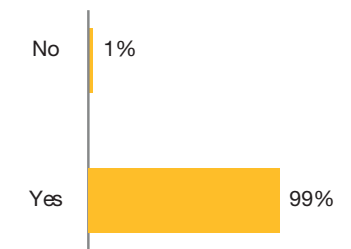
Sustain-T fellows completed online questionnaires at the beginning, during, and at the end of their mobility. These surveys were a very important tool to receive their feedback and to monitor the various phases of the project and of the mobility. Among other data, the results of these surveys gave a global overview of the benefits of the Sustain-T mobility on various aspects: linguistic, cultural, professional, and personal. In addition, all the fellows had to upload on their folder on the website a final report about the academic and cultural impact of their overall experience abroad.

Sustain-T partners were asked to complete questionnaires after the first and the second year of the project, in order to monitor their activities and developments, and a specific session of the final meeting was dedicated on the impact of Sustain-T. In particular, partners had to present the results achieved in their own institution, with a specific focus on the impact that the project had, the changes, and improvement that had been implemented.

How would you classify the overall mobility experience in the project?



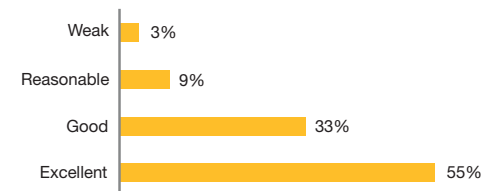
Would you recommend this experience to other potential applicants?



## Linguistic impacts

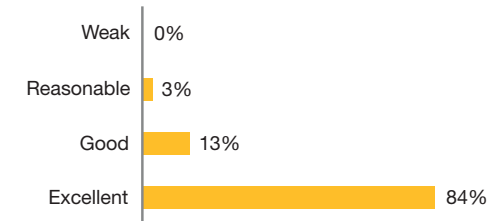
Languages of the Consortium: Czech, Italian, French, Portuguese, Spanish, plus the possibility to improve English language skills through their academic offer taught in English.

Impact on the development of new language skills



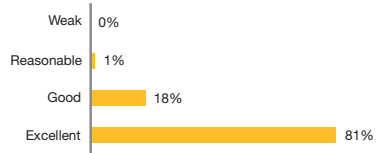
## Cultural impacts

Impact on the development of new intercultural skills

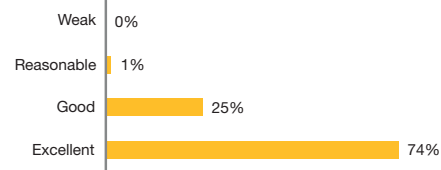


## Personal impacts

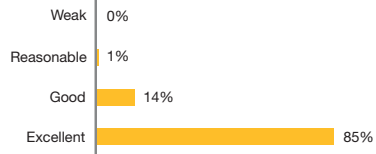
Impact on the development of personal autonomy (decision making, self-trust, etc.)



Impact on the development of Self-reliance

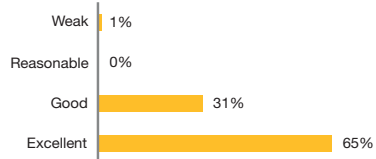


Impact on the development of self-knowledge/ enlargement of horizons (new concepts and life perspectives)

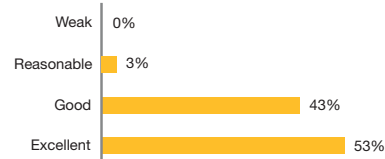


## Professional impacts

Impact on study/ work ability in an international environment

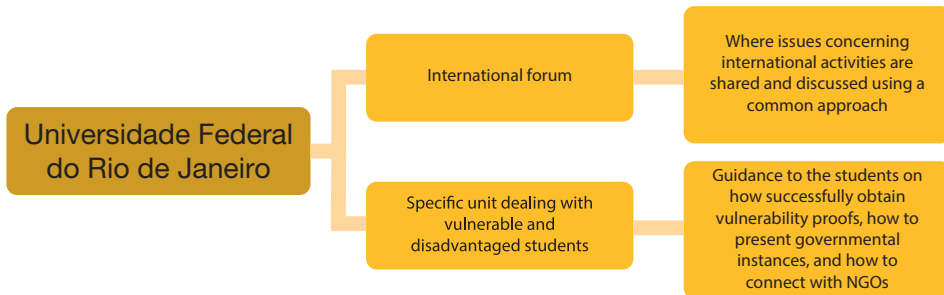
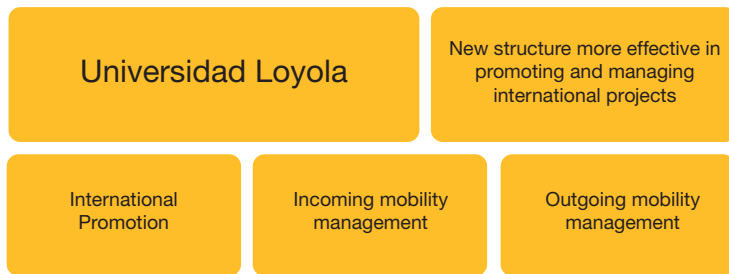


Impact on development of new professional skills

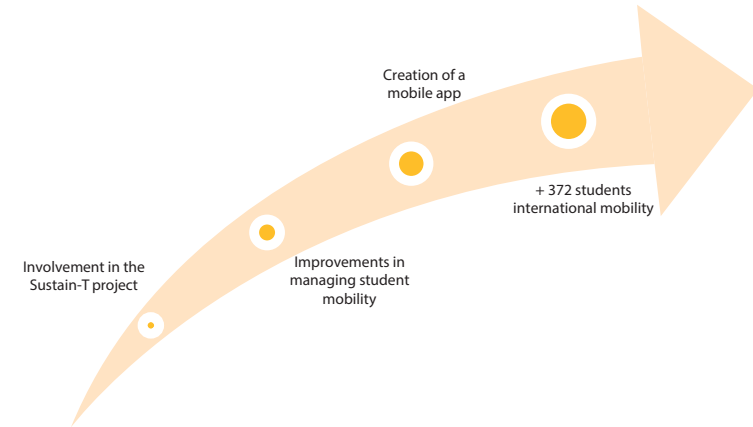


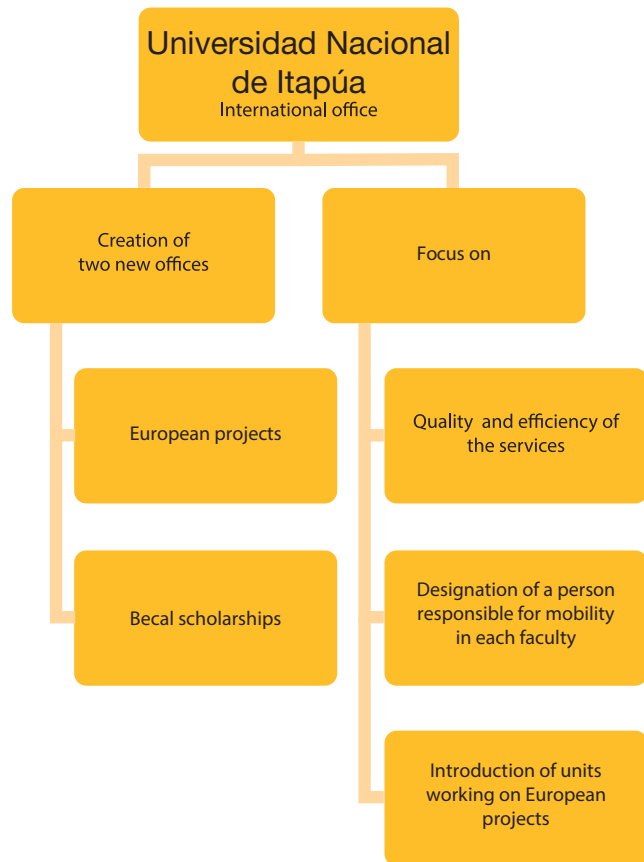
## Impacts on institutions

The development of international relations offices, especially in Latin America, was an objective of Sustain-T from the very beginning and the feedback received from partners show how the project affected several of them.

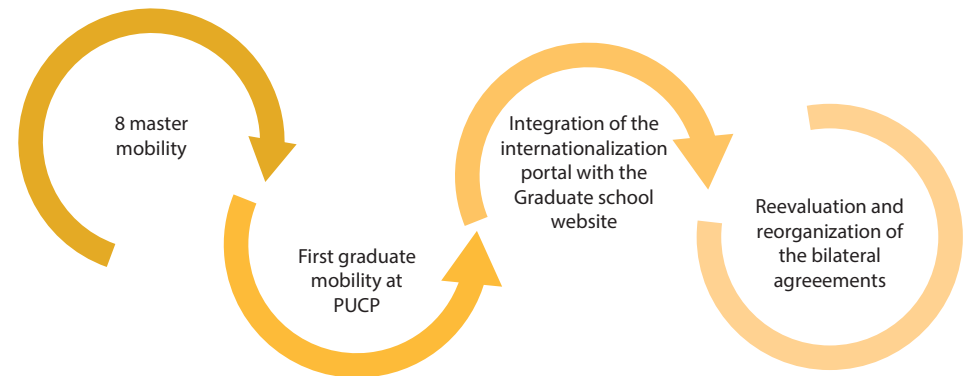


## Fundación Universidad del Norte:





## Pontificia Universidad Católica de Perú:



The project contributed to harmonize the practices and procedures of the involved international offices, with a positive influence on the programme coordination and on the approach towards internationalization. The project also fostered and facilitated the collaboration with other offices within the same partner institutions, such as housing, student services. The involved staff gained from Sustain-T in terms of professional development, acquiring skills and experience that helped them to assist the fellows in the most successful way.

**Additional outcomes of the project:** due to the lack of a Czech diplomatic representative in all the Latin American countries, LA students applying to Czech Technical University have always had to deal with a complicated visa application. Thanks to Sustain-T, CTU was able to improve the visa strategy by linking with the Czech Ministry of Foreign Affairs: the two institutions are working together on a specific visa policy program for students aiming at simplify the current procedure.

# INTERNATIONALIZATION, RECOGNITION, QUALITY

Internationalization, recognition and quality are central issues of Erasmus Mundus projects.

## Internationalization

Internationalization keeps on being strategic in Higher Education worldwide. The development of international relations offices, especially in Latin America, was, for example, an objective of Sustain-T from the very beginning and several partners were positively affected by the project.

With the mobility, the newly established research, collaborations, partnerships, the increase of the international capacity of many partner HEIs and the exposure to different academic systems, Sustain-T has actively contributed to enhance the academic, scientific, technical cooperation between Latin America and the EU.

The EU partner HEIs have largely gained in terms of regional, national and international recognition, and rankings thanks to the contribution of Sustain-T and to their internationalization strategy in Latin America, which increased their visibility in the region and lead to the development of new projects and activities with Latin American Institutions. The Latin American HEIs have gained even more from the Sustain-T experience that have inspired them and boosted them to a new and wider regional, national and international scenario.

The coordinating institution as well as all the partners have gained experience in project management and capacity building. The consortium

also supported and implemented the exchange of best practices, ideas, suggestions among the partners in order to benefit from each other experiences.

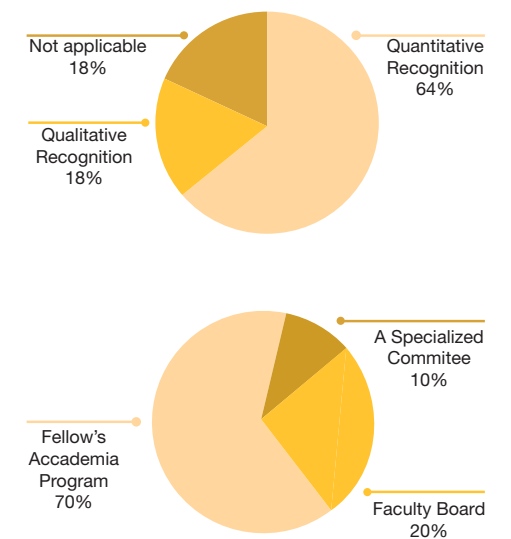
institutions for future mobility management. Administrative staff mobility also contributed to this achievement thanks to their know-how and to the best practices' exchange on the topic.

## Recognition

The student, the home and the host institutions signed the Learning Agreement. Their commitment was clearly indicated: for the home institution: "We confirm that the proposed program of study/learning agreement is approved and that the credits earned at the hosting HEI within such program will be recognized", and for the host institution: "We confirm that the proposed program of study/learning Agreement is approved and that the student will earn the above listed credits after successfully passing the relevant exams". The host institution signed the LA only after the selection procedure. For PhD, post-doc and staff applicants, the Work Plan proposal documents had to be prepared, signed by the host institution and uploaded on the website.

Thanks to the involvement of the international relations offices in the process, the briefing on the ECTS system to the academic units, the raising of awareness that credits gained within the project had to be recognized, and the equivalence on a hour/workload-based system, it was possible to achieve a standardization of the recognition process in the partner

## Methods





## **Quality**

A specific mechanism was established with respect to quality management, which included activities performed before the mobility by the local coordinator at the home institution, during the mobility by the local coordinator at the host institution and by the coordinator. This monitoring system included meetings, regular contact by e-mail, follow-up documents such as the certificate of arrival in order to ensure the smooth running of the mobility.

In addition, all the fellows had periodical meetings with the international relations office of their host institution to ensure a close monitoring of their mobility as part of the internal evaluation process for the quality of the hosting.

The Central Sustain-T Office monitored the quality of the implementation of the process by each host institution through questionnaires addressed to the partners, which included the support to the grantees, services provided, recognition of studies, and internal evaluation. The questionnaires also provided the CSO with information about results obtained thanks to the Sustain-T project (signed agreements, common projects,) and dissemination activities (events, papers in newspapers, etc.).

To guarantee the achievement of the project's objective, three external evaluations have been performed. The first one was completed in August 2015 and a second one in December 2015, this was included in the second progress report. The final external evaluation was carried out at the end of the project.

## **Sustainability**

The approach of the consortium was to enhance the participation and contribution of all the partners in the management activities. That is why the partners were involved in different committees focusing on important issues including quality, credit transfer, academic collaboration, capacity building. Since the beginning of the project, one of the aim of Sustain-T was to set up the condition for the partnership to develop fruitful and successful cooperation and opportunities for the sustainable development of the consortium activities. All the partners highly contributed in all the communication and dissemination activities and they were all involved in the most important decision-making processes.

The Sustain-T project also had a positive impact on the involvement of partners in European Projects and they were encouraged not only to develop bilateral agreements but also on European proposals. Some partners, in particular, took the chance and joined forces in working on EU projects that capitalize on the Sustain-T activities such as Erasmus + KA2 Capacity Building Projects on full academic

recognition in Latin America, how to further enhance internationalization and how to implement international relations activities in the Latin American countries. Sustain-T also opened new possibilities of networking between Latin American and European universities in the field of research and enhanced the cooperation among the involved research laboratories.

## AGREEMENTS

The collaboration activities initiated thanks to the Consortium, has allowed the partners to know each other. The joint work has fostered the establishment of bilateral agreements and collaborations. Here is the list:

- **Fundación Universidad del Norte:** Student exchange and double degree agreement with École Centrale de Nantes, agreement with Universidade Federal do Rio de Janeiro.
- **Pontificia Universidad Católica de Perú:** Agreement with Universidade de Porto, framework and student exchange agreement with Politecnico di Milano.
- **Pontificia Universidad Javeriana:** Student exchange and double degree agreement with École Centrale de Nantes, double degree agreement with Politecnico di Milano, agreement with Universidade do Porto.
- **Universidade Federal do Rio de Janeiro:** Student exchange agreement with Politecnico di Milano, agreements with Universidade do Porto, Fundación Universidad del Norte, Universidad Nacional de Colombia, Universidad Nacional de Itapúa, KA107 International Credit Mobility project 2018-2020 with Universidade do Porto.
- **Universidad Nacional de Colombia:** Student exchange and double degree agreement with École Centrale de Nantes, student exchange, double degree and double PhD agreements with Politecnico di Milano, agreements with Universidade de Porto and Universidade Federal do Rio de Janeiro.
- **Universidad Nacional de Itapúa:** Agreement with Universidade do Porto and Universidade Federal do Rio de Janeiro, KA107 International Credit Mobility project 2016-2018 with Universidade do Porto.
- **Universidad Tecnológica de Panamá:** Agreement with Universidade de Porto.
- **Universidade Federal da Bahia:** Agreement with Universidade de Porto.
- **Universidade Federal de Pernambuco:** Agreement with Universidade de Porto.

## PUBLICATIONS AND CONFERENCES BY SUSTAIN-T FELLOWS

Following the collaborations established thanks to Sustain-T, many publications and participations to conference by the fellows were possible. Here is a list of part of them, since some are still in process.

**ARENAS, Juan, Academic staff at Universidad Politécnica de Madrid**  
Arenas, Juan J.; González, Domingo. 2018. Technology Transfer Models and Elements in the University-Industry Collaboration. Adm. Sci. 8, no. 2: 19.

**AGUIAR, Douglas Oliveira, Doctorate at Politecnico di Milano**  
Aguiar, Douglas, et al. On-Chip OSNR Monitoring with Silicon Photonics Transparent Detector. IEEE Photonics Technology Letters 29.24 (2017): 2155-2158.  
Andrea Annoni, Douglas Oliveira De Aguiar, Andrea Melloni, Emanuele Guglielmi, Marco Carminati, Giorgio Ferrari, Annika Buchheit, Hans-Dieter Wiemhöfer, Marina Muñoz-Castro, Charalambos Klitis, Marc

Sorel, Francesco Morichetti, “Noninvasive monitoring and control in silicon photonics,” Proc. SPIE 10249, Integrated Photonics: Materials, Devices, and Applications IV.

Chaves D.R.A., Aguiar D.O., Bastos-Filho C.J.A., Martins Filho, J. F. “Fast and adaptive impairment aware routing and wavelength assignment algorithm optimized by offline simulations”, (2010) Optical Switching and Networking, 7 (3), pp. 127-138.

Chaves, D. R. A. ; Aguiar, D. O. ; Alves, H. P. ; Bastos-Filho, C. J. A. ; Martins Filho, J. F. Novel Physical Impairments Aware Adaptive Weight Function for Routing in All Optical Networks. In: Microwave and Optoelectronics Conference, 2007. IMOC 2007. SBMO/IEEE MTT-S International, 2007, Salvador. International Microwave and Optoelectronics Conference, 2007. v. 1. p. 194-198.

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## A tribute to Prof. Giancarlo Spinelli

SUSTAIN-T was created, implemented and managed by **Prof. Giancarlo Spinelli** until September 2017.

Prof. Spinelli had been deeply involved in International Relations for over 25 years during which he represented Politecnico di Milano all over the world.

After he had visited Colombia for the first time, he became very passionate about Latin America. This passion joined his strong belief that Europe and Latin America should have strengthened and enhanced their cooperation in the field of education.

He developed the concept of SUSTAIN-T based on that and he created the consortium by involving institutions with which he had already worked. However, it was only a group of institutions when the SUSTAIN-T adventure began. It was thanks to his dedication, his hard work and, most of all, his enthusiasm and his charisma in dealing with people that turned this group into a network of people motivated and dedicated to make the project successful and in creating long lasting relationships.

Prof. Spinelli unfortunately passed away in September 2017, a few months before the end of the project and he could not see all the results achieved. However, all the partners remembered him during the Final Meeting and in several other occasions, since they were all aware of the impact he had in all the phases of the project.

It was an honor for the SUSTAIN-Team to work with him on the project daily and a privilege to carry on with the activities in order to achieve all the project goals.

A special thanks to him from all the SUSTAIN-T Consortium.

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