



## THE VOICE OF THE WIND ENERGY IN SPAIN

AEE's main objective is to promote the growth of wind energy through strategic analysis, technical prescription, research, communication and training.

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**AEE TEAM** 

## WHO WE ARE?

The Wind Energy Business Association promotes the use of wind energy.

It represents and defends the interests of the wind energy sector in Spain, covering its entire value chain with a focus on both the national and international levels

+320

#### **ASSOCIATED COMPANIES**

including developers, wind turbine and component wind turbine and component manufacturers, regional associations, industry organizations, consultants, lawyers, and financial and insurance companies, representing both listed companies and SMEs.

+95%

100%

REPRESENTATION IN SPAIN

OF THE VALUE CHAIN

## VISION

The commitment to wind energy is essential for Spain's energy independence, the development and competitiveness of the economy, technological leadership, the creation of value-added employment and environmental sustainability.

## **OUR MISSION**

- It contributes to the formulation and technical prescription of the regulatory framework with the aim of ensuring that the sector develops in the best possible conditions.
- It disseminates the reality of wind energy and carries out didactic work for society.
- It makes strategic proposals for the wind energy sector to address the main challenges, covering the entire value chain.
- It organizes high-level events that bring together leading national and international personalities.
- It publishes reports and studies, which are a reference for the energy sector.
- Coordinates research in the areas of wind energy.

# WHY BECOME A PARTNER?

To be a **protagonist** and actively participate in **wind power development** 

Being a member of AEE offers **numerous benefits**: being informed first-hand about the latest regulatory and technological developments, being part of **wind power networking**, being a protagonist and actively participating in wind power development by anticipating new strategic opportunities and the main challenges, sharing experiences of a leading sector in the world and working in solidarity for the **sustainable growth** of the wind power sector.

An opportunity to join efforts among all the companies in the sector at the national level at national level

## WHY AEE?

AEE brings together more than 95% of the economic agents in the Spanish wind energy sector: developers, manufacturers, engineering firms, consultants, suppliers, insurers, law firms, financial institutions, regional wind energy associations, circular economy and other companies.

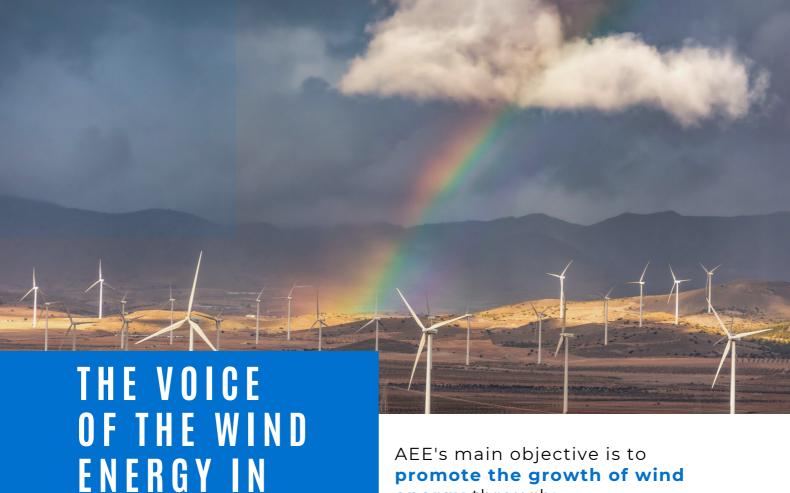
## WHAT WE DO?

- Contribute to the development of electricity production from wind energy.
- **Consolidate the growth of the business activities involved,** both in Spain and abroad, covering the entire value chain.
- **Promote stable and economically** efficient regulatory frameworks.
- **Promote technical and administrative improvements** in wind energy development through the exchange of experiences.
- Cooperate with administrations, agencies and sectorial institutions.
- To be the voice that represents the wind energy sector, disseminating our messages and sectorial positions in the achievement of these goals.
- Contribute to the **development of synergies** between the actors of the sector.

## **HOW WE DO IT?**

AEE acts as the largest representative of the wind energy lobby in Spain:

- Represents the sector before the different administrations and entities, with priority interlocution with the Government and the autonomous communities.
- **Conveys the position of the wind energy sector** to national and international forums and organizations.
- Publishes reports, analyses and studies
- Organizes events
- **Disseminates the reality of the wind energy sector** in the media and social networks.
- Coordinates and develops technical projects in Spain and the European Union.
- **Leads and participates** in socio-economic development initiatives in the territory.



promote the growth of wind energy through:

The development of business activity, influencing, research, communication and education

Our strategy and activities are focused on giving visibility to the wind energy sector, contributing to the development of wind energy in Spain, supporting wind energy companies and collaborating to maintain our competitive position. in Spain, support companies in the wind energy sector and collaborate to maintain our competitive position abroad.

SPAIN



## AEE Working Groups

Thanks to the various working groups within the association, which serve as the backbone of AEE, virtually all aspects impacting the wind energy sector are comprehensively addressed. Within these working groups, valuable learning takes place, insights are contributed, innovative proposals are developed, best practices are recommended, influence is cultivated, and synergies are actively pursued.

# Acceso a la información más actualizada del sector y networking

REGULATION AND TAXATION	INDUSTRY AND LOGISTICS	OFFSHORE WIND
MARKET MONITORING	NETWORK INTEGRATION	INFRASTRUCTURE PLANNING
ADMINISTRATIVE HANDLING	CYBERSECURITY	REGIONAL TERRITORIES AND ASSOCIATIONS
ENVIRONMENT	INTERNATIONALIZATION	COMMUNICATION AND CSR
CIRCULAR ECONOMY	MANAGEABILITY (HYBRIDIZATION, STORAGE AND HYDROGEN)	REOLTEC - R&D+I PLATFORM
EXTENSION OF LIFE AND REPOWERING		PREVENTION OF LABOR RISKS

WINDEUROPE (INFLUENCE IN EUROPE)

**STANDARDIZATION** 

## AEE PROJECTS AND INITIATIVES

## AEE defends the sector's leading role at the European level.

AEE is part of the **Board of**WindEurope occupying one of the three seats reserved for national associations. The activity is focused on collaborating in the formulation of the European regulatory framework on climate and energy, defending the leadership of the Spanish sector and maximizing opportunities for the wind power market in Spain.

## AEE participates in the following WindEurope working groups:

Market Design & Regulation
Electrification
Environment
Supply Chain
Sustainability
Systems Integration
Communication
Aviation & Defence
Offshore Wind & Floating OW
R&D

## Participation in WindEurope annual event

AEE participates in the annual event held by WindEurope to give visibility to the sector.





THE VOICE OF THE WIND ENERGY SECTOR IN SPAIN

## AEE & TECNOLOGY

## REOLTEC



AEE coordinates the Wind Energy
Sector Technology Platform
(REOLTEC) and collaborates with
ICEX to increase the presence of
the Spanish sector abroad.

## THE SPANISH ASSOCIATION FOR STANDARDISATION



AEE is a member of the Board of Directors and the Secretariat of the Spanish Technical Committee for Standardization UNE CTN206 / SC88 on "Wind Energy Generation Systems", which coordinates standardization activities and the participation of Spanish experts in international committees.

## AEE PROJECTS

AEE participates in national and European projects, playing different roles, always with the aim of contributing to the advancement of the wind energy sector in key aspects of R&D.

AEE's contribution to the projects is based on the extensive knowledge of the wind sector acquired in more than 20 years of activity. In the technical field, AEE plays an important role in projects related to the grid integration of renewable energies, the operation and maintenance of wind farms or the prevention of occupational hazards.

AEE also assumes the role of coordinator in national and international consortiums, performing Project Management functions, as well as dissemination and divulgation.

These are some of the projects with AEE's experience and participation:



It has a budget of 1 million euros and a duration of 3 years. Its main objective is to standardize training in the maintenance of wind turbines and wind farms, as well as to reinforce the use of digital tools, both virtual reality and augmented reality.

WINDEXT is part of the current strategy of decarbonization of the economy, at the lowest possible cost for the consumer and in the best operating conditions for renewable facilities. In addition to the main objective, the integration between training centers, universities and companies is reinforced, both through the development of different digital tools, as well as their validation and practical use.





3



# SIMULDWIND

It was born from the training needs of new professionals in the wind sector to meet the challenges posed by the digitization of wind farms within the industry 4.0. The scope of the project consists of the development of a computer simulator aimed at training in maintenance and risk prevention in wind farms, with the aim of reproducing in a virtual environment, the different maintenance operations and failure modes of a wind turbine.

SKIII WIND

Thanks to the willingness of European countries to create a standardized training program for the wind energy sector, with the aim of homogenizing training content and facilitating the mobility of workers between different countries. The result of the SKILLWIND project is an interactive game or Serious Game for mobiles that constitutes an innovative training tool with which users can reinforce their knowledge of wind farm operation and maintenance.

## AEE ENERGY POLICY AND INDUSTRY

#### **ENERGY POLICY**

AEE's Energy Policy area promotes the effective development of the regulatory framework for wind energy in Spain and Europe, as well as an energy transition focused on meeting the long-term decarbonization goals set out in the PNIEC and the Paris Agreement on Climate Change.

To achieve these objectives, AEE prepares analyses and proposals that represent the sector's vision and performs the function of interlocution with the central government, as well as with regional and local governments, parliamentarians and political parties. It also conveys the sector's vision to European and international institutions and organizations.

#### **INDUSTRY**

AEE carries out its activity with a clear industrial and manufacturing component, as Spain is one of the world's leading representatives in the manufacture and export of wind turbines and their components. Aspects such as national industrial policy, the technological competitiveness of our factories, the logistical and tariff implications for exports, or the defense in Europe of wind manufacturing capacity in our country to maintain its international positioning, are key areas of activity for AEE.

**AEE integrates 100% of the wind technology value chain,** which clearly orients its efforts towards proposals that encompass all the technological realities and sensitivities of the sector.

#### R&D+I

**R&D+i** is a key element in the development of the wind energy sector for the international positioning of our companies.

In this context, the work of the Technology Platform of the Spanish wind energy sector, **REOLTEC**, coordinated by AEE and supported by the Ministry of Science, Innovation and Universities, and with the participation of the scientific-technological agents of the Spanish wind energy sector, is included.

#### SOME CHALLENGES FACED BY THE WIND INDUSTRY SECTOR:

- Evolution of auction design, focused on value and not on price, which ensure that the supply chain is taken into
  account in its design.
- Streamlining, simplification, standardization and interregional coordination of administrative processes.
- Regulatory stability without abrupt changes in the remuneration models, which penalize the attraction of
  investments and legal certainty.
- Alignment of energy, industrial and innovation policies to ensure the entire value chain located in Spain and the development of wind power technology at different levels of technological maturity.
- Expediting and Facilitating Repowering Projects.
- Development of offshore wind energy and approval of offshore spatial planning.
- Advance social acceptance in the territories, seeking win-win schemes and ways of understanding, working with
  rigor, responsibility and sensitivity on the part of all stakeholders.



# AEE & COMMUNICATION

The aim of the Communication area is to disseminate the activities, projects and progress of the wind energy sector at national level, in general, and of AEE's member companies, in particular. This work is based on writing press releases, sector presence in social networks, sending newsletters, publications, reports, as well as audiovisual material, etc..

NEWSLETTERS	RRSS & WEB
CAMPAIGN	EXTERNAL COMMUNICATION
I INTERNAL COMMUNICATIONS/PA RTNERS	REPORTS
POSITIONINGS	PUBLICATIONS
RADIO PROGRAM	SECTORAL SPOKESMANSHIP

TO MAKE THE VALUE OF THE SPANISH WIND ENERGY SECTOR KNOWN TO ALL AGENTS OF SOCIETY IS

OUR COMMUNICATION STRATEGY

## AEE NEWSLETTERS

### AEE periodically presents the following newsletters:

#### **AEE PRESS - DAILY**

Daily newsletter that gathers a summary of press news about the current events in our sector. All those people in your company who wish to receive it can do so, just tell us their name and e-mail address. Also, if your company has appeared in the press, you can let us know so that we can publish the corresponding news.



#### **AEE REPORTS - EVERY FRIDAY**

Newsletter that you will receive every Friday and that includes information about the latest news in the sector that is not seen in the press, AEE's activities, the latest regulations, international news, the sector's agenda, as well as a bulletin board with conferences, workshops or courses of our members. This newsletter can also be received by an unlimited number of people in your company.



#### **AEE EVENTS - EVERY WEDNESDAY**

Informs our members about the events organized by AEE, whether they are free or paid. You will receive it on Wednesdays.



#### THE WIND ENERGY NEWS IN 5 MINUTES - MONTHLY

The wind Energy in 5 minutes is published monthly with the aim of gathering the latest news from the wind energy sector and highlighting the activities and projects of AEE's members. If you are interested in including news about your company, press releases, projects, conferences or participate with an interview to a representative of your company, this is the ideal support. This newsletter can also be received by an unlimited number of people in your company.



#### WIND POWER IN THE MARKET - MID-MONTH

A newsletter that was launched for the first time in January 2022, presents a technical content with the objective of informing about the functioning of the market, what it contributes and how the wind sector influences it and its contribution and impact. AEE sees the launch of this newsletter as very convenient given the current concern about the price of electricity and the interest of the contribution of the different technologies in the system.



## AEE PUBLICATIONS

## **AEE's most important publications:**

#### WIND POWER YEARBOOK

This comprehensive report on wind power in Spain and the world includes a summary of the figures for wind power capacity and generation in our country, a chapter with highlights on the evolution of renewable auctions, the update of the parameters that set the remuneration of renewables, the National Integrated Energy and Climate Plan, the Law on Climate Change and Energy Transition and RDL 23/2020, the repowering of wind farms, the integration of wind power into the grid, the participation of wind power in the adjustment markets for wind power in Spain and the rest of the world, the Climate Change and Energy Transition Law and RDL 23/2020, the repowering of wind farms, the integration of wind power into the grid, the participation of wind power in the adjustment markets, the implementation of grid codes, the new Access and Connection regulation, and wind power in the Canary Islands, among other topics. It also includes chapters on R&D&I in the wind sector and the REOLTEC wind technology platform, as well as the evolution of onshore and offshore wind in the world; and, finally, a section on AEE's different activities during the year.



#### SPANISH WIND ENERGY INDUSTRY CATALOGUE

The Spanish Wind Energy Industry Catalogue, published by AEE with the collaboration of ICEX Spain, compiles information on the companies that make up the Spanish wind energy sector. It is an essential tool to facilitate the internationalization of companies and shows information on their services, products and contact details, providing a detailed overview of the players in the wind value chain: qualified suppliers of components and services, as well as associations, research centers, developers, wind turbine manufacturers, market and financial agents, resource analysis companies, certifiers, consultants, training centers, engineering companies, supply companies and operation and maintenance services, or companies focused on offshore wind.



## AEE PUBLICATIONS



#### ANNUAL MACROECONOMIC REVIEW

Every year, AEE publishes the Macroeconomic Study of the Impact of the Wind Energy Sector in Spain, which quantifies the benefits of the wind industry for the Spanish economy and society.

#### **ACCIDENT REPORT**

The publication provides information on the various aspects of occupational accidents in the wind energy sector and good practices, introducing the data recorded during each year.

## TECHNICAL PUBLICATIONS

#### **TAXATION REPORT**

In this report, AEE, with the collaboration of Garrigues, analyzes the current tax scheme in relation to the development of wind energy activity and the fit of the usual tax figures in the new electricity production scheme.

#### OFFSHORE WIND INDUSTRY WHITE PAPER

This White Paper on the offshore wind energy industry in Spain includes the positive impacts on the Spanish economy, employment and the effects on other industries related to its development.





## **SPONSORSHIPS**

All AEE member companies have the possibility of contracting different sponsorships throughout the year in their publications and events to gain maximum visibility in their areas of interest.

# AEE TOP ANNUAL EVENTS

## AEE's associates have an extensive agenda of activities.

The events are attended by leading figures from the wind energy sector, who encourage the development of networking among the attendees.

Sponsorship possibilities in each of them offer the opportunity to gain greater visibility for the associated companies. associated companies.

During the year, in addition to the main events, AEE brings together its associates in working breakfasts, conferences and webinars, among others, to promote the exchange of information and knowledge.



WIND ENERGY AND MARKET



OPERATIONAL
ANALYSIS
OF WIND FARMS



ANNUAL MEETING WIND ENERGY AND INDUSTRY DINNER



OFFSHORE WIND CONGRESS



WINDTALENT

# AEE TOP ANNUAL EVENTS

This conference analyzes market operations and energy price formation. Among the various topics discussed are new opportunities to generate revenues, such as: capacity guarantees or flexible operation, analysis of results after the period operating in the balancing markets, corporate PPAs. etc.

WIND ENERGY AND MARKET



The congress analyzes and discusses solutions on how and in what sense to extend the life of wind farms. The interest in life extension and repowering brings together various industry stakeholders: wind turbine and component manufacturers, maintenance and service companies. Life extension and repowering is an opportunity to open new business avenues.

OPERATIONAL ANALYSIS
OF WIND FARMS



The annual and key meeting point of the wind energy sector, which brings together every year leaders of the national and international energy sector, as well as politicians and different institutions. A program composed of high-level political and technical conferences. It is the ideal space for networking and business development.

ANNUAL MEETING WIND ENERGY AND INDUSTRY DINNER



The Offshore Wind Congress organized by AEE will analyze the potential of this technology to position the Spanish industry as an international benchmark. The sector's leading experts in offshore and floating wind power will meet at this meeting.

OFFSHORE WIND CONGRESS



## RADIO PROGRAM



Do you want to know the latest news about renewables?

The voice of the present and the future of wind energy every
Tuesday at 15:30 on Capital
Radio with Ondas del Viento.



Each year, AEE awards the following **Eolo Prizes**, which are presented during the Annual Wind Meeting during the **Annual Wind Energy Meeting**:



## **RURAL INTEGRATION**

It rewards municipalities in Spain that have been able to use the wealth that wind power has brought them and integrate it into their environment.



Photographs of the best high quality images that capture the many facets of wind power as a clean, sustainable and indigenous energy source.



To discover talent in the graphic arts and awaken the imagination in relation to wind energy in the form of posters, illustrations, comics...



## **INNOVATION**

It rewards studies or projects that develop novel and relevant aspects for the wind energy sector. The jury of this award is formed by representatives of REOLTEC's Management Body.



Micro-stories with wind and wind as the main theme and a limited text length (less than 100 words). (less than 100 words).

## AEE & EMPLOYMENT

AEE offers its associates the possibility of **publishing the job offers** they need to find professionals with the most suitable profile for the required positions. In addition, thanks to an agreement with the consulting firm **Robert Walters** for the search and selection of talent, associates have the possibility of acquiring a discount in their selection processes.

## WIND ENERGY JOB PORTAL



AEE offers its associates the possibility of publishing job offers in its Employment Portal. These offers are made public, disseminated and redirected to the company's Employment area or Linkedin.

A greater interaction and participation of the companies is achieved, as well as support from AEE to get the best candidates.

#### **COLLABORATION ROBERT WALTERS**

AEE collaborates with the consulting firm Robert Walters, which has been recruiting and selecting talent since 1985. This framework of collaboration between the association and the British consulting firm serves to bring together those working in the wind industry and job offers in the sector. In addition, AEE members will also be able to benefit from a preferential collaboration agreement between their companies and Robert Walters.







# Talent is key to the full development of the wind industry in Spain

**EMPLEO** 

30.000

**PERSONAS** 

trabajan en el sector eólico en España En 2030, el sector eólico empleará a 60.000 personas



## AEE & TRAINING

AEE offers the opportunity to train academically and professionally in the world of wind energy. An opportunity to develop a professional career and grow in the wind energy sector, which is currently one of the sectors with the greatest employment projection in Spain.

IN SPAIN ALONE, WE HAVE 29,813 MW INSTALLED AND BY 2030 WE WILL HAVE DOUBLE THE INSTALLED CAPACITY. COMPANIES NEED SPECIALISTS IN THE MAINTENANCE OF THEIR WIND FARMS

#### WIND FARM MAINTENANCE COURSE



Aimed at people interested in developing their professional activity in the wind energy sector (wind farm owners, wind turbine manufacturers, independent maintenance companies).

and to professionals of the sector who want to deepen and increase their knowledge in the field of maintenance.

#### **EOI-AEE OFFSHORE WIND EXECUTIVE PROGRAM**



EOI and the Spanish Wind Energy Association (AEE) have joined forces and have designed a program that is unprecedented to date in our country, with a comprehensive approach that covers all phases of the life cycle of an offshore wind project. With the help of experts from the main companies in the sector, you will be able to acquire the knowledge and skills necessary to join this growing industry with a great future.

#### **CUSTOMIZED COURSES FOR COMPANIES**



Our experts will design tailor-made courses to meet your specific needs. At AEE, we provide tailor-made training. Currently, we have courses in offshore wind and wind farm maintenance and development, but we can adapt to your needs.

# AEE OUR PARTNERS OUR CORE VALUE

**90% of the Spanish wind energy sector is part of AEE.** AEE's members, around 280 companies, cover the entire wind energy value chain, including developers, manufacturers of wind turbines and components, financial institutions, etc.

01.	Market Agent
02.	Financial Agent
03.	Resource Analysis
04.	Association
05.	Research Center
06.	Certification
07.	Consulting
08.	Offshore Wind
09.	Wind Turbine Manufacturer
10.	Training
11.	Engineering
12.	Logístics
13.	Operation and Maitenance
14.	Others
15.	Promoter
16.	Services
<b>17.</b>	Supplies

# AEE MEMBER BENEFITS

## **DISCOUNTS ON:**

QUALIFIED AND AFFILIATED

40% USER

30% COLLABORATORS AND PARTNERSHIPS

TRAINING
25% EOI-AEE OFFSHORE WIND
EXECUTIVE PROGRAM
CLASSROOM AND ONLINE COURSES
IN AENOR COURSES

OTHERS

OTHERS

STANDARDS UNE

## **IMPROVED BRAND EXPOSURE**



## AEE WIND POWER IN FIGURES

Wind energy in Spain contributed 23.3% of the electricity consumed in 2021, being the first technology in the mix by demand coverage and the first by installed capacity.





In Spain, we have a complete supply chain dedicated to the domestic and export markets, with manufacturing centers in sixteen of the seventeen autonomous regions of Spain.

Unlike other technologies, wind power technology has 100% of the value chain in our country.

**47 PROVINCES HAVE WIND POWER GENERATION, 21 GENERATE MORE THAN 1TWH OF ELECTRICITY** 

**WIND POWER GENERATES** 8 **ELECTRICITY FOR** 17 MILLION HOMES **IN SPAIN THANKS** TO WIND ENERGY

## **DATOS MUNDIALES**

77.6 GW Nueva potencia instalada en 2022

**906** GW

Potencia mundial

**841,7** GW Eólica terrestre **64,3** GW

Ranking de países por potencia total instalada

China 40% 17% FF UU 7% **Alemania** 

5% India

4% 体 España



**64,3** GW Potencia eólica marina en el mundo

**8,8** GW Nueva potencia instalada eólica marina mundial

Ranking de países eólica marina **≋** 

49% China Reino Unido 22% 13% Alemania 4% Países Bajos 4% Dinamarca

## **DATOS EUROPA**

**219** GW Potencia acumulada en Europa

**19** GW Nueva potencia instalada en 2022

electricidad producida por la eólica

+300.000

empleos generados en Europa

Ranking de países por nueva potencia en 2022

14% Alemania 13% Suecia **Finlandia** 13% 11% Francia

9% Reino Unido

体 España





**30,2** GW Potencia eólica marina instalada en

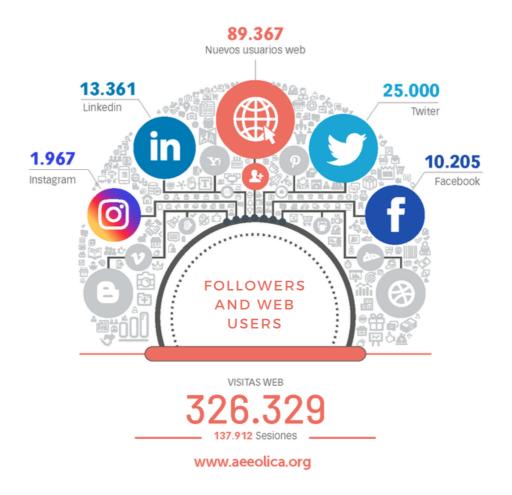
Europa

Nueva potencia . instalada eólica marina en Europa

## AEE IN FIGURES

The Communication area aims to disseminate the activities, projects and progress of the wind energy sector at national level, in general, and of AEE's member companies, in particular.

This work is based on writing press releases, sector presence in social networks, sending newsletters, publications, reports, as well as audiovisual material, etc.



## AEE TEAM



Juan Diego Díaz Vega

Presidente



Juan Virgilio Márquez

**Director General** 



Heikki Willstedt Mesa

Director de Políticas Energéticas y Cambio Climático



Tomás Romagosa Cabezudo

in o

Director Técnico



Piluca Núñez López



Directora de Comunicación y Relaciones

Institucionales



Ángel Budia García



**Director Financiero** 



**Alberto Ceña** 



Asesor Técnico



**Mar Morante** 



Responsable Medios y Redes Sociales



Sol Izquierdo Torán



Responsable Eventos y Publicaciones



Blanca Gonzalo Guedán



Responsable de Relación con Asociados y Formación



José Manuel Melendi García



Responsable de Innovación, normalización y proyectos



Enrique del Olmo Gancedo



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**Rosa Quero** 



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