

## DETECTING YOUNG TALENT AT REPSOL

## DETECTANDO TALENTO JOVEN EN REPSOL

JAVIER GARCÍA CABREJAS  
[javiergc2018@gmail.com](mailto:javiergc2018@gmail.com)  
EAE business School

ELENA GARCÍA CAMPILLO  
[elenagarcia300@gmail.com](mailto:elenagarcia300@gmail.com)  
EAE business School

SOFÍA ZAMIT GONZÁLEZ  
[sofiazamitgonzalez@gmail.com](mailto:sofiazamitgonzalez@gmail.com)  
EAE business School

### Summary

Spain is currently one of the countries in Europe with the highest youth unemployment and school dropout rates. Another reality is the existing mismatch between the training offer and its subsequent job placement. This generates a problem of shortage of specific talent, mainly in profiles related to digitalization and renewable energies, which are in high demand in the current business context. The Diamantes en Bruto Program (Rough Diamonds Program) allows Repsol to identify young people with concerns, skills and competencies oriented to the energy and digital branches. Focusing on the oil and energy sector, this project achieves its objectives through the use of a complete assessment specifically designed for the target profile through three types of tests: predictive tests, role play and group dynamics.

**Key words:** young talent, detection, digitalization, sustainability, renewable energies.

### Abstract

Currently, Spain is one of the countries in Europe with the highest rate of youth unemployment and school dropout. Another reality is the mismatch between the educational offer and its subsequent job placement. This generates a problem of a shortage of specific talent, mainly in profiles related to digitization and renewable energies, which are so in demand today.



The Rough Diamonds Program allows identifying young people with concerns, skills and competencies oriented to the energy and digital branches for Repsol. Focusing on the oil and energy sector, this project achieves its objectives through the use of a complete assessment specifically designed for the target profile through three types of tests: predictive tests, role play and group dynamics.

**Keywords:** youth talent, detection, digitalization, sustainability, renewable energies.

RECEIVED: 09-02-2024 ACCEPTED: 11-05-2024 PUBLISHED: 30-06-2024

**How to quote:** García et al. (2024). Detecting young talent at Repsol. *Almanaque*, 43, 47 - 76.  
<https://doi.org/10.58479/almanaque.2024.105>

## INDEX

Summary	47
Abstract	47
Repsol as a company	51
Participant profile	53
Renewable energies	57
Digital transformation	59
External analysis	61
Youth unemployment	61
School dropout rate	61
Most demanded profiles and skills	61
Brain drain	62
Internal analysis	63
Organization chart and staffing	63
Turnover rate	64
Company target: net zero emissions 2050	64
Profiles and skills most in demand	65
Similar programs	66
SWOT	66

Description of the Human Resources area	67
Specific Human Resources needs	68
Value proposition: Human Resources Plan	69
Presentation and objectives of the plan	69
Benefits	70
Bibliographic References	71

## Repsol as a company

Repsol's origins date back to 1927 when CAMPSA, the company in charge of administering the state oil monopoly, was created. This monopoly ended in 1947, with the exception of distribution and marketing. From the following year onwards, other companies such as REPESA, which inaugurated the first lubricant and asphalt refinery in 1951, were set up, Repsol being its most important brand, dedicated to the commercialization of lubricants (Martos, 2015). In 1987 it absorbed Butano S.A., a company dedicated to the production and distribution of LPG, under the name of Repsol Butano (de Castro, 2019).

The reorganization of the sector began in 1981, with the creation of the NHI, whose objective is to coordinate and control the business activities of the public sector in the area of hydrocarbons. Years later, as Spain was in the process of joining the EEC, it transferred the national transport and logistics network to CAMPSA. In 1985, the State sold its shares in CAMPSA to the refining companies. Finally, in 1986 INH created Repsol S.A. with the aim of transferring all its industrial participation, finalizing this process a year later (de Castro, 2019).

In subsequent years Repsol has expanded internationally and is present in more than 30 countries on five continents, especially in the Americas, where it has a presence in Peru, Brazil, Colombia, Chile, Mexico, Canada, and the United States, among others, and in Asia, as can be seen in Figure 1. It has a diverse team with more than 25,000 employees of 79 nationalities, which generates a very positive and innovation-oriented multicultural talent.

Also noteworthy is the creation, in 2014, of Repsol's corporate headquarters. Designed by Rafael de La-Hoz and built under sustainability criteria as it has more than 1,300 photovoltaic panels and its accessibility has been supervised by ONCE. The creation of this headquarters has positioned Repsol as a company whose culture is committed to people, society and the planet, reflecting the brand values based on good communication, collaboration and transparency (Cantis, 2013).



Figure 1. Repsol in the world  
Source: Repsol (2021a)

Repsol's natural evolution is towards a decarbonized energy model and its primary objective is to become a company with zero net carbon emissions by 2050. The business model it proposes incorporates the exploration and production of oil and gas and the commercialization of energy solutions for the home and mobility. As stated by Repsol (2020) in its 2021-2025 Strategic Plan, its four main lines of business are:

- *Upstream*. The start of the activity begins with the exploration of deposits where technology is used to develop geology, geophysics, and environmental impact studies that help identify the potential of the area. On the development side, a collection system and processing plants are implemented, always under the premise of sustainability, safety, and transparency. On the production side, the teams use their full potential for oil and gas extraction, maintenance work, and hydrocarbon transportation. In figures, Repsol produces 650,000 barrels per day, has reserves of 1,852 million barrels, accumulates up to 70% of its reserves in the form of gas and has 14 short-cycle and lucrative return projects in its portfolio.
- *Industrial*. Repsol is leading in Europe thanks to its competitiveness and the quality of its assets. The industrial business is divided into 4 parts: ○ *Trading*. Where the

supply and marketing of crude oil and products for refining systems and other needs is optimized.

- Refining. Supported by one of the most innovative and efficient systems, Repsol is able to generate higher-value products with lower carbon intensity. Location is a key factor since it has distribution points in the Atlantic Ocean and the Mediterranean Sea.
- Chemicals. It is present in many everyday objects that provide greater well-being and safety, such as the automotive industry, agriculture, construction, packaging, housing, etc.
- Marine terminals. Operates in more than a dozen terminals located in Spain, Peru, Canada and Portugal.
- Customer. The customer and his energy needs are at the center of the strategy. Within the customer business, there are 3 sections: ○ Sustainable mobility. Repsol's laboratory works with a global vision where it applies various technologies and solutions. Some of them are the creation of zero-emission synthetic fuels, next-generation batteries, advanced fuels that reduce consumption and emissions, more efficient lubricants with lower CO<sub>2</sub> emissions, the application of autogas as an alternative fuel, the creation of fuel oils for maritime mobility to reduce emissions and the *Spain 2017* project that allows understanding and anticipating how energy will contribute to transportation in the present and the future.
- Smart home solutions. Smart homes are those that possess a system that allows monitoring, controlling, and optimizing the consumed energy. Some of the solutions are: "Your Online Office" which is a service to adapt the home towards a smart home, "Repsol Solify" dedicated to the installation of solar panels or "Repsol Solmatch" where you can share solar energy with other customers.
- Products and services. Repsol offers its own services developed with the highest quality, the greatest safety, and a high level of innovation. The products and services are asphalts, aviation, specialties, lubricants, chemicals, *oil & gas trading*, service stations, butane and propane gas, diesel and fuel oils, light, and gas.
- Low-emissions businesses. This is one of the pillars of Repsol's strategy and key to becoming a zero-emissions company. The international expansion strategy expects to generate 7,500 MW in 2025 and 15,000 MW in 2030.

## Participant profile

Pineda and Aliño (1999) define adolescence as the stage between childhood and adulthood, between the ages of ten and nineteen, characterized by major biological, psychological and social changes that generate crises, conflicts and contradictions. In addition to being a period

of adaptation to physical changes, it is also a stage of great determination towards greater psychological and social independence.

Some psychosocial aspects integrated into a series of characteristics and behaviors present in adolescence that should be taken into account would be:

- Search for identity.
- Need for independence.
- Group trend.
- Evolution from concrete to abstract thinking.
- Sexual manifestations and behaviors.
- Contradictions in behavioral manifestations and mood swings.
- Conflicted relationships with parents.
- Social vindictive attitude.
- Choice of an occupation and the need for learning and training to perform it.
- Need to formulate and have answers for a life project.

Delpino and Eresta (2012) in their report on La Liga Española de la Educación de Utilidad Pública (The Spanish League of Public Utility Education), reflect the vital moment that students are going through and the concerns related to this moment are reflected in the opinion polls of the Instituto de la Juventud (Youth Institute), which determine their areas of greatest concern in unemployment, education, housing, economic problems and concerns about personal situations.

Also in the study carried out by the Spanish League of Public Utility Education, the following stand out among the concerns of adolescents in general with regard to the future: failure in their studies, loss of friendships, economic hardship, family conflicts and unemployment. In another question which refers to the personal concerns of each one of them, the main concerns are the choice of career, difficulties in studies, dating, the economic situation, the crisis, and the family economic situation (Figure 2).

The case study is oriented to adolescents between sixteen and eighteen years of age, who fall within the so-called late adolescence. In this phase, much of the physical growth and development has been completed, and a stage begins where important educational and occupational decisions must be faced. In addition, impulses are better controlled and their identity has matured, including the sexual aspect, which brings them closer to becoming a young adult.



n	2005 (4000)		2016 (1250)		2020 (1699)	
	Muy importante	Muy + bastante importante	Muy importante	Muy + bastante importante	Muy importante	Muy + bastante importante
Salud	82	97	83	97	81,4	96,4
Familia	80	98	81	97	73,6	94,6
Educación	-	-	-	-	68,0	95,6
Igualdad de género	-	-	-	-	67,4	89,8
Igualdad social	-	-	-	-	58,9	90,2
Medioambiente	-	-	-	-	55,1	89,3
Trabajo	60	92	57	96	50,9	90,7
Vida moral y digna	52	85	53	93	59,6	88,1
Amigos y conocidos	68	95	62	95	49,1	90,7
Tiempo libre y ocio	49	92	47	90	48,6	90,8
Gestionar dinero	55	91	49	93	44,1	89,2
Pareja	-	-	48	84	44	72,1
Vida sexual satisfactoria	49	85	29	78	32,8	72,6

Figure 2. Issues of concern to young people  
Source: Delpino and Eresta (2012)

Furthermore, some of the main conclusions of Fontcuberta et al (2021), from the report Jóvenes españoles 2021 can be found in this study. Ser Joven en tiempos de pandemia (Being Young in times of pandemic), data from which are included in Figure 3:

- Young people concerned about the environment with a greater political commitment, but without considering institutions credible. This table shows the evolution during the studies carried out since 1994 and the evolution of youth concerns. On the podium stand out: health (81.4%), family (73.6%) and education (68%).
- Young people recognize the value of education and the importance of educational centers as places for the transmission of values and development. The main linkage of studies is caused by the probability of finding a job (41%). Still 30% of young people who drop out of school do so for economic reasons.
- Social networks gain importance and the significance of friendships decreases. In 2016, for 62% of respondents, their friends were very important in their lives. In 2020, this percentage was only 49%. Technology is a constant and indispensable element in their social relationships. Some of the benefits of its use according to respondents are ease of connecting with people with the same interests (6.7 out of 10) and with their friends (6.49). Among the negative aspects are: the possibility of misunderstandings (6.63) and the difficulty in controlling the image projected on social networks (6.14). Moreover, 25% of young people admit to having been assaulted, mistreated or bullied through social networks.
- Climate change is considered the main problem in Spain. According to the report, 80% of the young people surveyed consider environmental protection a priority and

81% believe that their lifestyle is fundamental to the conservation of the planet. For young Spaniards, climate change is the main problem (8.07 out of 10).

- Technological youth. The current context has caused the online space to be where life happens and important things take place. Its main use is for relationships, communication, and audiovisual entertainment. The most popular activities are: listening to music (73%), watching movies or series (70%), surfing the net (70%), and watching TV (64%).
- 46% of young people believe that their future life will be better than that of their parents, but a similar percentage believes that they will have a lot of difficulty forming a home and being financially self-sufficient. Forty-nine percent believe they will have a lot of difficulty working at what they like, and 48% will face a lot of adversities in getting adequate housing. More than half (52%) believe that it is very likely that they will have to emigrate in order to be able to work in the future to improve their quality of life or to find jobs with better conditions. It is striking that young people with the worst socioeconomic conditions are the most reluctant to build their future outside Spain.

n	2005 (4000)		2016 (1250)		2020 (1609)	
	Muy importante	Muy + bastante importante	Muy importante	Muy + bastante importante	Muy importante	Muy + bastante importante
Salud	82	97	83	97	81,4	96,4
Familia	80	98	81	97	73,6	94,6
Educación	-	-	-	-	68,0	95,6
Igualdad de género	-	-	-	-	67,4	89,8
Igualdad social	-	-	-	-	58,9	90,2
Medioambiente	-	-	-	-	55,1	89,3
Trabajo	60	92	57	96	50,9	90,7
Vida moral y digna	52	85	53	93	50,6	88,1
Amigos y conocidos	63	95	62	95	49,1	90,7
Tiempo libre y ocio	49	92	47	90	48,6	90,8
Ganar dinero	55	91	49	93	44,1	89,2
Pareja	-	-	48	84	44	77,1
Vida sexual satisfactoria	49	85	39	78	32,8	72,6
Competencia profesional	-	-	-	-	31,6	78,4
Política	7	25	12	41	16,5	54,1
Religión	6	19	5	16	10,6	22,7

Figure 3. History of young people's concerns  
Source: Fontcuberta et al (2021)

With all the information gathered, an empathy map (Figure 4) has been drawn up describing the profile of the student who participates in the Rough Diamonds Program. The aim of this map is that the reader, through a series of questions related to the student’s feelings, can get to know him/her better.



Figure 4. Candidate empathy map

## Renewable energies

Renewable energies are defined as those that come from natural sources that produce energy inexhaustibly and indefinitely. In addition to being inexhaustible, they have little or no negative impact on the environment and are therefore considered clean energies. For example, solar, wind or tidal energy are renewable sources of energy; others, such as forest mass, are also considered renewable because they regenerate naturally over time. It should be noted that renewable energies can be applied and exploited locally, helping to reduce the dependency of populations on large energy producers, favoring economic development and job creation (Let's Take Care of the Planet, 2018).

For Twidell and Weir (2006) renewable energy is “energy that is obtained from continuous and recurring energy streams in the natural world”, while for Sorensen (2017) it is any “energy

flow that is restored at the same rate at which it is used” or, also, “the use of any energy reservoir that is replenished at a rate comparable to that at which it is extracted”.

Some of the advantages over traditional energies are:

- They contribute to reducing greenhouse gas emissions that cause global warming. They are considered clean energies because they respect the environment.
- They reduce energy production costs, create jobs, and reduce dependence on large producers and countries with fuel reserves.
- Production is indefinite since they are inexhaustible and unlimited sources.

In Spain, the main renewable energies are wind energy (51%), hydro (36%) and solar energy (8%). Total production will be 44% of the country’s energy demand by the end of 2020 (Cuidemos el planeta, 2018).

At Repsol, renewable energies are those obtained from natural sources such as the sun, wind, water, or plant or animal biomass, and are therefore inexhaustible and do not produce greenhouse gases. Further, technological advances have made it possible to reduce production costs, as well as the maintenance costs of logistics centers, making renewable energies more accessible and competitive. Repsol generates 3,386 MW and has another 2,549 MW under development (Repsol, 2021d). Repsol’s main sources of renewable energy are offshore and onshore wind, hydro and solar photovoltaic.

With respect to the competition in the renewable energy sector and that is present nationally, the following companies stand out for their main sources of renewable energy and their generation capacity.

- Iberdrola. It has been the model company in terms of its commitment to renewable energies for more than two decades. Today it is a global reference and is leading the energy transition towards a low-emission economy. Its investment plans until 2030 aim to reach 95,000 MW of production. Iberdrola currently has a generation capacity of 34,800 MW. Its main renewable energy sources are onshore and offshore wind power and solar energy (Iberdrola, 2021).
- Endesa. It belongs to the Italian energy group Enel, whose company Enel Green Power is in charge of the renewable energy area and is the world leader in terms of production, reaching 49,000 MW in 2020. Its renewable energy sources are hydropower with 27,830 MW, wind power with 15,430 MW and solar power with 6,600 MW (Enel Green Power, 2021).
- Naturgy. It is a multinational energy company that stands out for being the leader in the gas sector and a benchmark in the electricity sector. Its strategy is to promote sustainable innovation where, also coincides with Repsol and the common goal of having zero emissions in 2050. Naturgy’s growth plan involves an investment of 8,700 euros, during the period 2021-2025, focused on attractive countries, with stable regulation and a solid currency. It currently produces 4,600 MW and aims to

reach 14,000 MW by 2025. Its main renewable energy sources are hydro with 2,100 MW, onshore wind with 2,000 MW and solar with 400 MW (Naturgy, 2021).

- Siemens Gamesa. It is one of the leading manufacturers of wind turbines. Its business model is focused on Onshore, which is the manufacture and installation of onshore wind turbines, with more than 40 years of experience. It is estimated that they have installed more than 94,600 MW worldwide. There is also the Offshore business, which focuses on the manufacture and installation of offshore wind turbines, and whose figures amount to 15,000 MW installed worldwide. Furthermore, worldwide forecasts estimate the installation of 55,000 MW per year until 2025 and 65,000 in 2030 for the Onshore business and more than 180,000 MW in the Offshore business for the period 2020-2030 (Siemens Gamesa, 2021).
- Grenergy. Founded in 2007 by 5 people, Grenergy produces 100% renewable electricity on a large scale. It currently has 470 MW installed and another 6,294 MW under development. Its growth strategy aims to reach 25,000 MW by 2023. Its renewable energy sources are onshore wind and solar. (Grenergy, 2021)
- Audax Renovables. Founded in 2000, Audax Renovables is the energy leader in the SME segment. It has a generation capacity of 2,498 MW and presence in Europe and Latin America. Its renewable energy sources are onshore wind and solar (Audax Renovables, 2021).
- Solaria. It started in 2002, and since then, it has become a leading company in the development and generation of photovoltaic solar energy. It is currently capable of generating more than 2,000 MW, with the goal of reaching 6,200 MW by 2025 and 18,000 MW by 2030 (Solaria, 2021).

In this research, renewable energy will be all energy that comes from natural resources, that is inexhaustible and has no impact on the environment.

## Digital transformation

Digital transformation in companies is a relatively new concept that goes hand in hand with the development of new technologies and the use of these as a search for competitive advantage. Martínez (2016) defines it as the application of digital capabilities to processes, products and assets to improve efficiency, customer value, manage risk and discover new profit opportunities. Other authors such as del Val (2016) relate it directly to the concept of Industry 4.0 as an industrial revolution caused by the increase in information technologies, mainly IT and software. And other authors identify it not only with its technological attribute, but also dependent on organizational and social elements (Reis et al, 2018).

For Repsol, digital transformation is a set of all the above definitions, as they identify it as the tool that relies on people and technology as a way to improve and competitive advantage by designing digital products and services, mainly through Big Data, IoT, omni-channeling, robotization or blockchain. They consider the transformation as a very important step in their

challenge towards decarbonization, so much so that, in 2021 they prepare their own dossier in which they develop each element that is part of this process and expose their data (Figure 5). Because its corporate strategy focuses, among other elements, on digitalization and innovation, as a lever for energy transition and sustainability on the path to its goal of decarbonization.

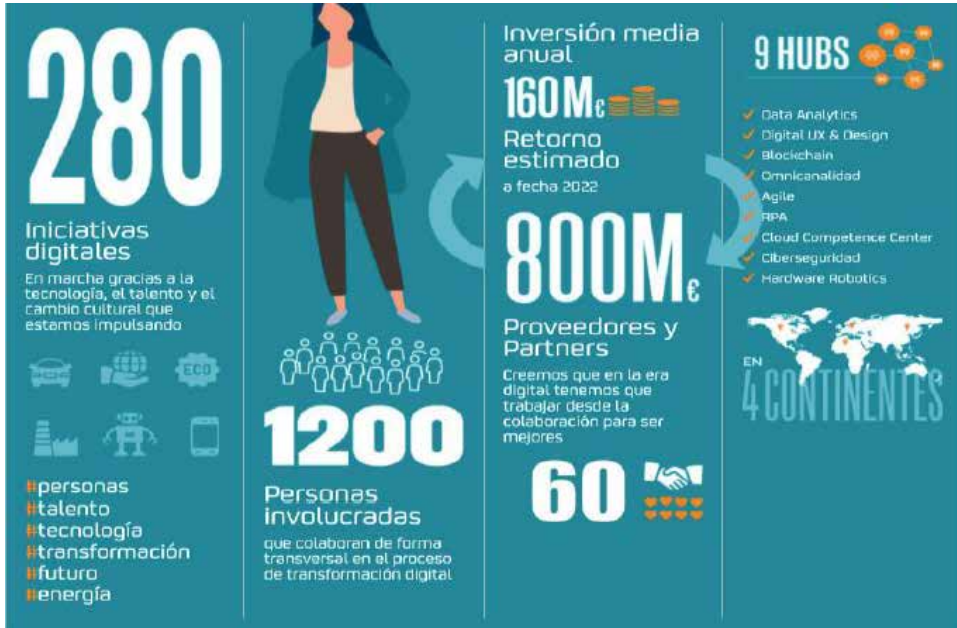


Figure 5. Digital transformation in data  
Source: Repsol

Repsol faces its digital transformation based on seven main values: improving its reliability and safety in operations, End to End intelligent programming and planning, excellent development of its operations and digitized processes, creation and implementation of digitally optimized assets, omnichannel to improve customer experience, implementation of new business models and becoming an Agile organization. To achieve these values, the company has opened its own research center for new technological solutions called Repsol Technology (Repsol, 2021b).

All these elements are incorporated and developed by teams of people highly specialized in different branches such as data analytics, UX&Design, blockchain, omnichannel, agile, software robotics, cloud competence center, cybersecurity and hardware robotics. These are the main profiles that guide Repsol to achieve its objectives and, therefore, one of the most important lines in which to detect talent.

## External analysis

For the correct design of the program, it is necessary to determine the present and future context in which society and Repsol find themselves, which motivates the necessary action of this project.

## Youth unemployment

The high rates of youth unemployment and the lack of future prospects is one of the major concerns of young people in Spain. The 2008 crisis highlighted this problem and the pandemic generated by Covid-19 has aggravated the situation. A whole generation (born between 1981-1996) has been dragging along these employability problems. This level of unemployment affects the country's development. Youth unemployment reached 56% in 2013 and still stands at 38%, well above the EU average. Added to the high unemployment rate is the labor precariousness resulting from 52% of temporary contracts. The sum of unemployment and precariousness increases insecurity and as a consequence in Spain, 64.5% of young people aged 18-34 have not been able to emancipate themselves and become economically independent. Unemployment affects young people with lower levels of education to a greater extent, reaching 63.8% for young people without higher education. As a result, the percentage of unemployed, uneducated and unskilled young people has risen to 17.3% (Missé, 2021).

## School dropout rate

Spain closes the year 2020 with a school dropout rate of 16%, far from the objectives of the European Union in the Europe 2020 Strategy, which set an average of 10% for member countries and 15% for Spain. This high figure has a very marked historical character since Spain has been leading the ranking of countries with the highest school dropout rate in Europe for decades. The reasons are gathered under 4 major dimensions; the personal dimension, the dimension of the family context, the social dimension and the dimension of the educational system, which in many cases are interrelated (Suberviola, 2021).

## Most demanded profiles and skills

This section reflects the new skills required for the coming years as well as the different profiles needed and the trend of their demand.

According to the World Economic Forum (WEF, 2020), in its The future of Jobs report 2020, the new jobs and skills required in the future will change drastically, where 85 million jobs may be displaced by machines and it is estimated that 97 million new roles will be created to adapt the division of labor between humans, machines and algorithms. Some of the new positions are data analysts, data scientists, artificial intelligence, machine learning specialists, etc., which demonstrates an acceleration of automation.

The study on Employability and HR in the energy sector: most demanded profiles and current and future situation of companies in the sector conducted by The Adecco Group Institute (2021) states that:

The most demanded profiles in energy companies are: engineers (65%), marketing and sales (30%), IT profiles (24%), staff personnel (22%) and operators (16%) (p. 2).

Looking towards the long-term future, the profiles that appear to be most in demand are those of technological transformation, according to 3 out of 4 companies. 58% believe that these are very important positions for the new technical models in charge of the energy transition (storage, aggregators, self-consumption, electric vehicles, etc.), and 50% think that there will also be a strong demand for specialists in renewable energies. While 1 in 4 believe that the most sought-after profiles are related to the field of sustainability (CSR, environment, governance) (p.4).

If we consider the selection processes in energy companies, what they value most when selecting a candidate is experience within the sector (42%), followed by training and technical knowledge (31%). Personal skills and values are considered by 25% of the companies, and only 3% on basic training in the sector (p.4).

The most valued skill sets are changing and among those highlighted are critical thinking and analysis, problem-solving and other self-management skills such as learning, resilience, stress tolerance and flexibility. These are some of the top skills in demand among employers by 2025, reflecting the different skill groups and the expected trend for the next 5 years, where the physical skills group is the most affected.

In the skills listed in the Top 15 prepared by the WEF for 2025, we can observe a marked trend, where skills such as analytical thinking and innovation, analysis, problem-solving or active learning are some of those at the top of the list.

According to the Adecco Group Institute's Energy Sector Employability and HR Study (2021):

78% of energy companies have accelerated their digitization model after the first few months of the pandemic, severely affecting the most in-demand skills (p.2).

The most valued skills in the energy sector are teamwork (57%), goal orientation (41%), problem-solving (35%), and learning ability (32%) (p.2).

### **Brain drain**

In Spain, the economic crisis of 2008 caused the so-called brain drain phenomenon. According to figures from the NSI (National Statistics Institute), the number of young people between 20-35 years old, including all nationalities, residing in Spain who emigrated reached 223,805 in 2013. In the section of young people of Spanish nationality, it was in 2014 when more young



people emigrated reaching the figure of 32,183. This figure began to fall in 2015 and stopped in its tracks due to the pandemic, but the problem has not disappeared.

This behavior associated with developing countries has been reproduced in Spain, mainly during the years of the economic crisis. The so-called war for talent is fundamental for the development of a country, and in Spain, young people point out some key points for the attraction, motivation and retention of talent such as diversity, relating it to a future-oriented mentality under a positive perception of the organization that increases the speed to innovate, access to diverse markets thanks to multiculturalism and another point is the reinvention of the job interview where the “soft-skills” concept has generated a change of mentality in the selection areas of companies that now prioritize the search for socio-emotional skills, key to select future job leaders.

## Internal analysis

This section provides an analysis of Repsol’s current situation at a general level, including its structure and distribution, its main strategy and the profiles and skills needed to achieve it, as well as other similar training programs carried out by Repsol.

## Organization chart and staffing

Repsol Global has four main lines of business: upstream, industrial, customer and low-emissions business. The latter line of business is gaining greater weight in its future outlook, as it encompasses the areas of digitalization and low-emission energy.

Figure 6 shows how Repsol's global organization chart has been formed. It is composed of the chairman, followed by the general director of the Chairman's Office, the general director of the Repsol Foundation and the CEO. This is followed by nine directors of equal rank:

- General Manager of Energy Transition, Sustainability, Technology & Deputy to the CEO.
- General Manager of Customer and Low Carbon Generation.
- Chief Financial Officer.
- General Director of Legal Affairs.
- General Director of Communication and Institutional Relations.
- General Director of Exploration and Production.
- Executive Director of Industrial Transformation and Circular Economy.
- Corporate Director of Digitalization and Global Services.
- Director of People and Organization.



Figure 6. Organizational Chart  
Source: Repsol (2021c)

The latest data on the workforce is provided by Repsol's 2020 Integrated Management Report (2021a), which indicates that the gender composition of the workforce in Europe in 2020 was 11,750 men and 6,602 women. The total number of employees in Spain was 16,646, of 60 different nationalities, with an age distribution at group level of 9.2% under 30 years old, 67.5% between 30 and 50 years old and 23.3% over 50 years old. This data demonstrates the need to detect young talent that can offer new ideas to the company.

## Turnover rate

Repsol indicates in its 2020 Integrated Management Report (2021a) that the voluntary turnover rate (number of voluntary departures over the total number of employees at the close of the same year) was in 2019 and 2020 at 6% and 5% respectively; the objective is to reduce it to the voluntary turnover rate in Europe, which is 3%. The first phase in an employee's working life where factors to reduce turnover can be identified is in the selection process, where a good fit of the person with the company's culture and objectives must be detected.

## Company target: net zero emissions 2050

Repsol has a clear objective, to reach 2050 with zero net emissions following the path of the Paris Agreement, being aware that they are the first company to set such an ambitious goal.

In order to achieve this goal, they are immersed in a strong industrial transformation that allows them to progress towards decarbonization, therefore, this change in the vision of the company's activity must be accompanied by a major digital and personal transformation of its employees. This scenario leads the company to require increasingly innovative and specialized profiles.

## Profiles and skills most in demand

Repsol focuses its corporate objective in a clear and direct way, the energy and digital transition; this entails a change in the needs of profiles and skills.

An analysis of the job offers currently available on LinkedIn and in the corporate employment exchange, as of October 3, 2021, has been carried out. This analysis shows that the profiles most in demand by the company itself are IT profiles, with knowledge in digitalization and transformation, engineers and technicians specialized in low-emission renewable energies and project managers, most of these positions being included under the Corporate Digitalization and Global Services Management. In detail some of the available offers:

- Machine learning applied scientist
- Solution Architect / Devops AWS
- Technical-commercial automotive engineer.
- Senior Data Engineer / Platform Architect
- Logistics and SMA purchasing manager.
- Lead retail operation.
- Responsible for solar mobility climate implementation region (SMASO): nine bids.
- Cybersecurity Architect.
- NNII Accounting and Reporting Analyst.
- Financial Markets Trader.
- Internal SCIF Technician - Temporary.
- Responsible for the development of new SME sales models.
- Telesales manager new projects: one vacancy.
- Commercial Point of Sale Systems (TMS) Consultant.
- Data Analyst: Loyalty.
- Retail platform manager.
- Equity Trader.
- Dr Data and Analytics Engineer.
- Consultant SR IT & D Projects.

Focusing on the strategic needs set out by Repsol in its Strategic Plan 2021-2025 (2020), the new soft skills needed within the company are resilience, the ability to adapt and learn, and data culture. In addition to this, the hard skills are those focused on achieving its main objective, which are all the knowledge necessary for digitalization, blockchain, artificial intelligence, renewable energy and those that contribute to reducing the carbon footprint.

### Similar programs

Repsol is a company that is very aware of the future, and this has led it to previously set up programs aimed at young people, among which are the following:

- Repsol Digital Girls: through participation in Technovation Girls they are guided and encouraged to create an App. The objective is to encourage girls to enter into theoretical and practical training that will increase their interest in STEM disciplines (Repsol, n.d.).
- Energy with conscience: this is a project aimed at students in the 3rd and 4th years of ESO, in which they are proposed to carry out an energy audit in their own schools. The objective is to raise awareness and teach in a practical way the importance of energy efficiency, thus involving workers and young people (Fundación Repsol, 2020).
- Fundación Repsol Zinkers: a program that offers teachers innovative material and challenges with content on sustainability, energy efficiency, environmental impact, and SDGs, adapted to the level of the students (Fundación Repsol, n.d.).
- Dual Vocational Training: Repsol participates with different vocational training centers throughout Spain, carrying out a program consisting of a year of theoretical knowledge and a second year of applied practice in production centers.

### SWOT

The SWOT tool (Figure 7) provides a picture of the current context of the company around the factors that mainly affect the scope of the study, such as talent detection in young people for Repsol as an energy company.

<p style="text-align: center;"><b>DEBILIDADES</b></p> <ul style="list-style-type: none"> <li>• Identificación principal de la marca con la venta de combustible y, con ello, de la contaminación.</li> <li>• La presencia en países con inestabilidad política, en ocasiones, le lleva a ser asociado con dichos problemas.</li> <li>• Sus actividades de extracción y transporte pueden ser causantes de graves accidentes ecológicos.</li> </ul>	<p style="text-align: center;"><b>AMENAZAS</b></p> <ul style="list-style-type: none"> <li>• Barreras institucionales para trabajar con menores de edad.</li> <li>• Reglamentación medioambiental que puede afectar a su estructura financiera.</li> <li>• Mala reputación del sector energético, principalmente por el encarecimiento.</li> <li>• Gran variedad de precios debido a las subidas de impuestos.</li> </ul>
<p style="text-align: center;"><b>FORTALEZAS</b></p> <ul style="list-style-type: none"> <li>• Gran capacidad financiera.</li> <li>• Empresa de actividad esencial.</li> <li>• Empresa mundialmente reconocida:             <ul style="list-style-type: none"> <li>◦ Forbes: como entre las 500 mejores empresas para trabajar en el mundo (381).</li> <li>◦ Merco: tercera empresa en España con mayor capacidad para atraer y retener talento en el país.</li> </ul> </li> </ul>	<p style="text-align: center;"><b>OPORTUNIDADES</b></p> <ul style="list-style-type: none"> <li>• Sector consolidado y en crecimiento gracias a las energías renovables.</li> <li>• Aumento de la política regulatoria y favorecedora de la implantación de renovables.</li> </ul>

## Description of the Human Resources area

The human resources area may be made up of several divisions, thus focusing its specialization and efficiency, allowing it to increase its operational range. This segregation usually depends on the size of the company, hence affecting the way in which talent functions are assumed and distributed.

“Rough Diamonds Program to detect young talent at Repsol” (García, García & Zamit, 2022)

On the one hand, some authors state that its management is assumed in a generalist way by the human resources department as part of personnel management, defining this as the process that refers to the acquisition of human resources talent in the company, its administration, evaluation, development and compensation, etc. From various perspectives such as planning, recruitment, selection, revenue, education, training, performance management, evaluation of potential, salary administration, compensation, communication, and internal climate (Maddalena, 2021).

On the other hand, we find authors who include talent in a division called Talent Management. Mondy et al (2010) define it as the area in charge of detecting and anticipating workforce needs, managing employees and attracting highly skilled individuals, as well as integrating them and encouraging their development to achieve the highest possible workforce productivity.

Finally, there are authors who explain how talent can be broken down into attraction, detection, acquisition and development. The first refers to an activity carried out by the human resources department, although it may be framed within the functions of internal marketing, with practices such as employer branding, engagement techniques and certifications such as Great Place to Work (Blasco et al, 2014). The second approach an integral part of the analysis and management of recruitment and selection of workers (Cardozo, 2021). The third involves a compendium of best practices in human resources management, training and maximum development of internal employees (González et al., 2009).

The talent detection and acquisition division is the one that concerns this paper because, as Huselid et al. (2005) state, companies should focus on detecting the key jobs for the organization and focus all their efforts on placing in them those talents with the best competencies and a history of outstanding performance. Josu Jon Imaz, CEO of Repsol in the Repsol Integrated Management Report 2020 (2021a) states that to face the current situations of continuous change, the company can count on the strength of its industrial assets and its financial soundness, but its most important resource is the immense talent of its professionals.

Analyzing Repsol's main organizational chart, Figure 6, it can be seen that it includes human resources in the People and Organization department, which is integrated into the strategy area, thus giving it a leading role in the company's vision. According to information provided by Repsol's Director of Culture, Diversity and Inclusion, María Pilar Rojas, in an interview held on November 24, 2021, within the department the division that manages talent in the organization is Talent, Culture and Transformation, which in turn is made up of the subdivisions of Leadership and Talent; Selection and Mobility; Training and Learning; Culture, Diversity and Inclusion, and finally Workday and People Analytics.

At Repsol, the process of detecting needs starts with the joint work between the Selection and Mobility subdivision and the business itself, analyzing what is required and, based on that, gaps are established with employees. This process is carried out by internal consultants, people who, although they are from the company, have a global and strategic vision. Once the existing gaps have been established, programs are created if necessary or a new edition of those already created. It is a model aligned and oriented to meet the needs of the company, taking into account the interests and motivations of the person and prepared to respond to the changes that the environment demands with a style of action based on its values (Santiago, 2017).

### **Specific Human Resources needs**

A differential value of today's companies is the ability to detect talent, and young talent is becoming increasingly important.

Repsol aims to cover a primary need, which is the detection of early talent in young people in their developmental stage, promoting the future skills and abilities that the company considers essential for its long-term business strategy. The aim of this program is to guide young people, through the visualization and enhancement of their value, to help them create their own profile and feel comfortable during their career, during the first stages of selection of their professional profile in which the lack of knowledge of their possibilities and insecurities about making the wrong choice are the most important. In the same way, it allows us to make ourselves known as a company that is committed to people and their development, offering first job opportunities through the creation of a pool of talent and generating, thanks to this first contact, a feeling of recognition and belonging.

The main skills and competencies identified as necessary for the future of the company are those associated with the roles of digital transformation and renewable energies. The 2020 Integrated Management Report and Repsol's 2021-2025 Strategic Plan make clear the importance of these, centering the company's foundations around these concepts. The mission is to provide energy to society in an efficient and sustainable manner; the vision directs them towards being a global energy company that, based on innovation, efficiency and respect, creates value in a sustainable manner for the progress of society; and its business model is based on a sustainability model that materializes in half of its objectives the needs that the present work comes to develop:

- Climate change: to be a net zero emissions company by 2025.
- Innovation and technology: promoting technological innovation as a lever for transformation towards more sustainable business models.
- People: to focus on people and promote their development and that of their social environment.
- Environment.
- Secure Operation.
- Ethics and transparency.

## **Value proposition: Human Resources Plan**

### **Presentation and objectives of the plan**

The Rough Diamonds Program is a national early talent detection project in online format, focused on young people between the ages of sixteen and eighteen, which seeks to validate and guide the group in digital skills and environmental commitment, during a vital period in which they have to make many academic decisions that can define their professional career. In this way, it serves as an aid, discovery or expansion of knowledge of these two branches of work that are in great demand at Repsol.

It is organized during the summer months of June and July to ensure the greatest possible participation of the target group and availability of the selection team, since these are months with less workload.

This project is managed by three Repsol recruitment professionals and is organized in two main parts. The first takes place in June and consists of communication through internal and external marketing campaigns and the application of people interested in participating in the program. The second, and more important, takes place during the month of July and covers the complete remote talent detection process that includes the entire assessment, including an evaluation through a proprietary test and a DISC test, a digital skills role play activity and a group dynamic of environmental commitment management.

The management process begins after the application of the candidates during the month of June and in which it is assessed that they meet the minimum formal requirements. Those who comply with this first part, go on to take the online assessment through the aforementioned tests. On the first Monday in July, the participants take the tests and have a limited time of 2 hours in the morning. The 54 young people best evaluated after the psychometric tests continue to the phase of the last two tests of the selection process and are given a Repsol participant kit.

For a correct performance and assessment by the professionals, the 54 participants are divided into three calls divided into groups of 18 people in alphabetical order according to their last names, so that each call from the second week of July onwards is held in a different week of the month. The distribution of the activities is as follows: on Monday the role play begins for 3 hours in the morning and on Tuesday the group dynamics is carried out for another 3 hours at the same time, leaving from Wednesday to Friday for the evaluation and analysis of the results. Thus, by the end of July the program will be finished.

As a last phase, those 20 young people who have obtained the best performance, based on the observations of the selectors, are those who go on to carry out a talent development program with Repsol professionals through dynamic and fun theoretical-practical activities, not competent to the present work. The main objectives of the program are the detection of young talent oriented towards digital transformation and environmental awareness, who also have a series of competencies required to work at Repsol. This detection is carried out through an assessment adapted to the participant's profile. After selecting the participants who stand out for their skills, Repsol continues their training with a series of activities to further develop their competencies. This training plan contributes to establishing the potential future employability of these participants within the company.

## Benefits

The Rough Diamonds Program has clear and measurable objectives for Repsol, but it is also expected to achieve additional benefits as a result, which, although not measurable, can improve its situation as a company and the surrounding environment. Among the most noteworthy benefits are:



1. Detection of talent needed in the company. The talent detection program focuses on the detection of talent that the company demands for the coming years. This early detection helps to guide the participants to a job orientation that is well-received in the company.
2. Contribution to a better employability of the students. The Rough Diamonds Program contributes to improving the future employability of the participants since it aligns them with the present and future needs of one of the largest companies nationally and with international projections that is constantly looking for suitable profiles for its strategy.
3. Generate a renewal workforce: pool of talent. The talent detection program results in the generation of contact between the company and the potential participants who are selected. These are linked through subsequent training in the company and this link serves Repsol to have a base of candidates and future collaborators who already know the company and who, if well developed, should show a predilection for working in it later on.
4. Development of specific competencies. Participants who are selected to continue the full training at Repsol continue to develop the competencies necessary to qualify for a future job in the organization. These competencies are fundamental to the strategy and all participants will be trained to develop them.

## Bibliographic References

- Audax renewables (2021). Who we are. <https://www.audaxrenewables.com/sobre-audax/>
- Blasco, M., Rodríguez, A. Fernández, S. (2014). Employer Branding: a multinational study on the construction of the Employer Brand. *Universia Business Review*, (44), 34-53. <https://journals.ucjc.edu/ubr/article/view/974/1090>
- Cantis, A. (2013). Repsol Campus. A landscaped cloister. *Boletín Informativo Aparejadores*, (276), 18-27. <https://www.riarte.es/bitstream/handle/20.500.12251/700/BIA%20276%20PRIMAVERA-13.%2018->
- Cardozo, A. P. (2021). The HR 4.0 approach. Is it finally changing the human resources function? *Journal of Latin American Research in Organizational Competitiveness*, (9), 114-147. <https://www.eumed.net/es/revistas/rilco/9-febrero21/enfoque-rrhh40>
- Chaparro, M. Y., Urra, M. (2013). Core and generic competencies: a view from social workers located in the area of Human Talent Management. *Hojas y Hablas Journal*, (10), 54-69. <http://revistas.unimonserrate.edu.co:8080/hojasyhablas/article/view/12/35>
- Let's take care of the planet (2018). Renewable energies. Green Line. <http://www.lineaverdecarrreno.com/lv/consejos-ambientales/energias-renovables/energias-renovables.pdf>

- De Castro, L. (2019). The Repsol Historical Photographic Archive: Creation and Access to photographic material. *Documentation of Information Sciences* 42, 117-131. <http://doi.org/10.5209/dcin.65270>.
- Del Val, J. L. (2016). Industry 4.0: the digital transformation of industry. *Conference of Directors and Deans of Computer Engineering, CODDII Reports*. <http://coddii.org/wp-content/uploads/2016/10/Informe-CODDII-Industria-4.0.pdf>.
- Delpino, M.A., Eresta, M. J. (2012). Adolescents today. Aspirations and models. *Spanish League of Public Utility Education*. <http://ligaeducacion.org/wp-content/uploads/2018/03/adolescentes-de-hoy.pdf>.
- Enel Green Power (2021). Renewable energy for a sustainable future. <https://www.enelgreenpower.com/es/quienes-somos>
- Fernández, F. P. (2010). William Moulton Marston: polygraphs, comics and the psychology of normality. *Journal of the history of psychology*, 31(2), 151-166. <http://www.revistahistoriapsicologia.es/app/download/5836057511/10+PEREZ.pdf?t=1361965576>
- Fontcuberta, P., González-Anleo, J.M., Ballesteros, J.C., Megías, I., Pérez, A., Rodríguez, E. (2021). Young Spaniards 2021. Being young in times of pandemic. *Fundación SM and Observatorio de la Juventud en Iberoamérica*. [https://www.fundacion-sm.org/wp-content/uploads/2021/01/SM\\_DOSSIER\\_JE2021\\_4as.pdf](https://www.fundacion-sm.org/wp-content/uploads/2021/01/SM_DOSSIER_JE2021_4as.pdf)
- Repsol Foundation (2020). Winners of the VI Campeonato Energía con conciencia. <https://www.fundacionrepsol.com/es/noticias/ganadores-del-vi-campeonato-energia-con-conciencia>
- Fundación Repsol (n.d.). *Fundación Repsol Zinkers*. <https://zinkers.fundacionrepsol.com/>.
- González, T., Martínez, C., Pardo, M. (2009). Talent management in the Spanish industrial firm. *Industrial Economics*, (374), 21-35. <https://www.mincotur.gob.es/Publicaciones/Publicacionesperiodicas/EconomiaIndustrial/RevistaEconomiaIndustrial/374/21.pdf>
- Grenergy. (2021). *Business lines*. <http://grenergy.eu/conocenos/>
- Huselid, M.A., Beatty, R. W., Becker, B.E. (2005). A Players or A Positions? The Strategic Logic of Workforce Management. *Harvard Business Review*, 83(12), 110-118. Iberdrola (2021). *Leaders in renewables*. <https://www.iberdrola.com/conocenos/energetica-del-futuro/energias-renovables>
- Interim Group Hr (2021). Talent drain: causes, consequences and solutions. <https://interimgrouphr.com/blog/gestion-talento/fuga-talento-causas-soluciones/>
- López, E. (2016). Around the concept of competence: an analysis of sources. *Profesorado. Revista de Currículum y Formación de Profesorado*, 20(1), 311-322. <https://www.redalyc.org/articulo.oa?id=56745576016>

- Lucas, J., Galarraga, I., Escapa, M. (2016). ADAPTECC: A Role-Playing Game on Climate Change Adaptation. *e-pública: electronic journal on public economics education* (19), 55-77. <http://e-publica.unizar.es/wp-content/uploads/2016/09/193LUCAS.pdf>
- Maddalena, G. (2021). *Human resources*. Booksprint.
- Marketing News (2021). Teens' favorite social networks. <https://www.marketingnews.es/investigacion/noticia/1165924031605/redes-sociales-favoritas-de-adolescentes.1.html>
- Martínez, F. (2018). Talent mobility in Spain. *Journal of Youth Studies*, (119), 11-26. [http://www.injuve.es/sites/default/files/2018/41/publicaciones/1.-\\_movilidad\\_del\\_telento\\_en\\_espana.pdf](http://www.injuve.es/sites/default/files/2018/41/publicaciones/1.-_movilidad_del_telento_en_espana.pdf)
- Martínez, J. V. (2016). *La Transformación Digital y su Repercusión en las Empresas* [Final degree thesis]. Universidad Politécnica de Valencia. <https://riunet.upv.es/bitstream/handle/10251/68911/MART%C3%8DNEZ%20-%20LA%20TRANSFORMACI%C3%93N%20DIGITAL%20Y%20SU%20REPERCUSI%C3%93N%20EN%20LAS%20EMPRESAS.pdf?sequence=7>
- Martos, U. (2015). Repsol's internationalization process [Trabajo fin de grado, Universidad de Jaén]. Repositorio de Trabajos Académicos de la Universidad de Jaén. <http://tauja.ujaen.es/handle/10953.1/4374>
- Missé, A. (2021). Youth unemployment, a country's challenge. *Alternativas Económicas*, (92), 3-3. <https://alternativaseconomicas.coop/articulo/editorial/paro-juvenil-un-desafio-de-pais>
- Mondy, R. W., Noe, R. M., Mondy, J. B. (2010). *Human resource management*. Pearson Education.
- Naturgy (2021). Our goal is to have zero emissions by 2050. [https://www.naturgy.es/Publicacion/Satellite?c=Page&childpagename=GNF%2FPPage%2FGNF\\_GlobalLayout&cid=1477575474578&pagenam=GNFWrapper](https://www.naturgy.es/Publicacion/Satellite?c=Page&childpagename=GNF%2FPPage%2FGNF_GlobalLayout&cid=1477575474578&pagenam=GNFWrapper)
- Orús, A. (2021). Preferred media for information by age group in Spain in 2021. *Statista*. <https://es.statista.com/estadisticas/874413/medios-de-comunicacion-preferidos-para-informarse-por-grupo-de-edad-espana/>
- Pineda, S., Aliño, M. (1999). The concept of adolescence. In R. Márquez, E. F. Colás (Eds.), *Manual de prácticas clínicas para la atención integral a la salud de la adolescencia*, (pp. 15-23). MINSAP.
- Reis, J., Amorim, M., Melão, N., Matos, P. (2018). Digital transformation: a literature review and guidelines for future research. *Advances in Intelligent Systems and Computing*, 745, 411-421. [https://doi.org/10.1007/978-3-319-77703-0\\_41](https://doi.org/10.1007/978-3-319-77703-0_41).
- Repsol (2020). *Strategic Plan 2021-2025*. <https://www.repsol.com/content/dam/repsol-corporate/es/conocenos/documentos-conocenos/IP26112020-plan-estrategico-2021-20251.pdf>.

- Repsol (2021a). Repsol 2020 Integrated Management Report. <https://www.repsol.com/content/dam/repsol-corporate/es/sostenibilidad/informes/2020/informe-gestion-integrado-2020.pdf>
- Repsol (2021b). Repsol's Digital Transformation. <https://www.repsol.com/content/dam/repsol-corporate/es/energia-e-innovacion/documentos-energia-e-innovacion/dossier-transformacion-digital.pdf>
- Repsol (2021c). Organizational chart. <https://www.repsol.com/es/conocenos/nuestro-equipo/organigrama/index.cshtml>
- Repsol (n.d.). Repsol Digital Girls. <https://www.repsol.com/es/energia-innovacion/iniciativas-stem/digital-girls/index.cshtml>
- Repsol (2021d). Renewable energy development. <https://www.repsol.com/es/conocenos/que-hacemos/desarrollo-energias-renovables/index.cshtml>
- Santiago, V. (2017). Corporate university: a comparison with business school (ICADE Business School - Repsol) [Master's thesis]. Comillas Pontifical University Repository. <https://repositorio.comillas.edu/xmlui/bitstream/handle/11531/24134/TFM000757.PDF?sequence=1&isAllowed=y>.
- Santos, J. A., Muñoz, D. (2015). Brain drain and low cost biographies: new stage in the precarization of youth. *Recerca: revista de pensament i anàlisi*, (16), 13-33. <https://doi.org/10.6035/Recerca.2015.16.2>
- Siemens Gamesa (2021). Leading position in the entire wind energy sector. <https://www.siemensgamesa.com/es-es/sobre-nosotros>
- Solaria Energy (2021). Company. <https://www.solariaenergia.com/es/empresa-fotovoltaica>
- Sorensen, B. (2017). Renewable Energy: physics, engineering, environmental impacts, economics and planning. Academic Press. Suberviola, I. (2021). Analysis of predictors of early school dropout. *Vivat Academia. Revista de Comunicación*, (154), 25-52. <http://doi.org/10.15178/va.2021.154.e1373>
- The Adecco Group Institute (2021). Study on Employability and HR in the energy sector: Most demanded profiles and current and future situation of the companies in the sector. <https://www.adeccoinstitute.es/wp-content/uploads/2021/03/estudio-sobre-empleabilidad-y-rrhh-en-el-sector-energetico.-perfiles-mas-demandados-y-situacion-actual-y-futura-de-las-empresas-del-sector.pdf>
- Twidell, J., Weir, T. (2006). Renewable Energy Resources. E & FN.
- World Economic Forum (2020). The future of job report 2020. [https://www3.weforum.org/docs/WEF\\_Future\\_of\\_Jobs\\_2020.pdf](https://www3.weforum.org/docs/WEF_Future_of_Jobs_2020.pdf)



