

STRATEGIC

PLAN

POLYTECHNIC OF LEIRIA

2020



**POLITÉCNICO
DE LEIRIA**

**STRATEGIC
PLAN
POLYTECHNIC OF LEIRIA
2020**

CONTENT

TECHNICAL SHEET

TITLE

STRATEGIC PLAN 2020 POLYTECHNIC OF LEIRIA

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LIST OF ACRONYMS

A3ES	Agency for Assessment and Accreditation of Higher Education
CNAES	National Contest for Admissions to Higher Education
CPLP	Community of Portuguese Language Speaking Countries
CDRSP	Centre for Rapid and Sustainable Product Development
CTC/OTIC	Technology and Knowledge Transfer and Valuation Unit
DGES	Directorate-General of Higher Education
ESAD.CR	School of Arts and Design
ESECS	School of Education and Social Sciences
ESSLEI	School of Health Sciences
ESTG	School of Technology and Management
ETI	Full Time Equivalent
ESTM	School of Tourism and Maritime Technology
R&D+i	Research, Development and Innovation
HEI	Higher Education Institutions
ISCED	International Standard Classification of Education
KPI	Key Success Indicator
MCTES	Ministry of Science, Technology and Higher Education
NERLEI	Entrepreneurial Association of the Leiria Region
NUT	Nomenclature of Territorial Units for Statistics
RJIES	Legal Regime of Higher Education Institutions
SAPE	Student Support Service
SAS	Social Services
TESP	Higher Professional Technical Course
CU	Curricular Unit
UED	Distance Learning Unit

INTRODUCTORY NOTE



NUNO MANGAS
PRESIDENT OF THE POLYTECHNIC OF LEIRIA

More than the fulfilment of a legal and statutory obligation, the development of a strategic plan is, above all, an opportunity to think about the institution and project it into the future. It was in this spirit that the Presidency of the Polytechnic of Leiria began this process, set forth in this document.

A process that was desired, above all, and which involved all those who intended to contribute to our work base in an undoubtedly enriching manner. To watch students, external entities, members of the institution and its professors as well as technicians and administrative staff participate in this project was the confirmation of how important the Polytechnic of Leiria is to all of us.

To portray the institution and envision it in the future means that we believe in the work we are carrying out; watching our partners do the same has been, most of all, gratifying for us given that in the confrontation between our strengths and weaknesses we found the will to make this institution grow, an institution that belongs to all of us and serves this vast and diversified community, as well as the region in which it is located.

This strategic plan arose from the intention to make the Polytechnic of Leiria become a university, a process which the General Council of our Institution has continuously accompanied and participated in. By taking on this objective, we did not, however, want it to devalue our activity and continuity as a polytechnic institution in any way. This concern was shared with our various partners, in particular with the businesspeople with whom we agree on the importance of having increasingly qualified human resources as well as scientific research that truly promotes our regional development.

The Strategic Plan 2020 is in fact a plan. This means that it must be monitored at all times and that it may be altered at any time. It reflects the objectives we wish to accomplish and paths we wish to pursue, together with all our internal and external partners. Our wish is to take our institution further, and along with it the entire Leiria and Western region.

**WE ARE
COUNTING
ON EACH
AND EVERY ONE OF YOU**

INTRODUCTION

Nowadays, strategic planning is considered an essential management tool, providing orientation and cohesion to the activity carried out by the institutions, characterizing its context in a global manner, and providing clear instructions about the work it needs to develop in order to reach its goals. This is materialized in the strategic plan, a guiding tool in the activity of an institution, in which the procedures to reach the strategic aims and objectives are defined. As the driving force of the institutional activity, it directs the collaborators' effort towards a common goal.

A strategic plan provides the institution, its external partners (stakeholders) and society in general with a clear and contextualized image

of what it is and what it does - its mission - and where it intends to go - its vision. Through the SWOT analysis, it is possible to understand the institution better, identifying and reflecting upon its strengths and weaknesses as well as its social context, evaluating the opportunities and threats it presents. Based on these elements, the strategic plan will then show the operative objectives (either strategic or operational, ...) as well as the actions that the institution intends to carry out in order to achieve what it has set forth as its vision, while accomplishing its mission and taking into account its characteristics and its context. It also defines metrics in order to assess what has been done well or not so well, and why.

Aproved by the General Council on the 3rd of May 2016

CHARACTERISATION AND INSTITUTIONAL FRAMEWORK

INSTITUTIONAL CHARACTERISATION

The Polytechnic of Leiria is a public institution of higher education that was created in 1980 under Decree Law no. 303/80 of the 16th of August. Its headquarters is in Leiria and its Schools and Research Centres are located in various parts of the Leiria and Western region (see Table 1) in the cities of Leiria, Caldas da Rainha, Peniche and Marinha Grande. Its schools are:

- School of Education and Social Sciences (ESECS)
- School of Technology and Management (ESTG)
- School of Arts and Design (ESAD.CR)
- School of Tourism and Maritime Technology (ESTM)
- School of Health Sciences (ESSLei)

In addition to the five Schools, the Polytechnic of Leiria's R&D+i ecosystem encompasses 18 research units (in various areas, such as: social sciences; education; inclusion; tourism; management; legal sciences; health; engineering; sports and quality of life; maritime science and technology; arts

and design), a knowledge and technology transfer centre (CTC/OTIC), two scientific infrastructures (CDRSP Building - Engineering and biomanufacturing; CETEMARES Building - Maritime Science and Technology). The R&D+i ecosystem to which the Polytechnic of Leiria belongs is also characterised by three business incubators (IDD - Incubadora D. Dinis; OPEN - Business Specific Opportunities; ABC - Apoio de Base à Criatividade), one business school, one business association (NERLEI), one technological centre (CENTIMFE), one technological park (OBITEC), two regional energy agencies (ENERDURA - Agência Regional de Energia da Alta Estremadura; Oeste Sustentável - Agência Regional de Energia e Ambiente do Oeste), one centre for scientific dissemination (Alviela Ciência Viva Centre) and four competitiveness and technology clusters.

The Polytechnic of Leiria also includes the Distance Learning Unit (UED), the Social Services (SAS) and the Student Support Service (SAPE).

Table1
Polytechnic of Leiria Campi

Infrastructure	
Headquarters - Leiria	Central Services
Campus 1 - Leiria	ESECS
Campus 2 - Leiria	ESTG + ESSLei
Campus 3 - Caldas da Rainha	ESAD.CR
Campus 4 - Peniche	ESTM
Campus 5 - Leiria	FOR.CET
CDRsp Building - Marinha Grande	CDRsp
CETEMARES Building - Peniche	MARE-IPLeiria

The Polytechnic of Leiria has invested in modern and well-equipped facilities, which include educational buildings with classrooms and laboratories, scientific research buildings, libraries, students' residence halls, cafeterias, canteens, restaurants, sports fields and medical services. On every *campi*, the academic community has access to free Wi-Fi.

Through its Schools and Research Units, as well as through other structures for knowledge transfer and the provision of services, the Polytechnic of Leiria carries out its activity in the following areas:

- Education and training, carrying out study cycles that award different academic degrees (1st cycle – undergraduate degree and 2nd cycle – master's degree), higher education courses that award a professional qualification (TeSP), post-graduate courses and continuous training, in accordance with the law;
- Research, support and participation in scientific institutions;
- Transfer and valuation of scientific and technological knowledge;
- Carrying out of professional training sessions and updating of knowledge;
- Provision of services to the community and development support;
- Cultural, scientific and technical cooperation and exchange with fellow institutions;
- Production and dissemination of knowledge and culture.

To support the development of its activities, the Polytechnic of Leiria has a body of 826 professors (645, 4 FTE professors), 3 researchers and approximately 425 technical and administrative staff (299 Polytechnic of Leiria + 125 SAS), spread out among the different organic units (data from 31st December of 2015).

The activity carried out by the Polytechnic of Leiria is directed towards two main target groups:

- Internal – the students and all the professors, researchers and technical and administrative staff as well as the different units that compose the Polytechnic of Leiria.
- External – the graduates, the entities with whom the Polytechnic of Leiria collaborates, companies and other public and private

institutions, the local region and society in general.

Any one of these groups may benefit from the education and training activities, R&D+i, knowledge and technology transfer processes, different types of services, or even, be a partner in the development of common projects.

The Polytechnic of Leiria considers itself to be a multidisciplinary and multipolar institution, which is a contributing factor to its success and to the role of exceptional importance in the technical-scientific, socio-economic and cultural, regional and national development, highlighting the consolidation conditions of its positioning in the European Higher Education Area (EHEA) and the Lusophone Area. The organization adopts a culture that places particular emphasis on the people who study and work there, who compose the true Polytechnic institution of Leiria. It is governed by a set of fundamental organizational values, in accordance with its mission, **inclusion, cooperation, responsibility, creativity, innovation, critical and entrepreneurial thinking.**

The Polytechnic of Leiria has approved and accredited statutes in accordance with no. 1 of Article 172 of the Legal Regime of Higher Education Institutions (RJIES), published by Legislative Order no. 35/2008 in the 2nd series of the *Diário da República*¹, no. 139, of 21st July, amended by rectification no. 1826/2008, published in the *Diário da República*, 2nd series, no. 156 of 13th August.

SET OF FUNDAMENTAL ORGANIZATIONAL VALUES, IN ACCORDANCE WITH ITS MISSION, INCLUSION, COOPERATION, RESPONSIBILITY, CREATIVITY, INNOVATION, CRITICAL AND ENTREPRENEURIAL THINKING.

INSTITUTIONAL FRAMEWORK

Higher education in Portugal is organized in a binary form comprising two subsystems: university higher education and polytechnic higher education. In accordance with the law, each of the subsystems has a different mission within the higher education framework in Portugal. This differentiation is made in the Basic Law for the Education System and then analysed in depth in the Legal Regime of Higher Education Institutions (RJIES). The university subsystem can still provide polytechnic education, although polytechnic institutions may not provide university education.

The number of students is a simple indicator of the institution's dimension. However, it also represents, to a certain extent, students' preference in relation to a specific institution. According to the data presented in Table 2, it is observed that the Polytechnic of Leiria is the third largest polytechnic in the country, following Oporto and Lisbon, and the ninth (of 34) largest public higher education institution in the country.

Table 2
Number of students enrolled in public higher education institutions in Portugal in the academic year of 2013/2014

HEI	No. students
University of Lisbon	46 780
University of Oporto	30 532
University of Coimbra	22 594
University Nova of Lisboa	18 790
University of Minho	17 629
Polytechnic Institute of Oporto	17 444
University of Aveiro	13 519
Polytechnic Institute of Lisbon	13 117
Polytechnic Institute of Leiria	10 334
Polytechnic Institute of Coimbra	9 874
ISCTE	8 306
University of Algarve	7 836
University of Trás-os-Montes and Alto Douro	7 066
University Aberta	6 772
University of Beira Interior	6 708
Polytechnic Institute of Bragança	6 077
University of Évora	6 056
Polytechnic Institute of Setúbal	5 646
Polytechnic Institute of Viseu	5 066
Polytechnic Institute of Viana do Castelo	4 038
Polytechnic Institute of Santarém	3 274
Polytechnic Institute of Cávado and Ave	3 164
University of Azores	3 123
University of Madeira	2 966
Polytechnic Institute of Guarda	2 624
Polytechnic Institute of Beja	2 550
Polytechnic Institute of Tomar	2 331
Nursing School of Coimbra	1 915
Estoril Higher Institute for Tourism and Hotel Studies	1 854
Polytechnic Institute of Portalegre	1 785
Nursing School of Lisbon	1 662
Nursing School of Oporto	1 600
Náutica Infante D. Henrique School	676

SOURCE: adapted from DGEEC/RAIDES - http://w3.dgeec.mec.pt/dsee/AL20132014/download.asp?file=DGEEC_DSEE_DEES_2014_Inscritos_201314.xlsx

¹ Official Gazette

In terms of population and regional delineation, Figure 1 identifies the area of direct influence of the Polytechnic of Leiria, considered to be a geographical proximity area and where there is a higher attraction of students (at the Polytechnic of Leiria there are students from, for example, Aveiro, Coimbra, Lisbon, Oporto, Braga). In terms of NUT II the Area of Influence of the Polytechnic of Leiria is the NUT II - Centre. In terms of NUT III², the following

were considered (with the indication of the municipality): Pinhal Interior Norte (Alvaiázere, Ansião, Castanheira de Pêra, Figueiró dos Vinhos, Pedrógão Grande); Pinhal Litoral (Batalha, Leiria, Marinha Grande, Pombal, Porto de Mós); Oeste (Alcobaça, Alenquer, Bombarral, Cadaval, Caldas da Rainha, Lourinhã, Nazaré, Óbidos, Peniche and Torres Vedras); Médio Tejo (Ourém).

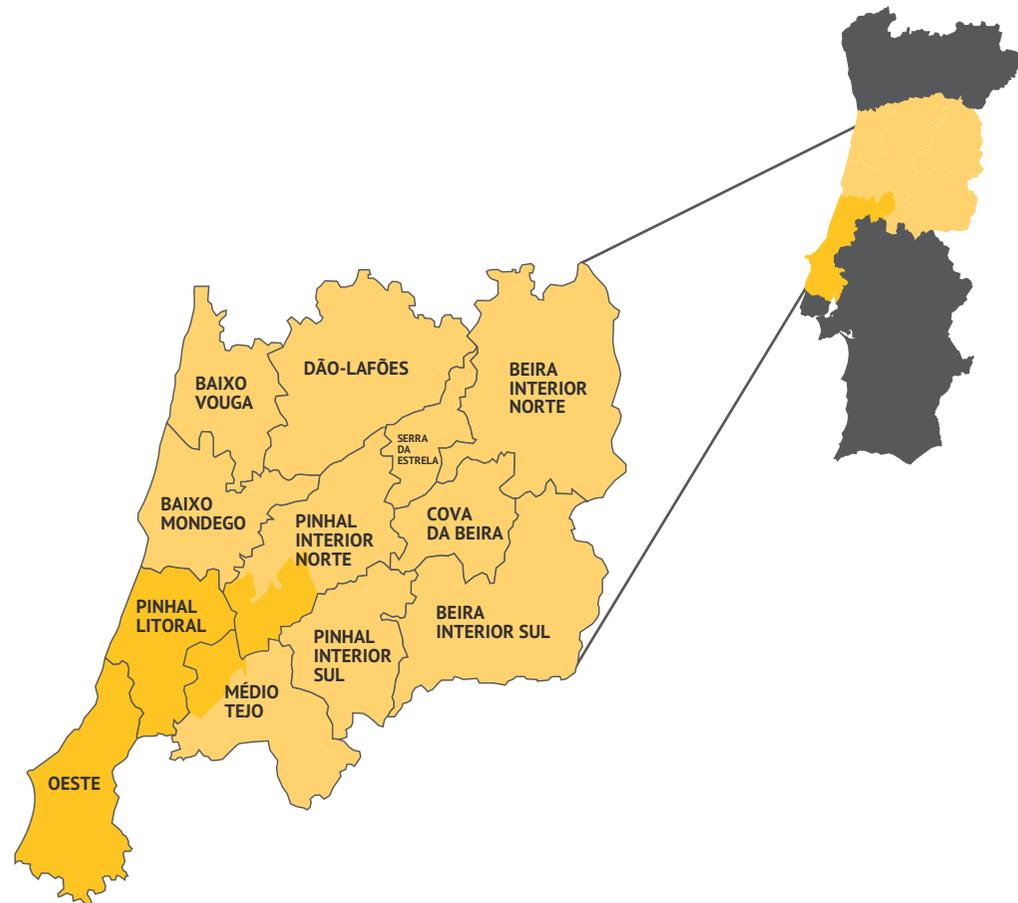


Figure 1
Centre and Area of Influence of the Polytechnic of Leiria in accordance with Regulation (EC) no.1059/2003, of the European Parliament and the Council, of the 26th of May, 2003 (NUTS 2003)

Considering this delineation, in accordance with PORDATA³, the resident population in the area of influence of the Polytechnic of Leiria,

according to census 2011 (latest available) is 698,802 people, representing 30% of the resident population in the NUT II - Centre (2,327,755 people).

² NUTS in accordance with Regulation (EC) no. 1059/2003, of the European Parliament and the Council, of the 26th of May, 2003 (NUTS 2003).
³ Source PORDATA at <http://www.pordata.pt/>

METHODOLOGICAL APPROACH

The choice of a specific methodology for the drawing up of a strategic plan aims to, fundamentally, follow a model to support the definition of its contents. The drawing up of

Strategic Plan 2020 of the Polytechnic of Leiria is foreseen in the objectives presented in Figure 2.

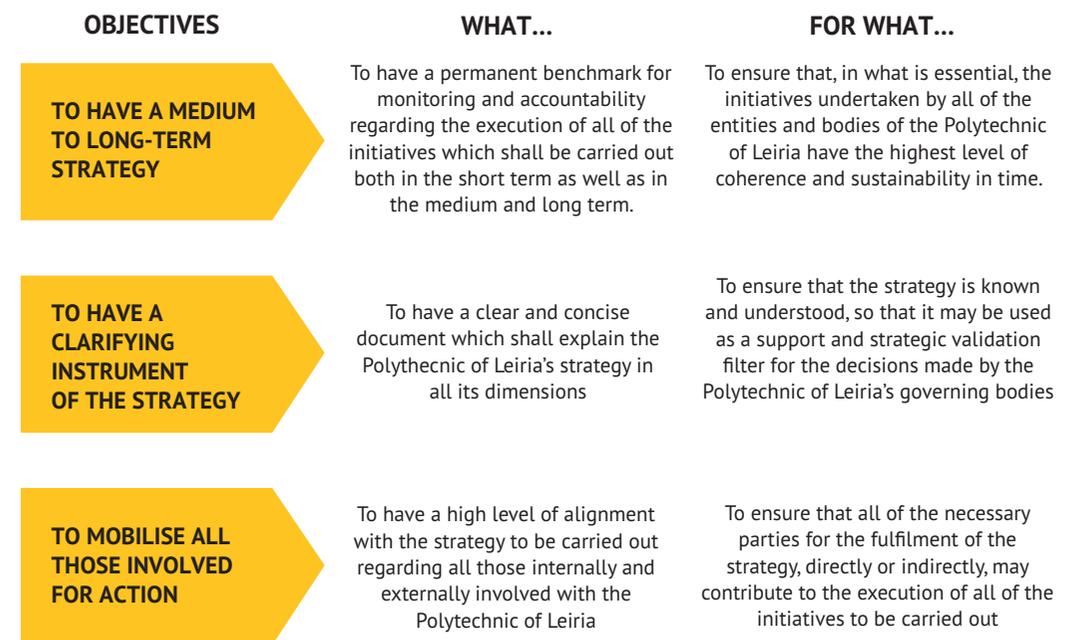


Figure 2
Objectives of Strategic Plan 2020 of the Polytechnic of Leiria

In this context, the drawing up of Strategic Plan 2020 was based on the application of Blue Ocean Strategy and Balanced Scorecard methodologies. The use of these methodologies arises from the intention to base the structuring of the Polytechnic of Leiria's strategic ambition for 2020 on the development and highly valued strategic execution instruments, internationally recognized among the best practices of strategic management.

The methodologies were used precisely as intended for the structuring of the content of the strategic plan and not exhaustively with regard to the use of all its associated elements and products. The methodologies were

applied to the strategic plan without, in any circumstances, having conditioned or limited its preparation due to a holistic application.

The strategic plan has a dimension of strategic development and a dimension of strategic execution, in which the first is supported methodologically by the Blue Ocean Strategy and the second by the Balanced Scorecard. The implementation of the Blue Ocean Strategy was carried out based on the search for a strategic development which was characterized as being simultaneously focused and divergent, and with elements requiring the internal and external mobilization of all stakeholders involved later in the implementation.

The implementation of the **Balanced Scorecard** was carried out in order to ensure the use of an effective management tool in the follow-up, monitoring and continuous adaptation of the execution of the strategy developed in the strategic plan. In brief, the Blue Ocean Strategy methodology is characterized as an approach to systematise practices based on the concept of creating a “blue ocean” for the Polytechnic of Leiria, understood as its own value-creating space for society, for the scientific community, for companies, for families and for students.

The implementation of the **Blue Ocean Strategy** methodology comprises the identification, analysis and definition of the set of critical success factors which characterise the activities carried out by higher education institutions and, subsequently, the strategic options to be developed for each factor are defined. The critical success factors, also known as competitive factors, are the determining elements for the competitive analysis of a particular organisation in the context of the economic and social activity that it carries out.

The Polytechnic of Leiria’s activity is set within the context of the common activities carried out by higher education institutions, whether they are universities or polytechnics, public or private, particularly education, research and knowledge transfer, among others. The main critical success factors of higher education institutions, mentioned below in this document, allow the characterization of the competitive environment in which the Polytechnic of Leiria operates in order to make decisions regarding the change in strategic attention by factor which support the achievement of its strategic vision for the year 2020, by means of a qualitative comparison as to their current degree of divergence, focus and appealing message.

The critical success factors of the identified higher education institutions are those that within the Polytechnic of Leiria’s 2020 strategic plan, were considered the ones that best characterize the economic and social activity carried out by these organizations, notwithstanding the fact that there are more factors, albeit of lower relevance and less critical to success. In the methodological implementation of the **Blue Ocean Strategy**, taking into account the critical success factors of higher education institutions, we

sought to understand what the Polytechnic of Leiria’s current strategic framework is, i.e. the qualitative assessment of the organization’s current strategic focus on each of the critical success factors. This methodological approach allows us to identify strategic focus opportunities inspired by the comparison with the common behaviour observed by each of the strategic groups considered for the competitive analysis, namely the institutions of higher polytechnic and university education.

In the context of methodological support for the strategic development of the **Blue Ocean Strategy**, decisions of strategic nature are taken in relation to the critical success factors that characterize the economic and social activity in which the organization operates, as well as regarding the activity carried out by other higher education institutions. The strategic development options that the Polytechnic of Leiria can take are only four: reduction, maintenance, increase and creation. Their selection depends on the combined analysis between the ambition expressed in its strategic vision for 2020, the current situation and the competitive analysis elements. The outcome of this combined analysis results in the methodological tool known as the structure of the four fields of action, which represents the possible strategic development options for the strategic focus that the Polytechnic of Leiria intends to instil, in order to achieve the transformation process upon which the drawing up of its Strategic Plan is based.

Following the implementation of the **Blue Ocean Strategy** methodology, the strategic development options expressed in the structure of the four fields of action for each of the critical success factors of the Polytechnic of Leiria, result in a new vision, which we aim to achieve by 2020. The 2020 strategic framework also includes new critical success factors seen as divergent elements when compared to the competition.

Finally, they result from the interpretation of the new value curve set as a goal for 2020, namely in relation to the critical success factors regarding which the strategic development is to increase attention, focus and set strategic guidelines that the Polytechnic of Leiria intends to include in its strategy and which will then make the connection with the strategic implementation of the Balanced Scorecard

methodology. These strategic guidelines are, in themselves, considered to be priority action references of the Polytechnic of Leiria to achieve in full and successfully, the ambition expressed in its strategic vision for 2020. These priority actions highlight the different paths which lead to the achievement of the strategic vision for 2020, bearing in mind that this vision is characterized as an ambition composed of different results to be achieved, which, despite being coherent and correlated among each other, lead to the definition of different strategic objectives and, subsequently, the different strategic initiatives to be implemented.

The **Balanced Scorecard** acts as a strategic execution model that seeks to establish the link between the formulated strategy, embodied in a static product in the form

of a document for analysis and further consultation, and the daily management of strategic execution which results in a dynamic process, which evolves according to the actual experience of the implementation of the defined strategic initiatives, simultaneously taking into account the normal and expected evolution of those internally and externally involved with the Polytechnic of Leiria, which require any adjustments and corrections without distorting, however, the ambition expressed in the strategic vision for 2020. In essence, the methodological organization model of the **Balanced Scorecard** is based on the development of different steps, which interconnected among each other, ensure the coherence and consistency between the development and execution of the strategy, as previously emphasised (see Figure 3).

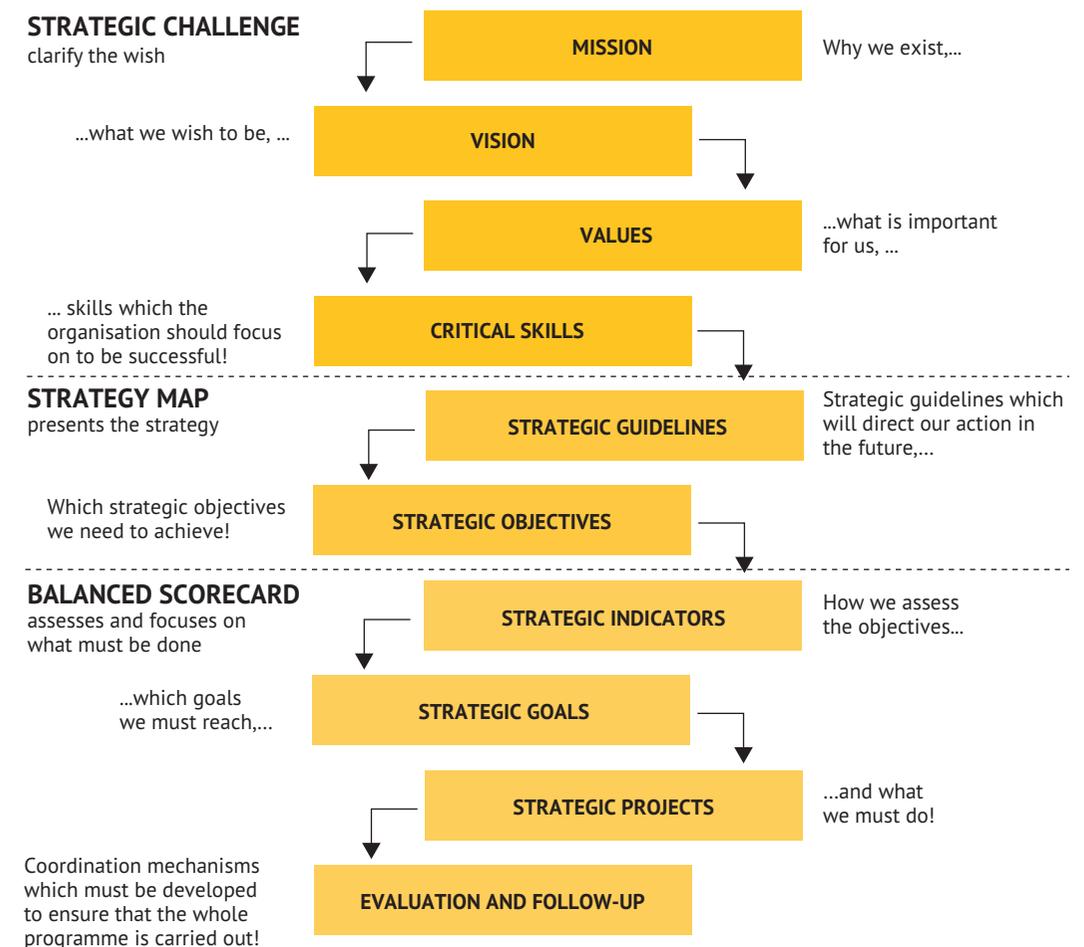


Figure 3
Organizational model of the methodological approach used in the development of the Polytechnic of Leiria’s Strategic Plan 2020

The central element of the methodological approach of the Balanced Scorecard is the strategy map, whose main purposes are to facilitate the understanding of the Polytechnic of Leiria's strategy and how the different objectives contribute to the achievement of each of the strategic guidelines and, in the end, to the achievement of the strategic vision for 2020. In the strategy map, all the strategic objectives have an equal weight regardless of their placement within the different perspectives of relevance for the Polytechnic of Leiria, and are spread out in a balanced manner among them. This balance is presented, in the graphic display of the strategy map, in a horizontal dimension, which homogeneously reflects the different ambition perspectives of the Polytechnic of Leiria, and in a vertical dimension, which homogeneously reflects the different strategic guidelines defined as priorities to achieve its strategic vision for 2020.

As a public higher education institution, the Polytechnic of Leiria has, as can be seen further on in the presentation of its mission, a perspective of action that is not focused on obtaining a financial gain or a reductive logic regarding the provision of services to its clients, which is a common and legitimate feature of business organizations. In this sense, in the Polytechnic of Leiria's Strategic Plan 2020, the financial and client perspectives, were replaced by a single perspective called impact

on the academy and society, maintaining the perspectives relating to internal processes and learning and growth processes (Annex 1).

The Balanced Scorecard methodology determines that each strategic objective is described in detail so that it may be presented, as far as possible, as a SMART objective (Specific, Measurable, Achievable, Relevant, Timely), i.e., an objective which is as specific as possible, measured by indicators whose interpretations, at each time of monitoring, are made reliably and carefully, and regarding which the targets set for each indicator are achievable. The wording of each of the strategic objectives should also clarify their relevance and explain the different dimensions that characterize them as well as the period of time within which they must be achieved, as a whole and in their different dimensions.

For the drawing up of the Strategic Plan 2020, a Planning Committee was formed (see Annex 3) and specialised support was requested from the company Ampergenio, Consulting and Management, Ltd. Throughout all the plan's development stages, different formats of consultation and discussion were promoted in the internal and external community, as can be seen in the diagram shown in Figure 4.

The people who participated in the different phases are identified in Annex 4.

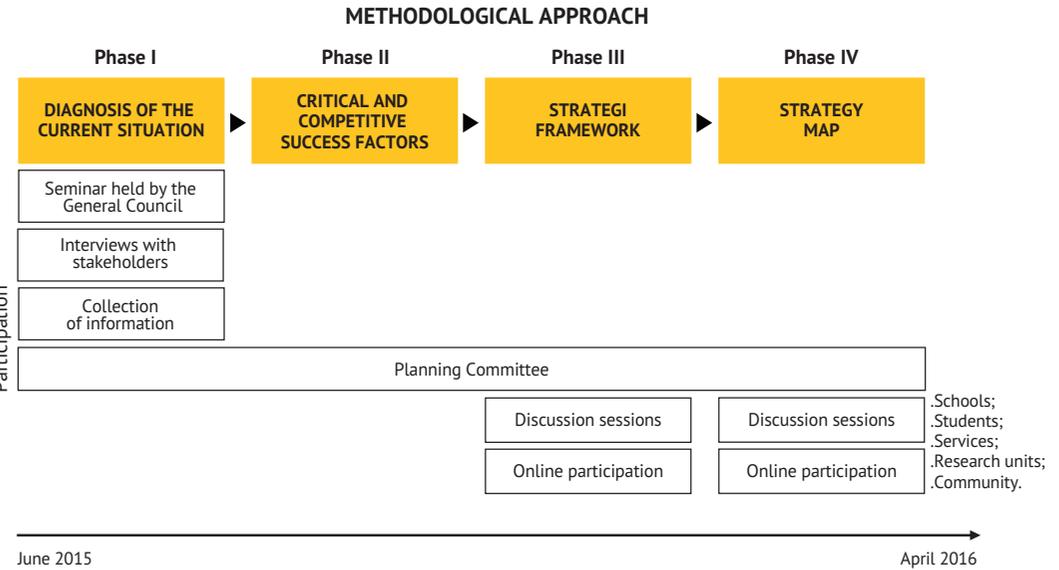


Figure 4
Development stages of the Polytechnic of Leiria's Strategic Plan 2020

SWOT ANALYSIS

In the preparation of the Strategic Plan, the drawing up of the SWOT analysis, i.e., the identification of the strengths and weaknesses that characterize the Polytechnic of Leiria's current internal environment as well as the identification of the opportunities and threats of its current external environment (see Figure

5), aimed to ensure awareness that both the enabling elements of the defined strategy, as well as its conditioning elements, respectively strengths and opportunities and weaknesses and threats, can potentially influence the execution of this.

<p>STRENGTHS</p> <ul style="list-style-type: none"> • Quality and relevance of the training offer • Public image of the institution at a local, regional and national level • Engagement with the business sector and institutions in the region • R&D+i activity in collaboration with the business sector • Social support measures for students • Organisational environment • Qualification and commitment of teaching staff and collaborators • Educational and scientific infrastructures 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> • School withdrawal rates • Low number of technical and administrative staff • Low scientific production indicators • Internal communication and external disclosure processes • Obsolescence of some equipment and laboratories • Level of implementation of the internal quality assurance system • Absenteeism and school failure in some areas • Training offer [of curricular units] in English
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • Geostrategic location of the Polytechnic of Leiria • Expansion of the international education market • Community support framework 2020 • Socio-economic development of the region • The need for a university in the region (3rd cycle) • Technology-based business sector • The working population's need for lifelong training 	<p>THREATS</p> <ul style="list-style-type: none"> • Reduction in the number of candidates for higher education (birth rate, immigration, school withdrawal, ...) • Families and students' financial difficulties • Competition from other higher education institutions • Negative social representation of higher polytechnic education • Lack of a development and organisation policy for higher education • Constraints and inadequacy of funding of higher education institutions • Limitations on the autonomy regime of higher education institutions

Figure 5
SWOT Analysis of the Polytechnic of Leiria

Notwithstanding the fact that the development of the strategic ambition, presented in the main guiding elements of the Polytechnic of Leiria's strategy until 2020, such as the Strategic Vision and the Strategy Map, was not influenced by the current situation of the internal and external environment of the Polytechnic of Leiria, its

execution will undoubtedly be optimised or conditioned, depending on the Polytechnic of Leiria's ability to comply with the elements set forth in the SWOT analysis. In Annex 2 it is possible to see the alignment between the strategic initiatives and the SWOT analysis.

MISSION

The higher education institutions (HEI) are generically defined both in the Basic Law for the Education System (LBSE) and the RJIES.

The drawing up of the specific mission for the Polytechnic of Leiria is mainly related to the need to create an identity, different from the other HEI, which will strategically guide in light of the set of specific needs it should respond to, as a public institution and as a higher education institution positioned within a given context.

Thus, the following was defined as the Polytechnic of Leiria's mission for the duration of this strategic plan:

THE POLYTECHNIC OF LEIRIA IS A HIGHER EDUCATION INSTITUTION COMMITTED TO EDUCATION AND RESEARCH, WHICH EDUCATES CITIZENS WITH THE RELEVANT SKILLS TO CONTRIBUTE TO REGIONAL AND NATIONAL SUSTAINABLE DEVELOPMENT AND WHICH GENERATES KNOWLEDGE AND INNOVATION OF HIGH CULTURAL, ECONOMIC AND SOCIAL VALUE.

In this mission we sought to highlight the training process at a higher level, in which “education and research” appear as two inseparable areas, in a training context which is not of an exclusively technical nature, even when taking into account the soft skills, but which “educates citizens”, contributing to the student's global training, as a person who belongs to a society where the citizens' duties and rights rule over relationships.

The training and research process should be able to confer “relevant skills (...) for development”. Thus, the connection to the institutional environment, namely the companies, is implicit herein, while respecting the idea that the institution acts within a specific context, at a regional level, but with implications at a national and even international level.

Finally, it is a mission which sees the Polytechnic of Leiria as an institution which “generates knowledge and innovation of a high cultural, economic and social value”. The generation of knowledge is linked to training and research activities and, in the context which we intend to consider here, this implies that the knowledge is relevant and that its results are transferred to society in order to create cultural, economic and social value and, directly or indirectly, foster well-being for citizens.

VISION

Through vision institutions express their duty while stating how they wish to be recognised in the future. This represents a goal or, if you wish, the end of a stage which one sets out to move through during a specific period of time. Through it we guide the institution. We give it direction and make the choices we consider to be capable of making us reach our goals.

Vision is in itself a type of dream: “the dream [which] commands life”.

For the 2020 horizon, the Polytechnic of Leiria has defined the following vision:

IN 2020 WE ARE A TECHNICAL UNIVERSITY RECOGNISED FOR SCIENTIFIC PRODUCTION AND TRANSFER OF KNOWLEDGE TO SOCIETY, FOR QUALITY AND TRAINING, EMPLOYABILITY, AND FOR CONTRIBUTIONS TO GLOBAL SUSTAINABLE DEVELOPMENT.

Fundamentally, the stated vision has two major strands: to be a university and to obtain recognition.

Clearly linked to its mission, by outlining this vision **the Polytechnic of Leiria clearly commits to the fact that it wishes to the same, better, and to do more, equally well.** This is the reason why we wish to evolve into a University.

To do more so as to be able to intervene in the whole spectrum of action of higher education: increasing the training it offers by complementing it with university training, conferring all of the higher academic degrees, not being limited in terms of the type of research which can be done, increasing its potential to be involved in projects with the institutional and business environment, namely in the region, and being able to assert itself at an international level as a HEI with no type of limitations except for those which arise from its own responsibility. Furthermore, to do it **equally well**, i.e., recognised and duly certified by the respective competent authorities, such as national and international evaluation and accreditation agencies, professional associations and regulatory and certifying entities for scientific activity.

To do the same, better, because what it does is important but can be improved. Moreover, it can be improved not only in its essence, but also to benefit the university with its evolution. The polytechnic nature of the education will continue to be part of the institution but now, all those interested will have the opportunity to have a future perspective of diversification of their qualifications and of the type of research they are involved in.

However, in the outlined vision the Polytechnic of Leiria wishes to be recognised. Recognised for the quality and relevance of its scientific production; recognised for the quality of the training given and the employability which it offers its graduates; recognised for its knowledge transfer processes to the institutions and companies with which it cooperates; and, last but not least, recognised for its contributions to development in its broadest sense: social, environmental, economic, cultural, artistic and scientific.

In short, recognised for what it does as a key partner in the community.

ORGANISATIONAL VALUES

Organisations hold specific values which characterise them. They come from their history, from the way in which they have built and build their relationships with people and with other organisations. But also from the way in which they position themselves with regard to the

future and the challenges which it may bring. To a certain extent, organisational values reveal the organisation's sensitivity to issues which it considers to be relevant or which it aims to value through the way in which it carries out its activity.

AT THE POLYTECHNIC OF LEIRIA WE CONSIDER THE FOLLOWING VALUES TO BE FUNDAMENTAL:

a) **Inclusion** - the Polytechnic of Leiria aims to be an institution for all. It values higher education which includes everyone, regardless of their specific characteristics and works to adjust its action so as to allow for the participation of all;

b) **Cooperation** - to cooperate means to do things with others. Those who wish to go further build paths which are followed by all and along which each person has an important role in the eyes of others. This is our sense of cooperation, whether it be interinstitutional, national or international cooperation, or cooperation with companies and other public or private organisations, with research centres or cultural associations;

c) **Responsibility** - in a world where there are, many times, excesses and values which are prioritised in a questionable manner, it is important to be responsible. Nowadays, people and organisations must adopt an attitude which ensures a way of being and doing which is aware of the fact that we are in a world inhabited by other people and other organisations which we should worry about, just like we worry about ourselves. Being responsible from a scientific, pedagogical, financial, cultural, artistic and social point of view;

d) **Creativity and innovation** - a creative organisation is an organisation which has the ability to renew itself. This is a fundamental value for a higher education institution which we aim to add value. Being creative means questioning our present and being able to envision our future. It means to dream. However, being creative makes even more sense if that creativity becomes innovation. Innovating means a willingness to try new practices, not being afraid to fail, reflecting upon the mistake and changing. Without creativity and innovation there can be no change;

e) **Critical and entrepreneurial thinking** - being entrepreneurial means taking the initiative. The word itself has become old. It has not, however, lost an important meaning. If we only have critical thinking, we can easily fall into easy and destructive criticism. If we work to develop critical and entrepreneurial thinking, we will be able to critique and present alternative strategies. This is to make the world evolve and understand that our role can be important.

CRITICAL SUCCESS FACTORS

The critical success factors are necessary requirements, and at the same time, sufficient for the success of an institution. In the case of the HEI, and following internal analysis, both retrospective and current, as well as through a benchmarking study in national and international HEI, the identification of ten critical factors as being fundamental for the success and achievement of the HEI's mission is systematic: learning-teaching process; training offer; attraction of national and international students; academic quality and accreditation; financial sustainability; attraction and retention of talent; employability; communication and institutional recognition; scientific production; and transfer of knowledge to society.

In accordance with the methodology adopted and in order to meet the main objectives and challenges associated to the institution's Vision, it is important to classify the attention which should be given to each one of the critical success factors set forth above: reducing attention, maintaining attention or increasing attention. This analysis can also lead to the creation of new critical success factors.

Reduction. No critical success factors were identified as requiring a reduction of attention and effort.

Maintenance. Five critical success factors were identified (training offer; learning-teaching process; attraction of students; academic quality and accreditation; financial sustainability) regarding which effort and attention should be maintained in relation to the current situation.

Increase. Five critical success factors were identified (employability; attraction and retention of talent; communication and institutional recognition; scientific production; and transfer of knowledge to society), regarding which effort and attention should be increased.

Creation. Two new innovative and disruptive critical factors were identified: sustainable campus and social innovation.

In Figure 6, the table regarding the Polytechnic of Leiria's critical success factors is presented in a diagram for the 2020 strategy, as are the abovementioned levels of attention.

■ Reduction	Training Offer	Learning/teaching process	Employability
□ Maintenance	Attraction of students (national and international)	Sustainable Campus	Attraction and retention of talent
■ Increase	Academic quality and recognition	Social Innovation	Transfer of knowledge to society
■ Creation	Financial sustainability	Communication and institutional recognition	Scientific production

Figure 6
Critical success factors at the Polytechnic of Leiria with the levels of effort and attention

DESCRIPTION OF THE CRITICAL SUCCESS FACTORS AT THE POLYTECHNIC OF LEIRIA

TRAINING OFFER

Socially relevant training offer, which is correlated with the professional needs and prospects of the region, the country and of a world that is increasingly global. Horizontally extensive, it covers a very wide range of applied training areas, and vertically, it offers higher education courses which do not confer an academic degree (TeSP), undergraduate degrees (1st cycle); master's degrees (2nd cycle) and doctorate degrees (3rd cycle); post-graduate courses and tailored training, and also, in terms of flexibility, it adapts to the needs of many different audiences, with daytime, night-time, e-learning functioning periods, in foreign languages, as well as being oriented towards specific audiences, such as senior citizens or those with special educational needs.

LEARNING-TEACHING PROCESS

Presentation of best practices, recognised for their innovative nature, and favouring of learning/teaching processes based on the student's responsibility and activity which makes it possible that, along with the studying and comprehension of the theoretical foundations, one finds their correct application, which promotes their consolidation, be it through laboratorial practices or through work context practices, namely in a business environment, as well as through their integration in scientific research teams. Existence of training processes which aim to develop transversal skills so as to provide global training, in which the development of the scientific and technical skills occurs alongside the development of citizenship values.

ATTRACTION OF STUDENTS (NATIONAL AND INTERNATIONAL)

Dissemination of the training and research activity carried out and of the material and social conditions available for their development so as to allow for an informed decision made by the interested audiences, both national and international, a flow of

candidates which guarantees their selection process in accordance with the criteria which give access to those who have the best conditions for academic success and continuation of studies. In addition, dissemination of the living conditions provided by the institution, such as extra-curricular activities, and by the region, namely its historical-cultural, artistic, sports and work activities which favour the settling of the population.

ACADEMIC QUALITY AND RECOGNITION

Training offered is accredited under legal terms. Participation in evaluation and certification processes carried out by academic and professional entities, at a national and international level, regarding the training and research activity. Development of internal mechanisms for evaluation and guarantee of quality. Participation in benchmarking activities and participation in international rankings. Institutional recognition, at an academic, scientific and social level, linked to the development of training and research activities, as well as activities of a social, cultural and artistic nature in collaboration with other HEI or public or private institutions of a business nature or other, both national and foreign.

FINANCIAL SUSTAINABILITY

Existence of a wide range of revenue sources, namely its own, which result from the attraction of national and international students, R&D+i projects, mainly international ones, the provision of services to the community, above all companies which, in the long run, show gradual and sustained growth of their relative importance when compared with public funding sources, and whose total revenue is surpassed in all activities so as to make financial means available for the co-financing of necessary investments on a regular basis.

EMPLOYABILITY

Recognition from employers of the quality of the training offered by the institution, which results in a clear preference regarding its graduates. Graduates with solid technical and scientific training and a great ability to innovate, who demonstrate as well a high level of transversal skills which facilitate a complete and rapid integration and professional involvement with the employer, and who are able to promote successful professional projects, both technically and in terms of internal and external interpersonal and institutional relationships.

ATTRACTION AND RETENTION OF TALENT

Creating human and material conditions which facilitate the attraction and retention of renowned professors and researchers as well as technical and administrative collaborators, in light of a challenging and motivating work context which is committed to the development of innovative and benchmark pedagogical and scientific projects. Promoting the dissemination of the projects and people so that they may also be an attracting factor so that other talents who are most worthy and prestigious in the national and international scientific community shall feel drawn to joining and collaborating with the institution.

TRANSFER OF KNOWLEDGE TO SOCIETY

Continuous demonstration of the application of the findings from the R&D+i activity and the cultural and artistic activities carried out at the institution for the business world, institutions and society in general. Participation in business incubation processes of a technological, scientific, social, cultural or artistic nature, provision of highly demanding and extremely rigorous technical and scientific services and development of added value for previously implemented products or processes.

COMMUNICATION AND INSTITUTIONAL RECOGNITION

Further development of the internal and external communication models, practices and tools. Internally, as a management tool, namely

for the increment of an organisational culture and environment which fosters cooperation with the whole academic community in the implementation processes of the strategy, and also as a dissemination tool regarding the activity of the different units. Externally, as a means to promote the institution and its activity so as to attract students, professors, researchers and partners to carry out its activity, both at a national and international level, and also as a regular means to present results.

SCIENTIFIC PRODUCTION

Notable existence of scientific research, development and innovation (R&D+i) activities clearly seen in the Research Units which are evaluated and the scientific research outputs, namely publications in important journals, registration of patents and alike, master's degree dissertations and doctorate degree theses supervised or developed in the institution, among others. Participation in national and international partnerships in terms of R&D+i activities. Valorisation of the number of national and international quotations in the scientific community, of the cultural and artistic demonstrations recognised at a national and international level, and of the existence of an academic community of students, researchers and professors, which is fully involved in R&D+i processes.

SUSTAINABLE CAMPUS

Increasing the sustainable practices at an environmental level which aims for the eco-efficiency of the institute's different *campi* and improving the academic quality of life, thus promoting harmonious living and being by respecting the needs of the various players of the academic eco-system. Use of alternative energy systems, thus contributing to the preservation of environmental resources and biodiversity and to systemic practices for reducing, reusing and recycling, which as more than pedagogical clichés should be effective practices in the academic community, which can be studied, developed and transferred to society.

SOCIAL INNOVATION

Further development of the inclusive practices in their various dimensions with the aim of making the institution a space where each and every one, in their own uniqueness, can study and better themselves in complete equality of opportunities. The elimination of architectural and material obstacles but, above all, social and cultural obstacles within the whole academy and its relational system – in the region, in the cities in which the institution operates and, particularly, in the institutions and employers – areas in which the institution must take its stand as a reference or a promoter of change processes. Increasing social entrepreneurship as a solution for some societal problems, namely in the generation of self-employment and creation of tangible and intangible value in society.

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STRATEGIC ORIENTATION 2020

The strategic orientation is organised in 16 objectives divided into five main strategic pillars: Quality and innovation in education; Research and innovation to serve

society; *campi*, excellence in resources and professionals; Internationalisation; and Becoming a university (see Figure 7).

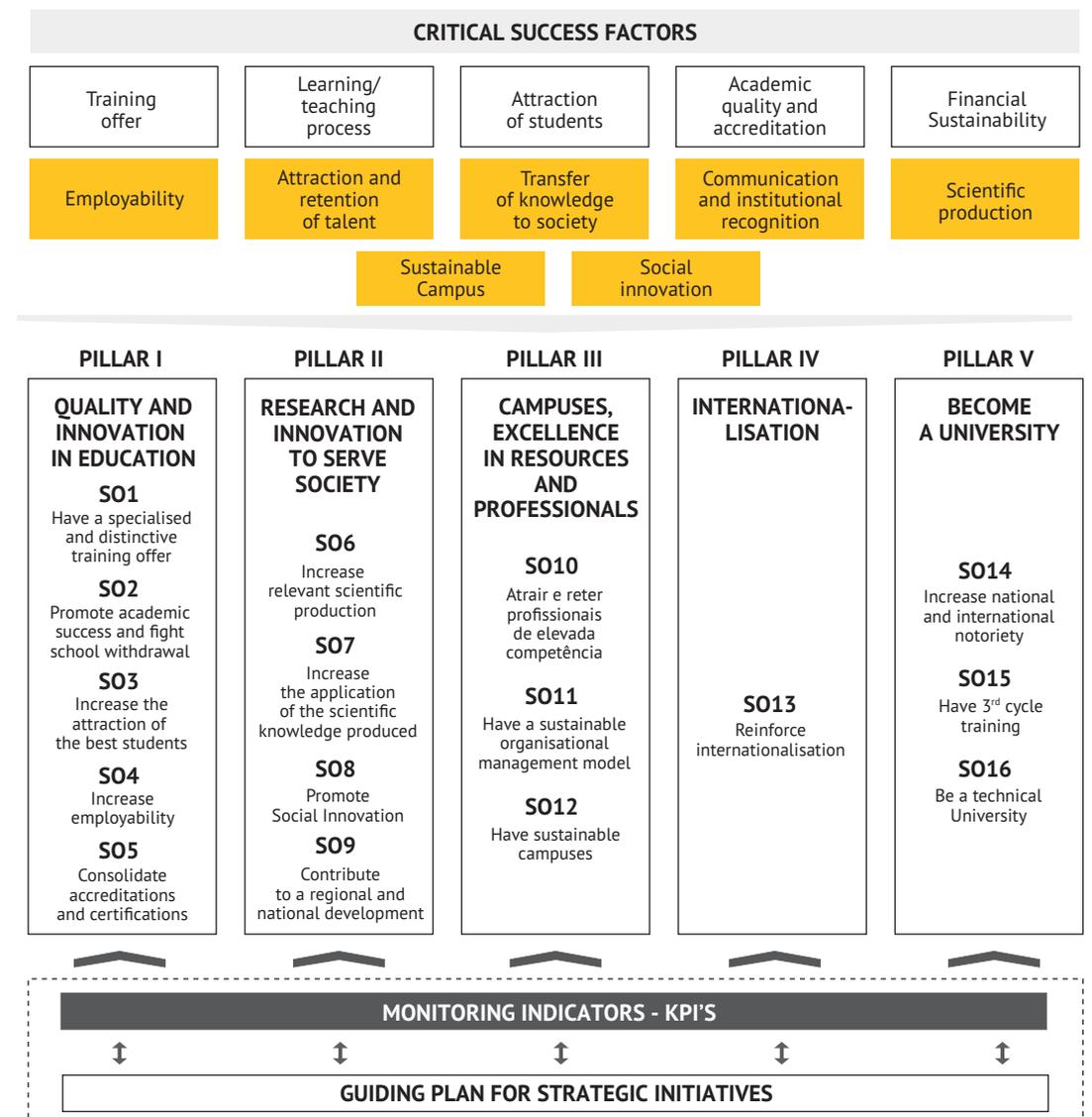


Figure 7.
Pillars and Objectives of the strategic orientation 2020

For each strategic objective monitoring indicators were defined as was a guiding plan for strategic initiatives.

PILLAR I QUALITY AND INNOVATION IN EDUCATION

STRATEGIC OBJECTIVE 1 HAVE A SPECIALISED AND DISTINCTIVE TRAINING OFFER

To optimise the training offer, focusing on the differentiation from other courses by ensuring the adequacy of the skills to the expectations of the job market, thus making it perceivable that there is increasing recognition from students and all other stakeholders, namely companies and institutions, the scientific community and society in general. To have differentiating study cycles of excellence in each one of its Schools within the main scientific areas.

Guidelines	Monitoring Indicators – KPI's	Goals 2020
Differentiation and recognition of the courses	No. of double degree courses	20
	No. of study cycles taught in English	12
	No. of study cycles in b-learning	15
	No. of international students (including mobility students)	1000
	% of students placed in their 1st option (1 st Cycle)	> 60%
	No. of courses with national coverage (1 st Cycle)	10
Optimise the training offer	% of 1 st Cycle courses with all vacancies occupied	+ 90% (all application processes)
	% of 1 st Cycle courses with more than 100 students enrolled	+ 60%
	% of 2 nd Cycle courses with more than 18 students enrolled in the 1 st year for the 1 st time	+ 60%
	% of TeSP courses with more than 20 students enrolled in the 1 st year for the 1 st time	+ 80%

Guiding plan for strategic initiatives

- Develop systematic activities of monitoring and benchmarking of market analysis in relation to the training offer and processes.
- Promote actions that identify and highlight differentiating factors of the training offer, placing emphasis on reference study cycles on a national level for each scientific area.
- Identify and plan actions that give relevance to students and graduates for their extraordinary performance in their areas of intervention.
- Increase actions with national and international partners that promote the creation of double degree courses.
- Promote an innovative Post-Graduate programme and short-term training courses to professionally update citizens throughout their lives.
- Create attractive MOOC's (Massive Open Online Courses) which are directly connected to the training offer.

STRATEGIC OBJECTIVE 2 PROMOTE ACADEMIC SUCCESS AND FIGHT SCHOOL WITHDRAWAL

To promote studies to understand and sustain actions that aim to minimise academic failure and school withdrawal while increasing the number and effectiveness of actions with this objective so as to gradually decrease the numbers regarding academic failure and school withdrawal.

Guidelines	Monitoring Indicators – KPI's	Goals 2020
Promote academic success	% of students who complete the course in the expected number of years (1 st cycle)	80%
	No. of professors participating in pedagogical training courses	200
Reduction of school withdrawal	% of students who stay in the study cycle one year after admission (1 st cycle)	n/a
	% of students who stay in the study cycle one year after admission (2 nd cycle)	n/a
	% of students who stay in the study cycle one year after admission (TeSP)	n/a
	% of students who drop out per year	- of 10%

Guiding plan for strategic initiatives

- Carry out, by school, diagnostic studies on academic success, which include the evaluation of the organisational (schedules, infrastructures, etc.) and pedagogical dimensions.
- Draw up a plan of action, by school, with measures to promote students' academic success.
- Implement a continuous training programme for professors, which involves features connected to new learning and assessment methodologies, and promotes student's motivation and well-being.
- Promote pedagogical innovation by encouraging the implementation of new pedagogical models, namely, Problem Based Learning (PBL) and Flipped Classroom methodologies, while at the same time encouraging activities based on experience and experiments and their interconnection with R&D activities (practice-based research).
- Implement control and monitoring technological systems closely connected to students' academic activity.
- Reinforce action programmes that aim to fight students' withdrawal, namely diversified structures for complementary support.

STRATEGIC OBJECTIVE 3 INCREASE THE ATTRACTION OF THE BEST STUDENTS

To expand and boost the national and international contexts to attract students, in order to increase the number of candidates to the courses at the Polytechnic of Leiria, significantly surpassing the number of vacancies available, and allowing for the filtering and selection of the best candidates.

Guidelines	Monitoring indicators – KPI's	Goals 2020
Attraction of the best candidates	% of national students with an average above 14 (1 st cycle)	+ of 35%
	No. of courses with more than 20% of students enrolled with an average over 14 (1 st cycle)	+ of 25
	% of international students with an average over 14 (2 nd cycle)	+ of 50%
Increase the number of applications for the courses	No. of CNAES applications 1 st Phase/total no. of vacancies in 1st cycle courses	+ of 2.5
	No. of applications /total no. of vacancies in 2 nd cycle courses	+ of 1
	No. of applications /total no. of vacancies in TeSP courses	+ of 2
	% of 1 st choice candidates (1 st cycle)	+ of 50%

Guiding plan for strategic initiatives

- Increase merit awards, granted by companies and institutions, to the best students who enrol every year in the Polytechnic of Leiria, as well as to their schools of origin.
- Create scholarships and performance awards for students.
- Create conditions for the best students to collaborate with the institution (monitors, scholarship holders, ...).
- Create contests, projects and courses aimed at students and teachers in secondary schools and promote events together with the schools and their teachers.
- Promote the creation of academies and summer courses for potential national and international candidates.
- Reinforce national and international marketing initiatives to attract students with the best academic performance.

STRATEGIC OBJECTIVE 4 INCREASE EMPLOYABILITY

To increase the employability potential of the graduates in their specific training area, and promote the follow-up of their professional integration as well as obtain feedback from the employers in order to optimise the training process, namely through the verification of the skills to be acquired.

Guidelines	Monitoring indicators – KPI's	Goals 2020
Increase of graduates' employability	<i>No. of students involved in complementary training courses in soft skills</i>	1000
	No. of students involved in mobility programmes	300
	No. of students involved in projects or internships in external entities	3000
Follow-up of the professional integration process	% of graduates with paying jobs 12 months after completing their course	n/a
	<i>No. of graduates connected to the Alumni networks</i>	+ 20 000
<i>Feedback from the employers</i>	No. of employers participating in the assessment of the quality of the graduates	200 (annual average)

Guiding plan for strategic initiatives

- Carry out complementary training activities (soft skills and others) specially directed to the students, which promote the acquisition of different skills in innovative environments.
- Reinforce activities that support professional placements, namely job exchanges, job fairs, curricular and extracurricular internships.
- Promote inquiries, visits, events and awareness sessions at institutions and companies in the region, identifying technical, human and other needs so as to encourage internships and development of specific training for our students and the collaborators of those institutions.
- Hold itinerant open days for students, so that knowledge about the companies and institutions of excellence in the region may be promoted.
- Promote and take advantage of the active participation of external professionals in academic activities.
- Create a unique space for monitoring and disseminating job offers, integrating various agents and social networks.
- Create conditions for the development of digital portfolios that present the (best) projects developed by the students throughout their academic path at the Polytechnic of Leiria, which may be used as a pre-curriculum vitae.
- Reinforce the Alumni networks, promoting feedback, contributions and participation in the institution's activities.

STRATEGIC OBJECTIVE 5 CONSOLIDATE ACCREDITATIONS AND CERTIFICATIONS

To have all the training offer accredited with no restrictions under the terms of the law, or to fully meet the objective conditions to do so, and increase the certification processes of the training offer, services and scientific activity, both at a national and international level, either by certifying entities or by professional associations or other guilds with recognized authority for that effect.

Guidelines	Monitoring indicators – KPI's	Goals 2020
Accreditation under the terms of the law	<i>% of courses accredited with no restrictions</i>	90%
Certification of training offer	No. of certifications attributed by national professional organisations	+ of 12
	No. of certifications attributed by international professional organisations	> 10
Certification of services and scientific activity	No. of certifications and accreditations attributed by national institutions	> 4
	No. of certifications and accreditations attributed by international institutions	> 2

Guiding plan for strategic initiatives

- Accredite the Internal Quality Assurance System.
- Create web space for dissemination of the accreditation and certification processes.
- Create web space for dissemination and monitoring of the Internal Quality Assurance System.
- Promote actions for internal dissemination, awareness and commitment regarding the importance of the accreditation and certification processes.
- Look for new entities of national and international certification and submit the study cycles to them.
- Look for new entities of national and international certification and submit the R&D+i activities to them.

**PILLAR II
RESEARCH AND
INNOVATION
TO SERVE
SOCIETY**

**STRATEGIC OBJECTIVE 6
INCREASE RELEVANT SCIENTIFIC PRODUCTION**

To encourage national and international publications with peer revision, namely with the most renowned journals in the literature database with peer revision (e.g. Thomson; Scopus). To increase the number of congresses with international dimension associated to publications in high impact journals. To reinforce the publications made in collaboration with companies, namely those which have technological knowledge or dimension with sectorial impact. To consolidate this dimension as an entrepreneurial HEI in a generation of intellectual property (IP) with national protection as well as reinforce both the international protection of IP and its transfer to the economy.

Guidelines	Monitoring indicators – KPI's	Goals 2020
Publications	No. of publications of international visibility with scientific arbitration (Scopus, Thomson, ERIH, IBSS and Scielo)	+ of 400
Congresses of international dimension associated to publications in high impact journals	Accumulated number of international congresses associated to journals with scientific arbitration (Scopus, Thomson, ERIH, IBSS and Scielo)	10
Intellectual Property (IP)	Accumulated number of intellectual property registries	+ of 200

Guiding plan for strategic initiatives

- Intensify interdependent and bi-directional mechanisms between the R&D+i activities and the training activities, encouraging activities that are based on experiences and experiments (practice-based research).
- Create mechanisms that ensure the dissemination of the scientific production in the institution's online repository.
- Create awards or scholarships for the participation in international congresses granted by the research units in order to attract the best students in the 2nd cycle to carry out R&D+i activities.
- Study and implement actions of positive discrimination of professors who develop relevant scientific activities, based on scientific publications and the obtained funding, namely through the granting of sabbatical leaves.
- Review the assessment regulations regarding professor performance, giving relevance to research and innovation to serve society.
- Create support programmes for the publication in indexed international journals (Scopus, Thomson ERIH, IBSS and Scielo), as well as presentation of scientific papers in international conferences associated to indexed publications.
- Create partnerships with scientific journals to carry out congresses, or through the development of thematic editions in the areas of intervention of the Polytechnic of Leiria.
- Launch a systematic internal assessment programme regarding the research units.
- Create encouragement awards for the researchers and for the research units with the highest scientific productivity.
- Launch a plan for the reorganisation of research units in order to increase the critical mass and promote the application for evaluation by the FCT (National Funding Agency for science, research and technology).
- Create an action plan to promote the integration of post-doc programmes in R&D+i projects.
- Create events to share R&D+i success cases.
- Create monitoring and follow-up tools and guidelines for the physical and financial execution of R&D+i projects and services.

STRATEGIC OBJECTIVE 7 INCREASE THE APPLICATION OF THE SCIENTIFIC KNOWLEDGE PRODUCED

To reinforce a culture of scientific and technological knowledge transfer with direct impact on society (products, services or processes), either from an economic, social, artistic or cultural point of view. To promote strategies in order to protect the knowledge and technology assets transferred to the economy, so as to stimulate the re-investment in research and innovation. To stimulate the creation of start-ups of a scientific, technological basis and of social innovation.

Guidelines	Monitoring indicators – KPI's	Goals 2020
Knowledge transfer with direct impact on society	No. of innovative products/processes introduced in companies and institutions	n/a
	No. of services open to the community	n/a
	No. of artistic productions	n/a
Protect the knowledge and technology assets transferred to the economy	No. of intellectual property registries with a transfer to the economy	+ of 6
Re-investment in research	Nº de contratos com reinvestimento obtido pela transferência de conhecimento para as empresas	+ de 10
Creation of start-ups	No. of start-up companies promoted by the Polytechnic of Leiria	+ of 20

Guiding plan for strategic initiatives

- Create a Teaching and Research in Health Clinic to encourage research and services to the community in the area of health.
- Reinforce the support and stimulus mechanisms for intellectual property registry.
- Provide conditions that promote the support to create companies which result from research and development projects within the institution.
- Create a regular fair for dissemination of intellectual property and R&D+i services of the Polytechnic of Leiria.
- Create a common laboratory for interdisciplinary experiments in the areas of design, arts, science and technology (STEAM).

STRATEGIC OBJECTIVE 8 PROMOTE SOCIAL INNOVATION

To stimulate social entrepreneurship as a solution for some societal problems, namely in the generation of self-employment and creation of capital value in the social economy. To promote inclusive projects and develop methodologies and strategies for inclusive training, in terms of contents, material and equipment as well as socio-cultural premises that determine interpersonal relationships. To contribute to the social and personal integration of all its graduates, regardless of the singularities that characterise each one of them. To reduce the architectural obstacles on the *campi*.

Guidelines	Monitoring indicators – KPI's	Goals 2020
Social entrepreneurship	No. of social innovation start-up companies	+ of 4
	No. of projects and services in the area of social innovation	+ of 20
Inclusion	No. of inclusive projects, services and tools	+ of 10
Campus accessibility	No. of actions that aim to improve accessibility	+ of 20

Guiding plan for strategic initiatives

- Promote solidarity campaigns and innovative volunteer work that involves the academic community, specifically the Student Associations, together with external institutions.
- Promote programmes that stimulate social entrepreneurship.
- In conjunction with the main institutions of the region (municipality, IPSS, business incubators, etc.), study the relevance of creating an incubator associated to social entrepreneurship in the Leiria and Western region.
- Consolidate innovative and differentiating solutions for students with special educational needs in a more permanent way.
- Develop projects and activities in the area of inclusion, accessibility and citizenship.
- Create web space to share the institution's services, projects and activities in the areas of inclusion and citizenship.

**STRATEGIC OBJECTIVE 9
CONTRIBUTE TO REGIONAL AND NATIONAL DEVELOPMENT**

To contribute, through the development of activities, to the social, economic and cultural growth of the region and the country, either directly or indirectly, particularly through the increase in added value of the companies and institutions' activities, resulting from the co-operation in the areas of R&D+i and provision of services. To annually increase the number of national and international R&D+i projects, as well as the provision of R&D+i services which have been developed in partnership with other institutions, namely companies, whose result brings improvements to the training process and added value to the activities developed by the partners, namely companies located in the Leiria and Western region, through the transfer, implementation, social and economic-financial valorisation of new knowledge.

Guidelines	Monitoring indicators – KPI's	Goals 2020
Economic and social growth of the region and the country	No. of relocated national students	2000
	No. of international students (mobility included)	1000
	No. of graduates from the Polytechnic of Leiria employed in companies and institutions of the region	n/a
Creative and cultural development of the region and the country	No. of cultural and artistic activities carried out in the region (Leiria and Western region) with the participation of the Polytechnic of Leiria	n/a
	No. of cultural and artistic activities carried out in the rest of the national territory with the participation of the Polytechnic of Leiria	n/a
R&D+i Projects	Total no. of R&D+i financed projects with regional and national companies and institutions	60 (accumulated number)
	Total no. of R&D+i financed projects with international companies and institutions	20 (accumulated number)
Provision of R&D+i services	No. of entities involved in the provision of R&D+i services	200 (accumulated number)
	Revenue resulting from the provision of R&D+i services	2M euros (accumulated number)

Guiding plan for strategic initiatives

- Develop action programmes between the institution and the economic and social environment, aiming to develop the research applied and the creation of value in the region and the country.
- Establish partnerships with regional agents to carry out activities in the various domains of knowledge, culture and arts.
- Create a regulation for the provision of R&D+i services which promotes re-investment in the R&D+i area, both in terms of continuous training of people and infrastructural conditions.
- Create internal programmes to collect ideas in order to produce a pre-project portfolio to present in future applications.
- Reinforce and create new regional partner networks that may facilitate the application for national and international funding programmes.
- Promote actions to encourage the participation of professors and researchers in the research and innovation ecosystems of companies and institutions, namely through the creation of an ambassador of the Polytechnic of Leiria position in the company or institution.

**PILLAR III
CAMPI,
EXCELLENCE
IN RESOURCES
AND PROFESSIONALS**

STRATEGIC OBJECTIVE 10 ATTRACT AND RETAIN HIGHLY QUALIFIED PROFESSIONALS

To have policies which focus on people and which strengthen the organisational spirit of the dedicated collaborators as well as the institutional commitment. To acknowledge and promote the merit of the professors, researchers, technicians and administrative staff and respond to the need for definition and restructuring. To promote group dynamics associated to activities of innovation and social relevance. To have an institution that adds value to its professionals and to society.

Guidelines	Monitoring indicators – KPI's	Goals 2020
Organisational and motivational environment	Collaborators' satisfaction rate	+ 80%
	Achievement rate of measures that aim to improve working conditions	+ 80%
	No. of measures for acknowledging professional merit	n/a
	% of full time professors	80%
Have policies focused on people	No. of collaborators annually involved in training in internal dynamics	300 (annual average)
	No. of collaborators who have obtained support in external training or valorisation	200 (annual average)
	No. of collaborators involved in international mobility	100 (annual average)
	No. of student monitors	20 (annual average)
	No. of research support scholarships	100 (annual average)

Guiding plan for strategic initiatives

- Promote studies to assess the adequacy of the logistic and technical conditions for the tasks carried out by collaborators, in order to identify areas for improvement and service restructuring, as well as possible reinforcement of middle management positions.
- Implement improvement actions for the organisational and relational environment, as well as promote a culture of merit and recognition, namely through welcoming activities, integration, career management, management of expectations and training.
- Create scholarships and merit awards for collaborators.
- Promote initiatives to boost the transversal knowledge of the institution among its collaborators, namely through the visit to units and services as well as through dissemination and distribution of published works.
- Implement a continuous training programme for professors, which involves features connected to new learning and assessment methodologies, and promotes student's motivation and well-being.
- Implement technical training programmes for technical and administrative staff.
- Implement professional valorisation actions for professors and researchers, namely by creating conditions that result in the opening of contests for career progression.

STRATEGIC OBJECTIVE 11 HAVE A SUSTAINABLE ORGANISATIONAL AND MANAGEMENT MODEL

To improve internal communication processes, namely information about the management of processes, and create specific channels for the circulation and flow of information so that it may reach its destination duly and with quality, preferably through the use of distribution platforms. To evaluate models of service organisation and academic decision and promote changes that are considered convenient in order to increase their efficiency, namely by reducing decision and processing times. To diversify and gradually increase the funding sources so as to increase its weight in terms of public funding in a sustainable way. To study organisational and management models that foster greater institutional autonomy and agility.

Guidelines	Monitoring indicators – KPI's	Goals 2020
Efficiency, decision and processing times	No. of meetings per year between service directors and teams	+ of 6
	No. of optimisation actions regarding operational flowcharts that are transversal to many services	+ of 60
	No. of services with a defined Service Catalogue in accordance with the Attendance Service Model of the Polytechnic of Leiria	12
	No. of services with a back office system integration	12
Organisational and management models that foster greater institutional autonomy and agility	No. of services with performance KPI defined for each attendance process	12
	No. of meetings per year between the presidency and the service directors	4
	Revenue from co-funded projects/ Total revenue	+ of 15%
	Own revenue / Total revenue	+ of 40%
	Exportation revenue (tuition, PSERs, international R&D+i projects) / Total own revenue	+ of 25%

Guiding plan for strategic initiatives

- Improve the formal and informal internal communication flow and promote participative structures, namely by listening to the academic community periodically, mainly students, through open days with the presidency/directors.
- Reinforce virtual Services and give continuity to the standardisation of institutional databases (e.g. academics, indicators of scientific production, mobility, etc.).
- Establish and/or improve agreements with large national and multinational institutions for funding solutions in the form of sponsorships and contributions, namely in the funding of internationally known chair professors and academies
- Reinforce the support mechanisms for applications to national and international financing funds.
- Develop identification activities of direct funding (patronage; labelling of laboratories or practical rooms) or through the granting of equipment on behalf of companies.
- Create new training formats so as to diversify the sources of their own revenue.
- Promote benchmarking studies concerning management and HEI organisational models.
- Promote a study about the possibility of changing to a public foundation model under private laws.

**STRATEGIC OBJECTIVE 12
HAVE SUSTAINABLE CAMPI**

To stimulate the dimensions of academic life, namely in terms of the students' quality of life, whether it be through the social dimension of the interculturalism of the *campi* or through the dimension of sports, culture, health and well-being. To progressively replace the traditional power sources by more "environmentally friendly" power sources, as well as all other elements in the chain, so as to make the *campi* more eco-friendly. To define and implement a set of RRR (Reduce, Reuse and Recycle) practices associated to objectives that are clearly measurable for each *campus*. To create a socially responsible and environmentally sustainable culture.

Guidelines	Monitoring indicators – KPIs	Goals 2020
Academic experience (social dimensions of interculturalism)	No. of intercultural events held	n/a
	No. of different nationalities among students	60
Academic experience (creativity, cultural, sports, health and well-being dimensions)	No. of sporting events held	15 (annual average)
	No. of cultural events held	15 (annual average)
	No. of health and well-being promotional events held	n/a
	No. of sports and well-being interventions on <i>campus</i>	n/a
Eco-friendly <i>campi</i>	Average energy consumption per student	n/a
	Energy production through renewable sources	n/a
	No. of soft mobility vehicles per <i>campus</i>	n/a

Guiding plan for strategic initiatives

- Implement an annual programme of sporting and recreational activities for each *campus*, characterised by an increasing stimulation both in terms of the diversity of the planned activities and its participants.
- Create and improve infrastructures for the practice of sports and artistic and cultural activities on *campus* and sign new protocols with external entities.
- Implement diverse measures to make use of resources, such as the collection of rainwater for re-use, installation of solar panels, reduction in water flow, recycling deposits, etc.
- Promote campaigns and awareness actions to help rationalise consumption.
- Promote training in Education for Sustainable Development aimed at the collaborators.
- Implement projects that improve and promote soft mobility on *campus*.
- Prepare and submit projects that promote the energetic sustainability of the *campi*, namely through the use of eco-friendly equipment and through the microgeneration of renewable energy.

**PILLAR
INTERNATIONALISATION**

**STRATEGIC OBJECTIVE 13
REINFORCE INTERNATIONALISATION**

To intensify the internal and external activities that support the institution's internationalisation, in the sense of increasing concrete results, in a gradual and sustained way, which simultaneously represent the different dynamics of the internationalisation, namely in terms of attracting foreign students, mobility of students, professors, technical and administrative staff, development of training activities, research and extension of partnerships with international partners, with special focus on actions occurring in the European Union and the CPLP.

Guidelines	Monitoring indicators – KPIs	Goals 2020
Attraction of international students	No. of international students (including mobility students)	1000
	No. of international students from CPLP	200
Students' and collaborators' mobility	% of courses with outgoing students (1st Cycle)	90%
	% of courses with incoming students (1st Cycle)	50%
	No. of professors/researchers involved in international outgoing mobility	80
	No. of professors/researchers involved in international incoming mobility	100
	No. of technicians and administrative staff involved in international outgoing mobility	20
	No. of technicians and administrative staff involved in international incoming mobility	100
	No. of international projects that promote mobility	20 (accumulated number)
International Training	No. of courses taught in partnership with international HEI	+ de 20
Research in partnership with international partners	Total number of R&D+i financed projects with international companies and institutions	20
	No. of publications by researchers from the Polytechnic of Leiria in partnership with international researchers	100 (annual average)
	No. of 2nd and 3rd cycle students from international partners supervised or co-supervised by professors and researchers from the Polytechnic of Leiria	n/a

Guiding plan for strategic initiatives

- Increase the courses and CU's taught in English, b-learning and in partnership with foreign HEIs.
- Reinforce the international marketing initiatives in order to attract international students.
- Reinforce actions related to welcoming international students.
- Building new accommodation facilities, renovate existing spaces and establish partnerships with external entities.
- Create attractive conditions to receive international collaborators and researchers.
- Promote international mobility of students through Erasmus+ programmes and through international partnerships.
- Develop Portuguese language training programmes for foreigners.
- Develop foreign language training programmes for the academic community.
- Increase the international partnership programmes that promote mobility and directly attract students.
- Create advanced short-term courses in association with international partners, promoting their integration in 2nd and 3rd cycle study plans.

**PILLAR V
BECOMING
A UNIVERSITY**

STRATEGIC OBJECTIVE 14 INCREASE NATIONAL AND INTERNATIONAL NOTORIETY

To improve the dissemination processes concerning the institution's activity for the external public, aiming to promote the Polytechnic of Leiria's name and attract students, professors, researchers and partners, so as to develop cooperation initiatives. To reinforce the levels of regional, national and international notoriety among teaching institutions, companies and the community in general, both in terms of higher education training provided and in terms of the research and innovation undertaken. To follow-up on the performance and evolution of the institution in the main rankings of the HEIs international classification.

Guidelines	Monitoring indicators – KPI's	Goals 2020
Improve external communication and promote the Polytechnic of Leiria's name	No. of hits on the Polytechnic of Leiria's portal.	+ of 3M
	No. of users of the Polytechnic of Leiria's portal	+ of 400 thousand
	No. of official social network followers	+ of 40 thousand
	No. of references made in articles and news reports published in the media	+ of 20 thousand
Notoriety among teaching institutions, companies and the community in general	No. of references made in articles and news reports published in the national media (excluding regional media)	+ of 6 thousand
	No. of candidates to IPLeia from the region/ total number of candidates from the region (1st phase of CNAES)	40%
	% of schools in the region with students placed in the Polytechnic of Leiria	100%
	Total number of applications submitted to the Polytechnic of Leiria (1st phase)/total number of national candidates (1st phase)	12%
Performance and evolution in international rankings	No. of collaborators' participations as juries in academic exams of other HEIs.	n/a
	Position in the main international HEIs assessment rankings	n/a

Guiding plan for strategic initiatives

- Create a communication strategic plan of the Polytechnic of Leiria.
- Make progress with the unification and strengthening of the Polytechnic of Leiria's name.
- Associate the institution's name to its excellence and differentiating aspects, namely highlighting what is done in terms of research, development and innovation.
- Promote the training areas and internal know-how in the area of communication, namely through initiatives developed by students (examples: the Polytechnic of Leiria's portal and its Schools' portals, Polytechnic of Leiria's newsletter, the AKadémicos newspaper, IPlay radio and social networks on the internet).
- Identify and disseminate successful, internal case studies (students, graduates, collaborators, researchers and companies).
- Promote actions that improve communication and management of science.
- Organise the existing and future communication resources for its transversal use in all units and services.

STRATEGIC OBJECTIVE 15 HAVE 3RD CYCLE TRAINING

To accredit (previous accreditation) and obtain an operating licence from the competent authorities for 3rd cycle higher education in at least three scientific areas and increase the number of PhD students under supervision or co-supervision by professors of the institution, as well as carry out their PhD works in the institution.

Guidelines	Monitoring indicators – KPI's	Goals 2020
PhD Students at the Polytechnic of Leiria	No. of PhD students supervised or co-supervised by professors and researchers of the Polytechnic of Leiria	+ of 140
	No. of PhD students carrying out their works in the institution	+ of 80
	No. of PhD students carrying out their works in projects with companies	n/a
Higher education in 3rd cycle	No. of advanced training courses that include doctorate programmes	4
	No. of 3rd cycle courses in partnership	5
	No. of 3rd cycle courses submitted for accreditation	3

Guiding plan for strategic initiatives

- Establish partnerships with national and international entities, aiming to offer PhD programmes (of a professional, entrepreneurial or performative nature), in close connection with companies and institutions of the region.
- Create a unit to manage the potential of all the protocols that foresee training in the 3rd cycle (doctoral school).
- Prepare 3rd cycle courses that are autonomous or have a national and/or international partnership under submission conditions to the A3ES.

**STRATEGIC OBJECTIVE 16
BE A TECHNICAL UNIVERSITY**

To evolve from a polytechnic higher education institution to a university higher education institution, with the consequent name alteration. To broaden its training offer, being able to teach not only polytechnic education but also university education. To grant every academic degree foreseen in the law and to be involved in every modality of scientific research, namely those which result from the development of PhD projects carried out in partnership with the business sector.

Guidelines	Monitoring indicators – KPI's	Goals 2020
Nature of the institution	Success rate of the promotional initiatives for the evolution into a university status	100%
	Legal authorisation to include the 3 rd cycle in the training offer	Until 2020
	No. of scientific areas in the training offer of the 3 rd cycle courses	3

Guiding plan for strategic initiatives

- Create a strategic plan of action that reinforces the internal and external support leading to the evolution of the Polytechnic of Leiria to university.
- Study an organisational and management model to articulate between polytechnic and university education.
- Study the possibility to create an interdisciplinary research and innovation structure which articulates the research units and the 3rd cycle training.
- Submit a formal request to the trusteeship for the evolution of the Polytechnic of Leiria to university.

MONITORING AND FOLLOW-UP

Monitoring and follow-up are essential elements to guarantee the realisation of the Strategic Plan. It will include the gathering of specific information regarding each strategic initiative, namely in terms of its level of accomplishment, as well as the results achieved in light of the goals set for each of the monitoring indicators. On the other hand, the follow-up will allow for the identification of the difficulties met, making it possible for the members of the Institution to evaluate the progress made.

This is a procedure which makes it possible to monitor and control the intervention process and to identify any deviations in relation to what was foreseen in the beginning.

It must be a continuous process, with annual moments for evaluation, after which information should be updated and the results obtained thus far should be evaluated, so as to

not only detect deviations in relation to what had been defined before, but also the level of progress already reached bearing in mind the final results which are sought.

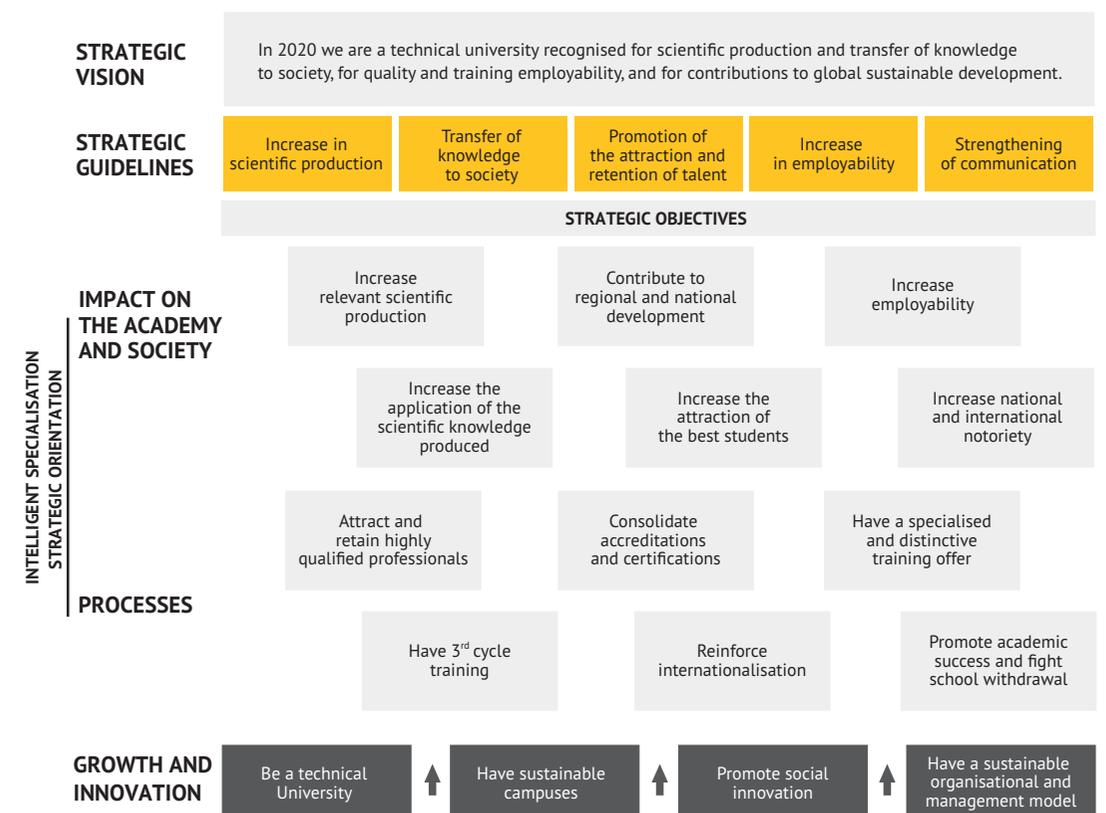
In order to ensure the monitoring of the Strategic Plan of the Polytechnic of Leiria 2020, there will be people nominated to be responsible for the Strategic Objectives defined. In collaboration with those responsible for the strategic initiatives, they shall do the annual follow-up of the Plan. There will also be people made responsible for the gathering of information regarding the monitoring indicators.

In addition, the annual evaluation of the level of realisation of the Plan will be carried out, so as to identify any deviations and adopt corrective measures which will make it possible to guarantee that the goals set will be reached.

**AN
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ANNEX 1

MAP OF THE 2020 STRATEGY OF THE POLYTECHNIC OF LEIRIA

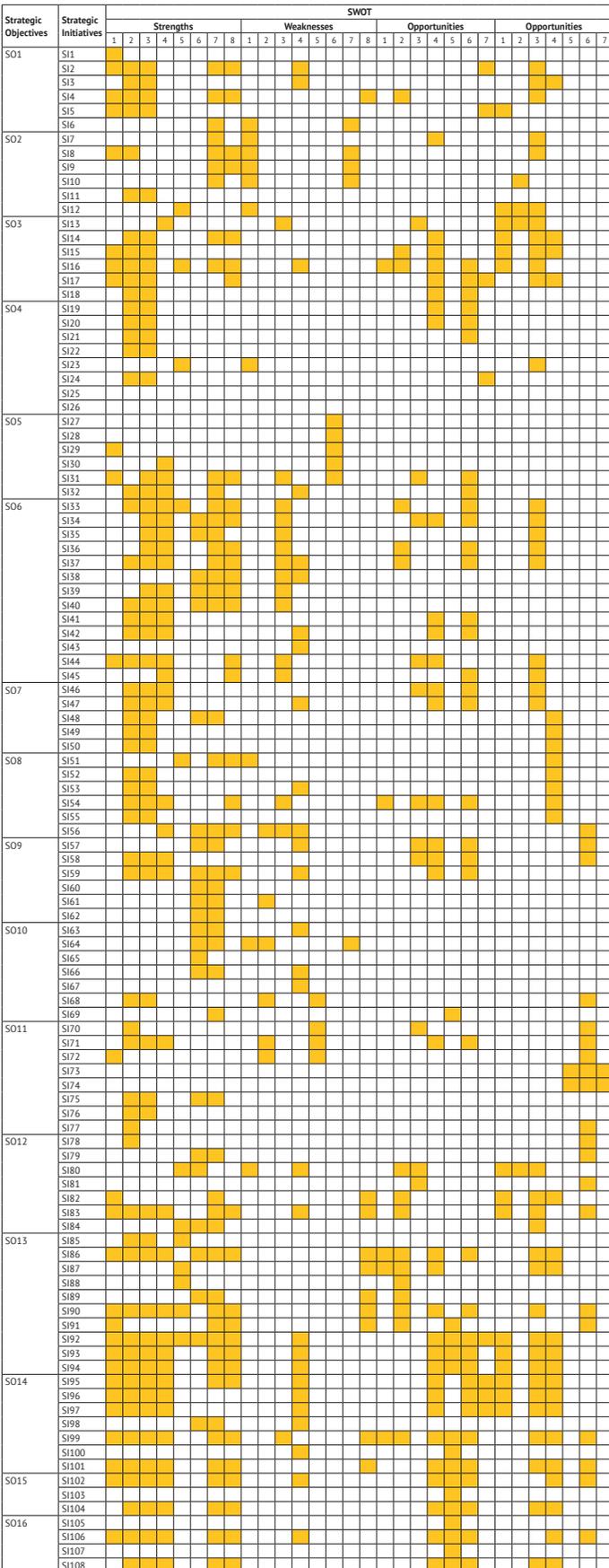


ANNEX 2

ALIGNMENT OF THE STRATEGIC INITIATIVES WITH THE SWOT ANALYSIS

Insofar as the execution of the strategy of the Polytechnic of Leiria is expressed by the integrated set of strategic initiatives associated to the different strategic objectives of the Strategy Map, in order to be successful in carrying out this project, it is essential to understand the degree of alignment among these initiatives, namely regarding their positive and relevant impact, not only as action instruments which take advantage of and/or promote the identified strengths and opportunities, but also as action instruments which mitigate the conditioning effects of the weaknesses and threats also identified.

Thus, an analysis process regarding the alignment of the strategic initiatives with the SWOT was developed. Merely as an illustration, Figure A2-1 represents the matrix analysis done between the strategic initiatives and the SWOT elements. The blue squares show the biggest impacts and the direct alignments between the strategic initiatives and the different dimensions of the SWOT analysis.



Strategic Objectives

- SO 1. Have a specialised and distinctive training offer
- SO 2. Promote academic success and fight school withdrawal
- SO 3. Increase the attraction of the best students
- SO 4. Increase employability
- SO 5. Consolidate accreditations and certifications
- SO 6. Increase relevant scientific production
- SO 7. Increase the application of the scientific knowledge produced
- SO 8. Promote social innovation
- SO 9. Contribute to regional and national development
- SO 10. Attract and retain highly qualified professionals
- SO 11. Have a sustainable organisational and management model
- SO 12. Have sustainable organisational and management model
- SO 13. Reinforce internationalisation
- SO 14. Increase national and international notoriety
- SO 15. Have 3rd cycle training
- SO 16. Be a technical university

Figure A2-1
Alignment of the strategic initiatives with the SWOT analysis

ANNEX 3 PLANNING COMMITTEE

I. PLANNING COMMITTEE

Nuno Mangas	President
João Paulo Marques	Vice-President
Rita Cadima	Vice-President
Rui Pedrosa	Vice-President
Paulo Fernandes	Pro President
Rui Matos	Dean of ESECS
Pedro Martinho	Dean of ESTG
Rodrigo Silva	Dean of ESAD.CR
Paulo Almeida	Dean of ESTM
José Carlos Gomes	Former-Dean of ESSLEI
Clarisse Louro	Dean of ESSLEI
Nuno Alves	Director of CDRSP
Eugénia Ribeiro	IPLeiria Administrator
Miguel Jerónimo	SAS Administrator
Leopoldina Alves	Director of CTC-OTIC

ANNEX 4

PARTICIPATION OF THE INTERNAL AND EXTERNAL COMMUNITY

A. INTERVIEWS

Amândio Santos	Portugal Foods
António José Correia	Mayor of the Peniche Municipality
António Poças	InCentea Group
Isabel Damasceno	Mais centro / CCDRC
Joaquim José Pereira Ruivo	Director of the Batalha Monastery
Jorge Santos	President of NERLEI and the Vipex Group
Manuel Fialho Isaac	Member of Parliament
Pedro Lourtie	President of the General Council of the Polytechnic of Leiria
Raul Castro	President of CIMRL and Mayor of the Leiria Municipality
Fernando Tinta Ferreira	Mayor of the Caldas da Rainha Municipality

B. DISCUSSION SESSIONS

1 st PHASE		
2 nd of November of 2015 - Headquarters		
Alexandre Miguel Santos Soares	Tech./Admin. Staff	ESECS
Ana Lúcia Lopes Duarte	Tech./Admin. Staff	SC
António José Pinto Pedrosa	Professor/Researcher	ESTG
Aurélio Jorge Fernandes Cardoso	Tech./Admin. Staff	SC
Carla Sofia Costa Freire	Professor/Researcher	ESECS
Carlos Alexandre Bento Capela	Professor/Researcher	ESTG
Carlos Fernando Couceiro de Sousa Neves	Professor/Researcher	ESTG
Catarina Frade Mangas	Professor/Researcher	ESECS
Célia Cristina Pereira Ferreira	Tech./Admin. Staff	SC
Cristina Isabel Alves Correia	Tech./Admin. Staff	SC
Cristina Isabel Neto Duarte	Tech./Admin. Staff	ESECS
Dina Maria Amaro Jorge	Tech./Admin. Staff	SC
Elisabete Carreira Gonçalves	Tech./Admin. Staff	SC

Elsa Marta Pereira Soares	Professor/Researcher	ESSLei
Eugénia Maria Lucas Ribeiro	Tech./Admin. Staff	SC
Graça Maria Santos Batista Seco	Professor/Researcher	ESECS
Helena Isabel Caseiro Fernandes e Silva Santos	Tech./Admin. Staff	SC
Ilda Maria Correia Silva	Tech./Admin. Staff	SC
Isabel Maria de Sousa Henriques Beato	Tech./Admin. Staff	SC
Isabel Maria Paraíso Faria Lopes	Tech./Admin. Staff	SC
João Paulo dos Santos Marques	Professor/Researcher	ESSLei
Joaquim Sérgio da Rocha Santos	Tech./Admin. Staff	SC
José Alberto Rei Jr.	Tech./Admin. Staff	SC
José Manuel Alves Guerreiro	Professor/Researcher	ESSLei
Luís Manuel da Costa Marta Salgado	Tech./Admin. Staff	SC
Márcio Filipe Rainho Duarte	Tech./Admin. Staff	SC
Marco Rodrigues Faustino	Tech./Admin. Staff	SC
Maria dos Anjos Coelho Rodrigues Dixe	Professor/Researcher	ESSLei
Maria Fátima Parracho Venâncio Gouveia	Tech./Admin. Staff	ESECS
Maria Goreti Silva Monteiro	Professor/Researcher	ESTG
Maria Josefina Dias da Silva Pereira	Tech./Admin. Staff	SC
Maria Pedro Sucena Guarino	Professor/Researcher	ESSLei
Mário Acácio Borges de Melo Correia de Oliveira	Professor/Researcher	ESECS
Marta Simões Pereira	Tech./Admin. Staff	SC
Miguel Martins Felgueiras	Professor/Researcher	ESTG
Naíde Marisa Pereira de Carvalho Martins	Tech./Admin. Staff	SC
Nuno André Oliveira Mangas Pereira	Professor/Researcher	ESTG
Nuno Miguel Morais Rodrigues	Professor/Researcher	ESTG
Pedro José Franco Marques	Professor/Researcher	ESTG
Pedro Miguel Gonçalves Martinho	Professor/Researcher	ESTG
Rita Alexandra Cainço Dias Cadima	Professor/Researcher	ESECS
Rita Margarida Gaivotto Anastácio	Tech./Admin. Staff	SC
Rui Filipe Pinto Pedrosa	Professor/Researcher	ESTM
Rui Manuel Neto e Matos	Professor/Researcher	ESECS
Sandra Isabel Duarte Francisco	Tech./Admin. Staff	SC
Sofia Alexandra Ferreira da Conceição e Sousa	Tech./Admin. Staff	SC
Sónia Cristina de Sousa Pós Mina	Professor/Researcher	ESSLei
Susana Manuela Franco Faria de Sousa	Professor/Researcher	ESECS
Teresa Madalena Kraus Brincheiro Huttel Barros	Professor/Researcher	ESSLei
Zita Graciete Pereira Brites	Tech./Admin. Staff	SC
Zita Paula Catarino Figueiredo	Tech./Admin. Staff	SC

2nd of November of 2015 - Campus 4, ESTM Auditorium

Alexandra Augusta Ramos Lopes da Cruz	Professor/Researcher	ESTM
Ana Margarida Paulino Violante Pombo	Professor/Researcher	ESTM
Ana Marta Cardoso Duarte	Student	ESTM
Ana Rita Fernandes Castelão	Student	ESTM
Anabela Clemente Elias Almeida	Professor/Researcher	ESTM

André Jorge Lindo Petinga	Tech./Admin. Staff	ESTM
António Alberto Florência Fernandes	Tech./Admin. Staff	ESTM
António Sérgio Araújo de Almeida	Professor/Researcher	ESTM
Carlos Alberto de Matos Domingos	Tech./Admin. Staff	ESTM
Célia Maria da Conceição Salmim Rafael	Professor/Researcher	ESTM
Clara Patrícia Jesus Tino	Student	ESTM
Fernanda Maria Fernandes Oliveira	Professor/Researcher	ESTM
Hugo Filipe Pereira Faria	Student	ESTM
Isabel Maria Martins dos Santos Pinheiro	Tech./Admin. Staff	ESTM
João Assis da Silva Domingues	Tech./Admin. Staff	ESTM
João Paulo dos Santos Marques	Professor/Researcher	ESSLei
José Manuel Ferreira Pereira	Tech./Admin. Staff	SC
Júlia Fragoso da Fonseca	Professor/Researcher	ESTM
Luís André Pereira Veludo Filipe	Tech./Admin. Staff	SAPE
Luís Lima Santos	Professor/Researcher	ESTM
Marco Filipe Loureiro Lemos	Professor/Researcher	ESTM
Maria Jorge Gerales Campos	Professor/Researcher	ESTM
Maria Manuel Gil de Figueiredo Leitão e Silva	Professor/Researcher	ESTM
Maria Rita Vala dos Santos Ascensão	Tech./Admin. Staff	ESTM
Pedro Miguel Nunes Correia	Tech./Admin. Staff	ESTM
Silvia Maria Santos Jesus	Tech./Admin. Staff	ESTM
Susana Luísa da Custódia Machado Mendes	Professor/Researcher	ESTM
Tatiana Filipa Guerra Mendes	Student	ESTM
Veronica Nobre de Oliveira	Professor/Researcher	ESTM
Zulmira Guadalupe Salgueiro Bule	Tech./Admin. Staff	ESTM

2nd of November of 2015 - Campus 3, ESAD.CR Auditorium

Alexandra Margarida Fernandes Aires de Abreu	Professor/Researcher	ESAD.CR
Ana Maria Pratas Dos Reis	Tech./Admin. Staff	ESAD.CR
Francisco António da Silva Barreto Fernandes	Professor/Researcher	ESAD.CR
Isabel Maria Rodrigues Barreto Fernandes	Professor/Researcher	ESAD.CR
João Paulo dos Santos Marques	Professor/Researcher	ESSLei
João Pedro Faustino dos Santos	Professor/Researcher	ESAD.CR
João Vasco de Oliveira Mateus	Professor/Researcher	ESAD.CR
José Emanuel Costa Henriques Brás	Professor/Researcher	ESAD.CR
José Luís de Almeida Silva	Professor/Researcher	ESAD.CR
Luísa Arroz Correia Albuquerque	Professor/Researcher	ESAD.CR
Manuel António de Jesus Ribeiro	Tech./Admin. Staff	ESAD.CR
Michael Schön	Professor/Researcher	ESTM
Rita Alexandra Cainço Dias Cadima	Professor/Researcher	ESECS
Rodrigo Eduardo Rebelo da Silva	Professor/Researcher	ESAD.CR
Rui Manuel Ferreira Leal	Professor/Researcher	ESAD.CR
Samuel José Travassos Rama	Professor/Researcher	ESAD.CR
Sérgio Gomes Pires Gonçalves	Professor/Researcher	ESAD.CR

2nd PHASE

1st of February of 2016 - Campus 2, Auditorium B

Alcina Teresa Gaspar Ferreira	Professor/Researcher	ESTG
Ana Cristina Ferreira de oliveira Rodrigues	Professor/Researcher	ESSLei
Ana Cristina Soares de Lemos	Professor/Researcher	ESTG
Ana Isabel Fernandes Querido	Professor/Researcher	ESSLei
Ana Isabel Lambelho Costa	Professor/Researcher	ESTG
Ana Lúcia Marto Sargento	Professor/Researcher	ESTG
Ana Patrícia Sousa Pereira	Tech./Admin. Staff	SAPE
Ana Raquel Martins	Tech./Admin. Staff	ESTG
António Carlos Ruivo Duarte	Professor/Researcher	ESTG
António José Pinto Pedrosa	Professor/Researcher	ESTG
Augusto Manuel Eusébio	Professor/Researcher	ESTG
Bruno Pereira Carreira	Professor/Researcher	ESSLei
Carla Sofia da Silva Piscarreta Damásio	Professor/Researcher	ESSLei
Carlos Alberto Silva Campos	Professor/Researcher	ESTG
Carlos Capela	Professor/Researcher	ESTG
Carlos Fernando de Almeida Grilo	Professor/Researcher	ESTG
Carlos Manuel da Silva Rabadão	Professor/Researcher	ESTG
Cidália Daniela Dionísio de Almeida Pereira	Professor/Researcher	ESSLei
Cidália dos Anjos Martinho Macedo	Professor/Researcher	ESTG
Dora Conde	Tech./Admin. Staff	ESTG
Eugénio Pereira Lucas	Professor/Researcher	ESTG
Fernando Ferreira da Cruz	Professor/Researcher	ESTG
Graça Maria Santos Batista Seco	Professor/Researcher	SAPE
Helena da Conceição Borges Pereira Catarino	Professor/Researcher	ESSLei
Helena Maria Coelho da Rocha Terreiro Galha Bártolo	Professor/Researcher	ESTG
João Miguel Charrua de Sousa	Professor/Researcher	ESTG
João Pedro Cruz da Silva	Professor/Researcher	ESTG
João Rafael da Costa Sanches Galvão	Professor/Researcher	ESTG
Jorge dos Santos Freitas Oliveira	Professor/Researcher	ESTG
José Carlos Quaresma Coelho	Professor/Researcher	ESSLei
José Guilherme Leitão Dantas	Professor/Researcher	ESTG
Judite Catarina Sousa Ventura	Professor/Researcher	ESTG
Judite Santos Vieira	Professor/Researcher	ESTG
Lígia Catarina Marques Febra	Professor/Researcher	ESTG
Luís Cotrim	Professor/Researcher	ESTG
Luis Manuel de Jesus Coelho	Professor/Researcher	ESTG
Luis Miguel Costa Carrão	Professor/Researcher	ESSLei
Luis Miguel Igreja Aires	Professor/Researcher	ESTG
Luís Miguel Pires Neves	Professor/Researcher	ESTG
Luisa Maria Silva Gonçalves	Professor/Researcher	ESTG
Maria Alexandra Abreu Henriques Seco	Professor/Researcher	ESTG
Maria da Saudade de Oliveira Custódio Lopes	Professor/Researcher	ESSLei
Maria Eduarda da Silva Teixeira Fernandes	Professor/Researcher	ESTG

Maria Helena Coelho Ribeiro	Professor/Researcher	ESTG
Maria Leopoldina Mendes Ribeiro de Sousa Alves	Professor/Researcher	ESTG
Maria Luisa Fernandes C. Santos	Professor/Researcher	ESSLei
Maria Micaela Gonçalves Pinto Dinis Esteves	Professor/Researcher	ESTG
Maria Pedro Sucena Guarino	Professor/Researcher	ESSLei
Mário Acácio Borges de Melo Correia de Oliveira	Professor/Researcher	ESECS
Mário João Gonçalves Antunes	Professor/Researcher	ESTG
Marisa Catarina da Conceição Dinis	Professor/Researcher	ESTG
Marta Isabel Conceição Henriques	Tech./Admin. Staff	ESTG
Nelson Simões Oliveira	Professor/Researcher	ESTG
Nuno Fonseca	Professor/Researcher	ESTG
Olga Freitas Craveiro	Tech./Admin. Staff	ESTG
Patrício Rodrigues Domingues	Professor/Researcher	ESTG
Pedro Miguel Cardoso Gago	Professor/Researcher	ESTG
Ricardo Filipe Gonçalves Martinho	Professor/Researcher	ESTG
Ricardo José Leal Martins	Professor/Researcher	ESTG
Rita Margarida Teixeira Ascenso	Professor/Researcher	ESTG
Romeu Manuel Vieira Vitorino	Professor/Researcher	ESTG
Sandra Cristina Fernandes Amado	Professor/Researcher	ESSLei
Sandra da Graça Pereira Alves	Tech./Admin. Staff	SAPE
Sofia Alexandra Gualdino Martins Filipe	Tech./Admin. Staff	ESTG
Susana Margarida Rodrigues Custódio	Professor/Researcher	ESSLei
Vânia Sofia Santos Ribeiro	Professor/Researcher	ESSLei
Vitor Hugo Santos Ferreira	Professor/Researcher	ESTG
Vitor Manuel de Oliveira Pegado de Noronha e Távora	Professor/Researcher	ESTG

2nd of February of 2016 - Campus 1, Auditorium 1

Alda Maria Rodrigues da Silva	Tech./Admin. Staff	SC
Alexandra Isabel Mendes Pereira	Tech./Admin. Staff	ESECS
Alzira Maria Rascão Saraiva	Professor/Researcher	ESECS
Ana Lúcia Lopes Duarte	Tech./Admin. Staff	SC
Ana Margarida D' Aires Pinto Basto Carreira	Professor/Researcher	ESECS
Ana Maria de Sousa Neves Vieira	Professor/Researcher	ESECS
Ana Paula das Neves Gomes	Tech./Admin. Staff	SC
Ana Zita Lopes Baptista de Oliveira	Tech./Admin. Staff	SC
Aurélio Jorge Fernandes Cardoso	Tech./Admin. Staff	SC
Carla Sofia Costa Freire	Professor/Researcher	ESECS
Catarina Frade Mangas	Professor/Researcher	ESECS
Catarina Maria Nogueira Marques da Cruz Menezes	Professor/Researcher	ESECS
Célia Maria Adão de Oliveira Aguiar de Sousa	Professor/Researcher	ESECS
Clarinda Luísa Ferreira Barata	Professor/Researcher	ESECS
Filipe Alexandre Silva Santos	Professor/Researcher	ESECS
Hélia Gonçalves Pinto	Professor/Researcher	ESECS
Hugo Alexandre Lopes Menino	Professor/Researcher	ESECS

Alda Maria Rodrigues da Silva	Tech./Admin. Staff	SC
Alexandra Isabel Mendes Pereira	Tech./Admin. Staff	ESECS
Alzira Maria Rascão Saraiva	Professor/Researcher	ESECS
Ana Lúcia Lopes Duarte	Tech./Admin. Staff	SC
Ana Margarida D' Aires Pinto Basto Carreira	Professor/Researcher	ESECS
Ana Maria de Sousa Neves Vieira	Professor/Researcher	ESECS
Ana Paula das Neves Gomes	Tech./Admin. Staff	SC
Ana Zita Lopes Baptista de Oliveira	Tech./Admin. Staff	SC
Aurélio Jorge Fernandes Cardoso	Tech./Admin. Staff	SC
Carla Sofia Costa Freire	Professor/Researcher	ESECS
Catarina Frade Mangas	Professor/Researcher	ESECS
Catarina Maria Nogueira Marques da Cruz Menezes	Professor/Researcher	ESECS
Célia Maria Adão de Oliveira Aguiar de Sousa	Professor/Researcher	ESECS
Clarinda Luísa Ferreira Barata	Professor/Researcher	ESECS
Filipe Alexandre Silva Santos	Professor/Researcher	ESECS
Hélia Gonçalves Pinto	Professor/Researcher	ESECS
Hugo Alexandre Lopes Menino	Professor/Researcher	ESECS
Mário Acácio Borges de Melo Correia de Oliveira	Docente/Investigador	ESECS
Mark Daubney	Docente/Investigador	ESECS
Nuno Miguel Pires Alves Amaro	Docente/Investigador	ESECS
Pedro Gil Frade Morouço	Docente/Investigador	ESECS
Ricardo Manuel das Neves Vieira	Docente/Investigador	ESECS
Rita Margarida Gaivoto Anastácio	Técnico/Administrativo	SC
Romain Gillain Munõz	Docente/Investigador	ESECS
Rúben Miguel Fernandes de Almeida	Técnico/Administrativo	ESECS
Sandrina Diniz Fernandes Milhano	Docente/Investigador	ESECS
Sara Mónico Lopes	Docente/Investigador	ESECS
Sofia Alexandra Ferreira da Conceição e Sousa	Técnico/Administrativo	SC
Susana Alexandre dos Reis	Docente/Investigador	ESECS
Susana Manuela Franco Faria de Sousa	Docente/Investigador	ESECS
Susana Margarida da Costa Nunes	Docente/Investigador	ESECS

4th of February of 2016 - Campus 3, ESAD.CR Auditorium

Ana Cristina Pereira Sacramento	Professor/Researcher	ESAD.CR
Anabela Figueiredo Machado Monteiro	Tech./Admin. Staff	ESAD.CR
Célia de Melo Bragança	Professor/Researcher	ESAD.CR
Diogo Lopes Saldanha	Professor/Researcher	ESAD.CR
Fernando Alípio Brízio Pires	Professor/Researcher	ESAD.CR
Filipe João Duarte Santos Alarcão e Silva	Professor/Researcher	ESAD.CR
Francisco António da Silva Barreto Fernandes	Professor/Researcher	ESAD.CR
Guilherme Abel Ferreira de Mendonça	Tech./Admin. Staff	ESAD.CR
Helena Maria de Araújo Carvalho	Professor/Researcher	ESAD.CR
Isabel Maria Rodrigues Barreto Fernandes	Professor/Researcher	ESAD.CR
João José de Sousa Bonifácio Serra	Professor/Researcher	ESAD.CR

João Pedro Faustino dos Santos	Professor/Researcher	ESAD.CR
José Eduardo Nunes Leitão Machado	Professor/Researcher	ESAD.CR
José Manuel Couceiro Barosa Correia Frade	Professor/Researcher	ESAD.CR
Luís André Pereira Veludo Filipe	Tech./Admin. Staff	SAPE
Luísa Maria Pires Barreto	Professor/Researcher	ESAD.CR
Manuel António de Jesus Ribeiro	Tech./Admin. Staff	ESAD.CR
Maria Paula Nogueira Fernandes Lomelino de Freitas	Professor/Researcher	ESAD.CR
Rui Manuel Ferreira Leal	Professor/Researcher	ESAD.CR
Sérgio Gomes Pires Gonçalves	Professor/Researcher	ESAD.CR

5th of February of 2016 - Campus 4, ESTM Auditorium

Américo Do Patrocínio Rodrigues	Professor/Researcher	ESTM
Ana Cristina Ferreira Batista Rocha	Tech./Admin. Staff	ESTM
Ana Luisa Oliveira Gonçalves Pires	Professor/Researcher	ESTM
Ana Margarida Paulino Violante Pombo	Professor/Researcher	ESTM
Ana Marques	Tech./Admin. Staff	ESTM
Ana Marta Aleixo Figueiras dos Santos	Tech./Admin. Staff	SC
Ana Sofia Viana;	Professor/Researcher	ESTM
André Gustavo Cavadas da Horta	Professor/Researcher	ESTM
Carla Sofia Ramos Tecelão	Professor/Researcher	ESTM
Carlos Alberto de Matos Domingos	Professor/Researcher	ESTM
Clélia Paulete Correia Neves Afonso	Professor/Researcher	ESTM
Filipa Isabel Estevão Ferreira Bento	Tech./Admin. Staff	ESTM
Francisco José Nicolau Domingos	Professor/Researcher	ESTM
Inês Paulo Cordeiro Brasão	Professor/Researcher	ESTM
Isabel Maria Martins dos Santos Pinheiro	Tech./Admin. Staff	ESTM
João Assis da Silva Domingues	Tech./Admin. Staff	ESTM
João Mendes Reboleira	Professor/Researcher	ESTM
João Viljoen De Vasconcelos	Professor/Researcher	ESTM
José Miguel do Rosário Nunes	Tech./Admin. Staff	ESTM
Luís Lima Santos	Professor/Researcher	ESTM
Marco Filipe Loureiro Lemos	Professor/Researcher	ESTM
Maria De Deus Melo Da Costa	Tech./Admin. Staff	ESTM
Maria Manuel Gil de Figueiredo Leitão e Silva	Professor/Researcher	ESTM
Maria Rita Vala dos Santos Ascensão	Tech./Admin. Staff	ESTM
Maria Sofia Fernandes de Pinho Lopes	Professor/Researcher	ESTM
Nuno Almeida	Professor/Researcher	ESTM
Paulo Jorge de Sousa Maranhão	Professor/Researcher	ESTM
Pedro Miguel Nunes Correia	Tech./Admin. Staff	ESTM
Roberto Carlos Marçal Gamboa	Professor/Researcher	ESTM
Rui Alberto de Freitas Martins	Professor/Researcher	ESTM
Rui Manuel Maneta Ganhão	Professor/Researcher	ESTM
Sérgio Araújo	Professor/Researcher	ESTM
Sérgio Miguel Franco Martins Leandro	Professor/Researcher	ESTM

Sílvia Lara Bolota Taveira Vieira	Tech./Admin. Staff	ESTM
Silvia Maria Santos Jesus	Tech./Admin. Staff	ESTM
Susana Luísa da Custódia Machado Mendes	Professor/Researcher	ESTM
Teresa Margarida Lopes da Silva Mougá	Professor/Researcher	ESTM
Teresa Maria Coelho Baptista	Professor/Researcher	ESTM
Zulmira Guadalupe Salgueiro Bule	Tech./Admin. Staff	ESTM

3rd of February of 2016, 10h00 - Headquarters

João Paulo Marques	Vice-President
Rita Cadima	Vice-President
Eugénia Ribeiro	Administrator
Pedro Costa	Chief of Staff
Mónica Ventura	Director of DSJ
Isabel Paraíso	Director of DSJ
Isabel Duarte	Director of DSJ
Maria Dulce Correia	Director of DSJ
Ricardo Grilo	Director of DSJ
Marta Simões Pereira	Director of DSJ
Helena Silva Santos	Director of DSJ
Paula Marisa Gomes	Secretary of ESECS
Marta Henriques	Secretary of ESTG
Ana Reis	Secretary of ESAD.CR
Maria de Deus Costa	Secretary of ESTM
Cláudia Vala	Secretary of ESSLEI

3rd of February of 2016, 10h00 - CDRSP

Rui Pedrosa	Vice-President
Judite Vieira	LSRE/LCM
Sérgio Faria	IT
João Miguel Sousa	INESC
Vitor Fernandes	CIIC
Luís Barbeiro	NIDE
Marco Lemos	MARE
João Vasconcelos	GITUR
João dos Santos	LIDA
Catarina Mangas	iACT
Ana Sargento	CIGS
Luís Coelho	CIEQV
Nuno Alves	CDRSP
Maria dos Anjos Dixe	UIS
Ricardo Vieira	CICS.NOVA

23rd of February of 2016, 15h00 - Head Offices

Nuno Mangas	President
Rui Pedrosa	Vice-President
Rita Cadima	Vice-President
Bruna Santiago	President of AE ESECS
Pedro Pereira	President of AE ESTG
Joel Rodrigues	Assembly President AE ESTG
Élton Rebelo	President of AE ESSLEI

C. ONLINE PARTICIPATION

Period: 2nd to 17th of November of 2015

Sérgio Leandro	Professor/Researcher
Nelson Jorge	Tech./Admin. Staff
Ana Lúcia Lopes Duarte	Tech./Admin. Staff
Luís Lima Santos	Professor/Researcher
Laura Chagas	Professor/Researcher
Graça Seco	Professor/Researcher
Carla Freire	Professor/Researcher
Sara Dias	Professor/Researcher
Maria Pedro Sucena Guarino	Professor/Researcher
Catarina Mangas	Professor/Researcher
Judite dos Santos Vieira e Mário Acácio Oliveira	Professor/Researcher
Ana Antunes	Tech./Admin. Staff
Carolina Henriques	Professor/Researcher
Cláudio Esperança	Tech./Admin. Staff
Nuno Amaro	Professor/Researcher
Inês Reis	Student
Jorge Farromba	Professor/Researcher
Ana Silva	Tech./Admin. Staff
João Assis	Tech./Admin. Staff
Ilda Maria Correia da Silva	Tech./Admin. Staff
Luis Filipe	Tech./Admin. Staff
Márcio Filipe Rainho Duarte	Tech./Admin. Staff

Period: 26th of January to 18th of February of 2016

Yana	Student
Raquel Antunes	Professor/Researcher
Ana Lúcia Marto Sargento	Professor/Researcher
Helena Bártolo	Professor/Researcher

Sandra Amado	Professor/Researcher
Maria da Saudade de Oliveira Custódio Lopes	Professor/Researcher
Marco Monteiro	Professor/Researcher
Eugénia Ribeiro	Tech./Admin. Staff
Ana Marta Aleixo Figueiras dos Santos	Tech./Admin. Staff
Judite Vieira	Professor/Researcher
Silva	Student
Pedro Costa	Tech./Admin. Staff
Maria Eduarda da Silva Teixeira Fernandes	Professor/Researcher
Luís Eva Ferreira	Professor/Researcher
Alexandre Correia	Student
Catarina Mangas	Professor/Researcher
Dulce Correia	Tech./Admin. Staff
Luis Filipe	Tech./Admin. Staff
José Carlos Marques	Professor/Researcher
Joel Vasco	Professor/Researcher
Ana Silva	Tech./Admin. Staff
Maria Dulce Gomes	Professor/Researcher