

arteche

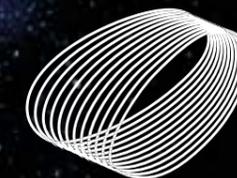
2020
**ANNUAL
REPORT**





2020
ANNUAL REPORT





arteche

ADDING | ENERGIES



arteche

1. LETTER FROM ALEX ARTETXE, PRESIDENT AND CEO

2. EXCELLENCE

- 2.1 Letter from Luis María Pérez, General Manager
- 2.2 Main Magnitudes
- 2.3 Outstanding Milestones
- 2.4 Our History: 75 years
Looking Towards the Future

3. INNOVATION

- 3.1 Letter from Oscar Fernández de Retana,
Director of R&D
- 3.2 Main Magnitudes
- 3.3 Outstanding Milestones
- 3.4 Our Solutions

4. CUSTOMERS

- 4.1 Letter from Tomás Solís,
Director of Sales and
Marketing
- 4.2 Main Magnitudes
- 4.3 Outstanding Milestones
- 4.4 Our Plants and Offices

5. PEOPLE

- 5.1 Letter from Sonia Garai,
Director of Human
Resources
- 5.2 Main Magnitudes
- 5.3 Outstanding Milestones
- 5.4 Our Team



1. LETTER FROM ALEX ARTETXE PRESIDENT AND CEO

A LEADING, GLOBAL, DIVERSE, INNOVATIVE AND SUSTAINABLE COMPANY FOR 75 YEARS

Looking back at 2020, I believe I must begin this letter by sending everyone who has suffered over the past months as a result of COVID-19 around the world a big hug. As I am writing, the fight against the pandemic has not yet ended, but I have no doubt it will and that we can take advantage of this new opportunity to do things from a different perspective.

The truth is taking a look back at the year 2020 is bittersweet as, despite the complicated global situation, it has been a positive year for the company. It was the final step towards our 75th anniversary which we will be celebrating in 2021. Over the course of the year, we have consolidated our project and exceeded all the expectations that first team that began working in a small shop on Gordoniz street could have ever dreamt of when the company was founded. There is no doubt that the way in which we have taken the path here foreshadows a new phase which will coincide with this celebration of our first 75 years of history.

Today, we are world leaders in the development of electric measurement products and a reference company for the power generation, transmission and distribution sectors not to mention already established in 15 countries on four continents.

This international presence has given us the opportunity to be an ever more diverse and multicultural company and that is one of the levers we are particularly committed to and most proud of:

diversity and equal opportunities for everyone at Artech. Our sustainability policies have been strengthened in a context that has been complicated for many people as we felt we had to do something.

Overcoming the COVID-19 crisis will be an **opportunity to do things from a different perspective**

We know that the sector is facing all sorts of challenges as a result of the necessary change in the energy model to a cleaner one aimed at a future that must be more environmentally-friendly. However, at Artech, we see these challenges as opportunities and, even though we know we must continue to give the best of our efforts, we feel incredibly excited. We firmly believe that our commitment to doing things well and support for an open innovation model allow us to offer products and services that are ever more sustainable, that help and will help our customers provide greener and more efficient solutions. Because Artech is a growing company that is continuously assessing different options that can reinforce our positioning and technological leadership in view of the challenges of the future as the energy scenario undergoes this transformation.



As a company, Artech is:

- a Leader
- Global
- Diverse
- Innovative
- Sustainable
- Purpose-oriented
- For 75 years



2020 has been the year for consolidating a corporate governance model based on independence and professionalization. Thus, Artech's underlying ethical principles have continued evolving to become the company that we humbly believe stands out because of its business excellence, both due to its best practices in governance as well as its economic results.

As I was saying at the beginning of this letter, I believe overcoming the COVID-19 crisis will be an opportunity to do things from a different perspective and, as concerns the corporate side of business, betting on organizations with humanistic models like the type we have always defended at Artech.

It will also coincide with our 75th anniversary through which we shall reinforce what has always been our purpose: "To provide agile and responsible answers to energy challenges all while remaining faithful to our commitment to people, society and the planet. And always together: ADDING ENERGIES".

ALEXANDER ARTETXE
President and CEO
Artech Group

EXCELLENCE



Arteche stands out because of its business excellence to which it is strongly committed

2.1

LETTER FROM LUIS MARÍA PÉREZ
GENERAL MANAGER

RESILIENCE (OR BETTER SAID, EXCELLENCE)

In the last annual report, I focused on that sought-after stability needed so the Arteche Group could fulfill its strategic plan to satisfaction. Already back in 2019 we began to sense the effects of the pandemic that completely affected us in 2020 and continue to be present now in 2021 as I am writing these words.

And this is why I decided to title this open letter Resilience (Or Better Said, Excellence).

Resilience because in spite of this truly atypical year, we have been able to stabilize our operations and achieve nearly all of our strategic goals as you will see as you read the following pages.

And as concerns what I have put in parentheses -Or Better Said, Excellence-, because I sincerely believe that since we were able to achieve stability making use of our most resilient characteristics, we are by all means moving into a virtuous circle of excellence.

Arteche stands out because of its business excellence, both due to its best practices in governance as well as its economic results.

Our focus is on offering quick responses, professionalism and evaluating the level of satisfaction with our customer service in all phases of our relationships with them.

Such is the case that we have made progress on projects and services throughout this pandemic situation, even during

the lockdown, and we closed financial year 2020 with our customers trusting our ability to execute projects and services even more.

Constancy, engagement and values have gotten us to where we are today and will carry us into the future based on our **commitment to talent and ongoing improvement**

The commitment and excellence that move us is reflected in our customers' satisfaction around the world as they value our approachability and capacity to propose solutions, our quick response and the professionalism of our teams. These drivers are fundamental for us and guide our improvement and innovation processes. We are proud to have helped guarantee the continuity of the electricity supply in more than 175 countries with continuous services all while tending to emergency situations in the middle of the lockdown.

We were able to complete projects, even during the most complicated months when a



lockdown was ordered in the different countries where we operate which undoubtedly influenced the increased trust our customers now have in our capacity to get things done. None of this would have been possible without the engagement shown by everyone at Arteche.

In order to look after all of them, we focused on quickly implementing all the measures to protect what has been and is most important to us -the health of our employees.

Convinced that our activity can have a positive impact on everything around us -both in the communities of the 15 countries where we are present as well as on the environment-, we have continued to use the services of local suppliers in every territory and we continue believing in sustainability as the strategic lever for the development of our

business, our products and our services.

We believe our actions for improvement are a part of our DNA and that's why the constancy, engagement and values Arteche set out for itself 75 years ago have gotten us to where we are today and will carry us into the future based on our commitment to talent and ongoing improvement.

LUIS MARÍA PÉREZ
GENERAL MANAGER

Good governance and economic results

Arteche stands out because of its business excellence, both due to its best practices in governance as well as its economic results.

A commitment to excellence and ongoing improvement

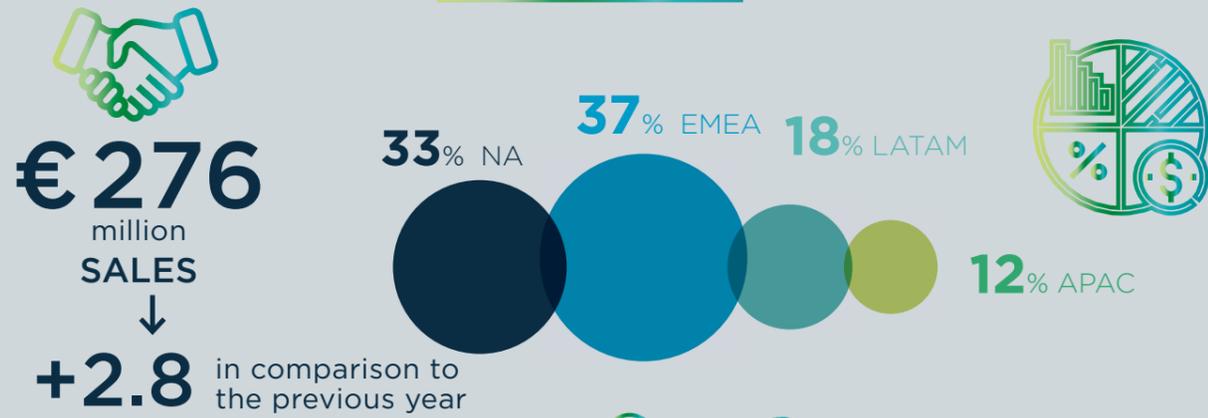
The drivers of our customer service management are quick responses, professionalism and evaluating their level of satisfaction.

We have made progress on projects and services throughout this pandemic situation, even during the lockdown.

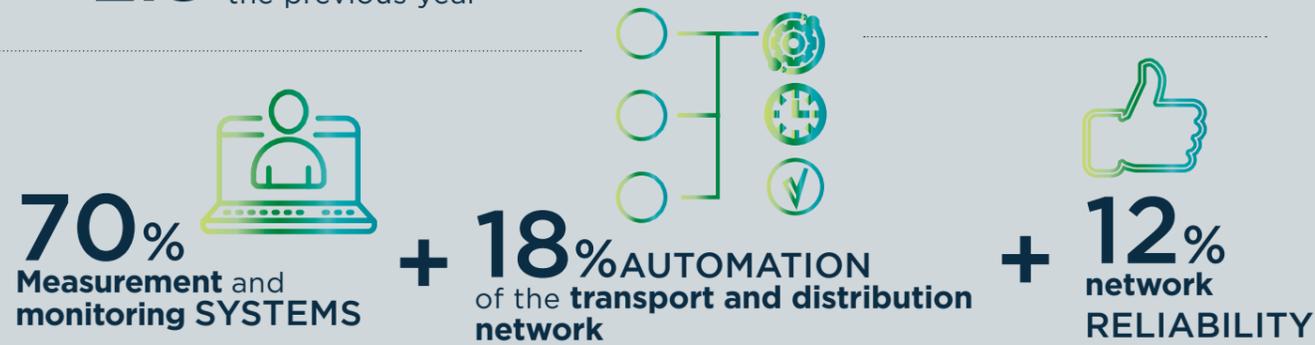
2.2 EXCELLENCE: MAIN MAGNITUDES

BUSINESS

VOLUME



ACTIVITY



SECTOR



EXPANSION



ENVIRONMENT



32% DECREASE in water consumption



15% INCREASE in recycled hazardous waste



20% DECREASE in the generation of non-hazardous waste



10% DECREASE in natural gas consumption



0 ENVIRONMENTAL INCIDENTS

31% DECREASE in gasoline consumption



11% DECREASE in diesel B consumption

6% DECREASE in diesel C consumption

HOW OUR CUSTOMERS RATE US

9.1 Ability to solve problems

8.8 Service personnel

8.8 The quality of our responses

8.5 Our response times



SATISFACTION: 8.7

2.3 EXCELLENCE: OUTSTANDING MILESTONES

Sustainable Financing



With the aim of aligning our financial strategy with our sustainable goals, streamline the cost of our debt and diversify our sources of financing, we secured **financing from various institutions** in 2020.

The financing granted by the European Investment Bank and the Spanish Official Credit Institute, respectively, **backs our R&D&I plan** and brings it into compliance with European Union guidelines on Innovation and Sustainability.

Moreover, Cofides granted us a loan to finance a **strategic project in Mexico** linked to our sustainability goals.

This economic injection is allowing us to **implement the plans made** for the coming years:

- Developing **new electronic solutions** aimed at digitizing the electricity distribution network and integrating renewable energy generation.

- Supporting the company's **innovation strategy** which focuses on designing and manufacturing its range of products and solutions all while enhancing its efficiency, reliability and sustainability.

- Modernizing our **digital infrastructure** and innovating in the electric power sector of up to 800 kV, the segment in which very few companies worldwide are operating.

With this investment plan, we're contributing to enhanced competitiveness, fostering a sustainable recovery and growth model and boosting job creation

New Business Development & Corporate Development Area



This year, we've developed a new area within the organization, Business Development & Corporate Development, the mission of which is to **define and implement individual**

strategies in each of our business lines in order to achieve our organic and inorganic objectives.

The area is divided into **two teams**: one

responsible for developing current business, led by our product managers, and another focusing on inorganic growth.

Our Actions for Improvement Arise from Internal Processes



As part of our commitment to excellence and ongoing improvement, we set a goal in 2020 to **manage our customers' satisfaction** of how we handle and process quality incidents related to our products.

The drivers of our management are quick responses, professionalism and assessing the level of satisfaction.

The aspect that is most highly valued by our customers has been our **capacity to offer solutions** that resolve their problems.

Our efforts are aimed at decreasing the number of incidents by quickly handling any symptom in advance that may lead to a problem in how any of our equipment operates.

After boosting our ongoing improvement system throughout 2019, we have kept up the pace and the data prove that the immense majority of our actions for improvement (more than 450 last year) arise from internal processes whereas only a small percentage comes from customer complaints. This means we **work on the problems** identified before they reach our customers.

Certification



In 2020, we maintained our **ISO 45001 certification at our sites**.

All of our plants are certified pursuant to standard **ISO 14001:2015**, as part of our Multi-Site Integrated Management System.

As a new development, we earned **ISO/IEC 27001 certification for our information security system**.

This achievement is the result of our daily work complying with the standards and improvements required in how we handle and manage information securely, which allows us as a company

to offer our current and potential customers added value as they appreciate the guarantee of secure information management

more and more all the time. Internally, it minimizes the risks identified of incidents related to the loss or filtration of information.



Maintaining Our Commitment to Stability in the Electric Power Distribution Network

During the month of March 2020, right in the middle of the lockdown caused by the COVID-19 pandemic, we continued **guaranteeing the continuity of the electricity supply** by testing the remote control system at the 400 kV Itxaso substation which is essential to the stability of the electric power distribution network in Spain.

With an important control system base installed in

the network owned by Red Eléctrica de España (REE), the Spanish electric power operator with nearly 44,000 kilometers of electric power lines and nearly 700 substations, the tests at the Itxaso substation were some of **the first to be done** during the pandemic.

We maintained our services for REE by adapting the performance thereof to the changes in their plans for implementing the



remote control systems and taking measurements for capacitive diagnostics.

People Management during COVID-19

From the beginning of the pandemic, we've been working **to make people safe** at Arteché in order to prevent and minimize the internal spread of COVID-19 at all of the group's plants.

To do so, we've been carrying out **the following actions**, among others:

- The preparation of a protocol to prevent the spread of COVID-19.

- The creation of a Coronavirus Committee.
- Ongoing information for personnel on the situation and rules to follow.
- Temperature taking for all personnel.
- Disinfection of common areas, the installation of hand sanitizer dispensers.
- Periodic delivery of masks.
- Monitoring of all personnel with symptoms or who have been in close contact with the virus.
- Serological and antigen screenings and tests for personnel as per medical criteria.
- The establishment of capacities in different rooms. The closing and safe re-opening of dining halls.



Implementation of a Tool to Develop Remote FAT Tests

Continuing with the process of implementing 4.0 technologies which allow us to maintain contact with our customers and suppliers, we've set up **a new remote support platform** at all of our plants.

By combining remote display hardware technologies, real-time document sharing and communications softwares, this platform allows us to

conduct remote Factory Acceptance Tests (FAT) with our customers or provide field assistance simply with an Internet connection, for example.

FAT tests are processes we conduct at our laboratories in the presence of the customer to verify **equipment works correctly** before being supplied. With this new augmented reality platform, our customers can fully

monitor these tests with complete guarantees without needing to travel to our sites.



Presentation of a Paper during the 'CIGRE e-Session 2020' and Development of 35 Webinars

We have a **vocation for sharing knowledge** and, therefore, participate and sponsor events that contribute to their dissemination.

In 2020, due to the global pandemic, many of the events in which Arteché Group habitually participates were either cancelled

or postponed for health and safety reasons. Of the 23 events planned, only Distributech (Texas, United States) went ahead as normal while all the others were cancelled, delayed or held online.

On the other hand, CIGRE, one of the transmission sector's

main international events, was postponed until 2021; however, some of the technical sessions still took place online.

For the fourth consecutive edition, we presented a paper (A3 - 210) at the 2020 e-session '**Online Monitoring of Paper-Oil Insulated Current Transformers**'.



35 Webinars + 1,700 participants + 7 businesses + 5 languages

2.4 OUR HISTORY: 75 YEARS LOOKING TOWARDS THE FUTURE



This wonderful adventure known as Artech began back in 1946. It was an adventure that began in Bilbao in a shop on Gordoniz street with a small team of people filled with excitement.

That project would soon move to Mungia ("halfway between Bakio and Bilbao"). The seed that was sown by those pioneers is now a business group with solid roots in the land where it was born and with stronger and stronger branches that extend across four continents. And that small group of 12 people is now a team of more than 2,000 professionals who carry the Artech brand and values all around the world.

It's something to be proud of. We've become a company that's internationally renowned for our technology, our quality, our market leadership, our international presence and our team of professionals but also recognized for our human values,

ethics, trustworthiness, closeness and commitment.

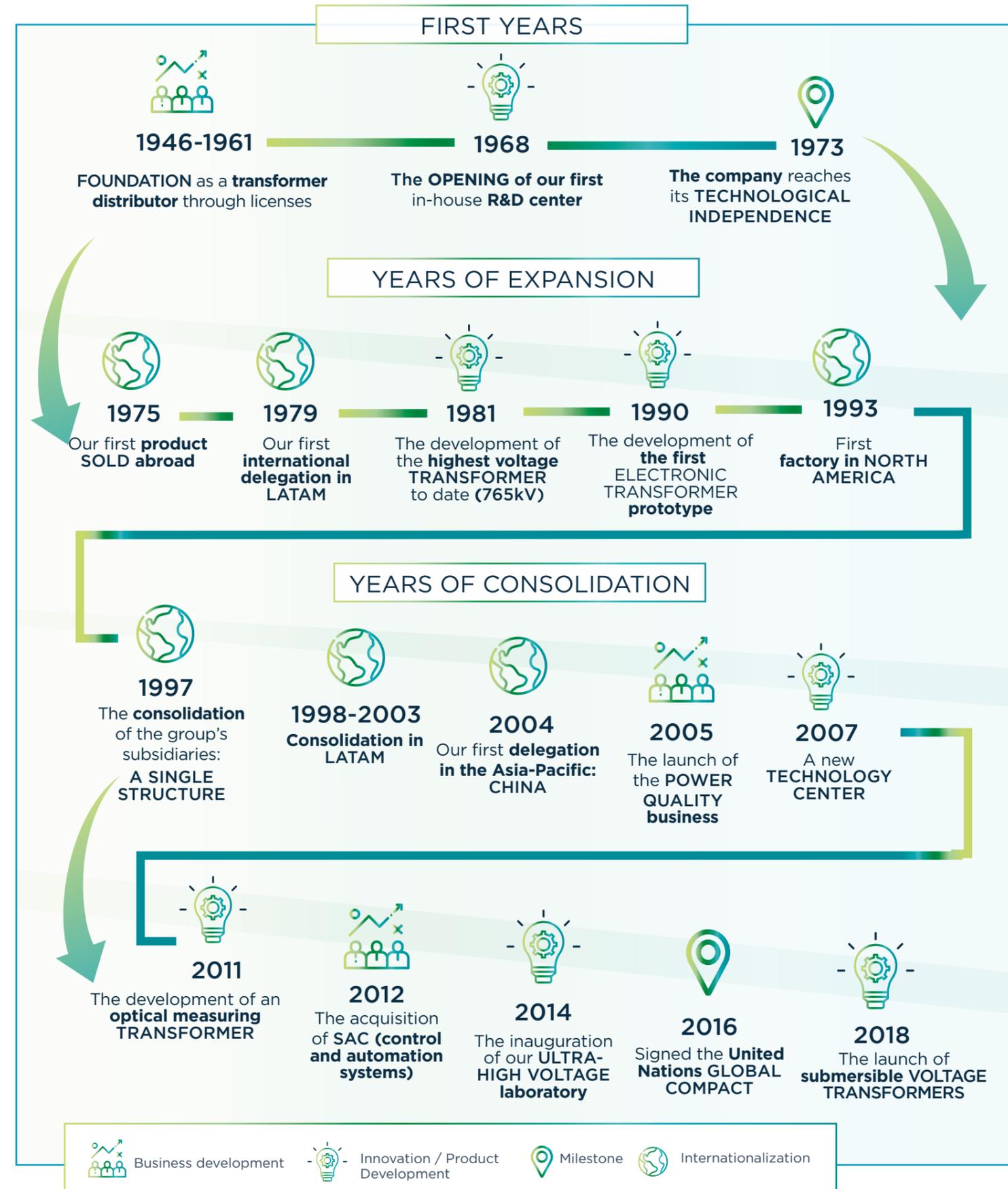
This commitment and these values have been demonstrated throughout our history by the women and men who have built Artech and we also demonstrated them throughout 2020, which was a rather difficult year. It was likely one of the most difficult we've ever experienced yet we came out of it successfully.

We did not necessarily do so in terms of results, but rather in terms of the decisions, projects, designs, changes, investments, etc. with which we're laying a solid foundation for the coming years. And it has all been thanks to everyone's effort, professionalism and dedication.

2021 will no doubt be a very intense year. Our sector is in a positive period with transformation projects and great opportunities ahead. And we have fascinating projects underway which are allowing us to look upon the future with enthusiasm.



Over its 75 years of history, Artech has gained unique experience and positioning in the industry



3

INNOVATION



*Above all,
innovation at
Arteche is an
attitude*

3.1

LETTER FROM ÓSCAR FERNÁNDEZ DE RETANA
DIRECTOR OF R&D

INNOVATION AND SUSTAINABILITY TO ADDRESS THE CHALLENGES IN THIS SECTOR

In a network and open are the words that define the innovation model we believe in. It's a model that's been enriched with the company's diversity and internationalization. Nowadays, we have six R&D centers in five countries where more than 150 people chosen for their talent do their work.

Yet, we won't stop there. We want to be a lean company; therefore, creativity and ideas cannot be limited to a single group of people within the company. Innovation impregnates Artech's DNA and that's why we believe true success means extending the innovation model to the entire organization and opening it up beyond our company. In 2020, 30% of our projects were already being developed with external collaboration. We plan to continue along these lines this year.

Companies have increased their digitization due to the pandemic and as we were in this race towards transformation, 2020 became a record year for cyberattacks.

It is precisely because we are also aware of our role in guaranteeing the electrical power supply through our products and services that we continue to be deeply committed to cybersecurity. Such is the case that we have developed the Artech Cybersecurity Lab

which will begin operating in 2021.

Through all of this, we shall not forget that innovation and sustainability are what will make the difference when it comes to dealing with the challenges facing the sector. In view of the present and future scenarios, we want to be right by our customers in these new economies that will arise and the movements that will define the energy model for the next 100 years.

Innovation is better when it's transversal and has more of an impact when developed side-by-side with customers and collaborators

The fact that more than 60% of our sales in 2020 came from new technologies developed and portfolio improvements and that the new products developed or modified in the last three years now account for 80% of our sales indicates

Innovation to transform the sector

Artech is committed to innovation and sustainability as the way to address the current and future challenges that come with the energy sector's transformation.



that the road that has been built is solid.

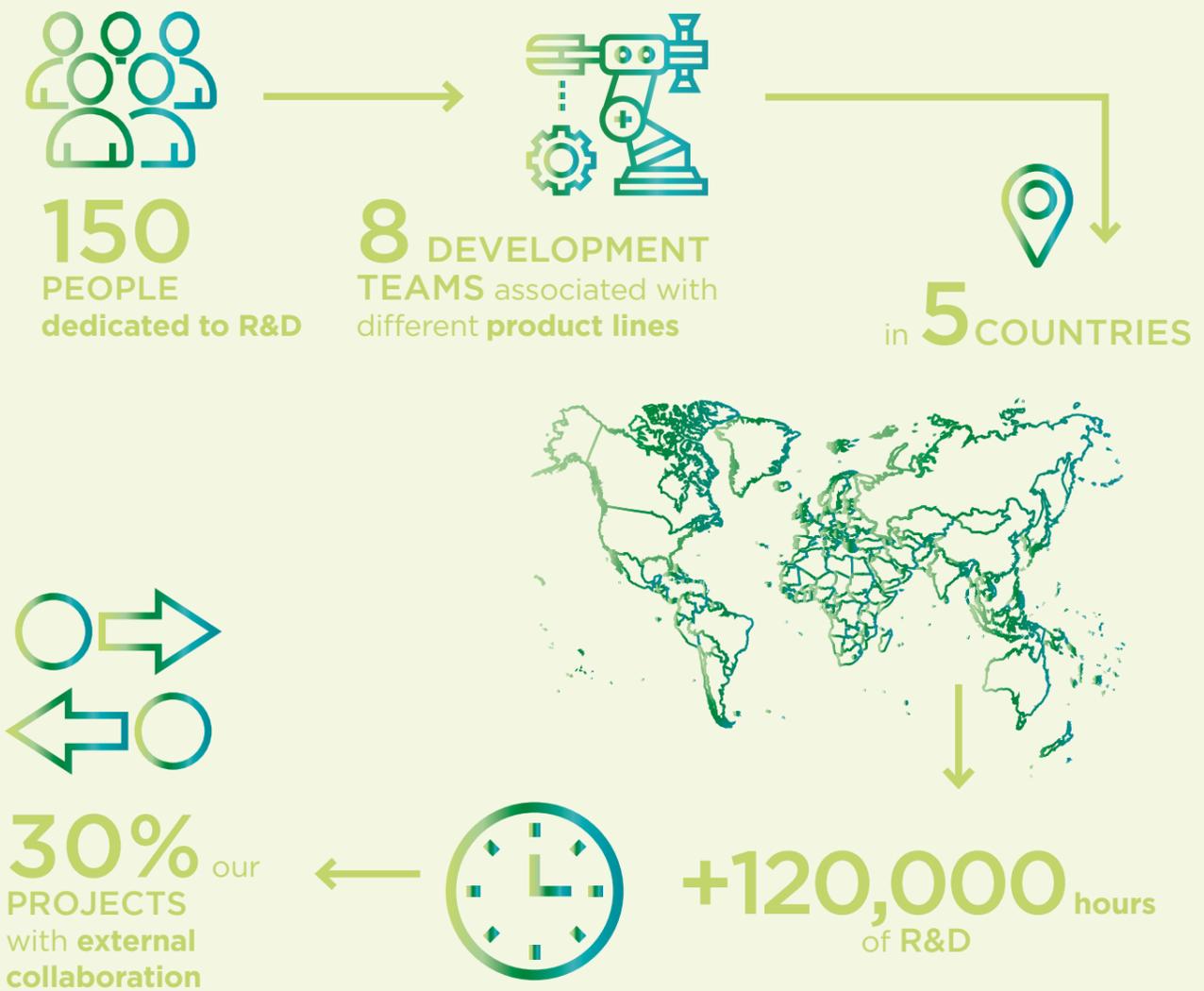
We'll continue taking steps together because innovation is better when it's transversal and has more of an impact when developed side-by-side with customers and collaborators.

A handwritten signature in black ink, appearing to read 'Oscar Fernandez de Retana'.

ÓSCAR FERNÁNDEZ DE RETANA
Director of R&D

3.2 INNOVATION: MAIN MAGNITUDES

R&D&I

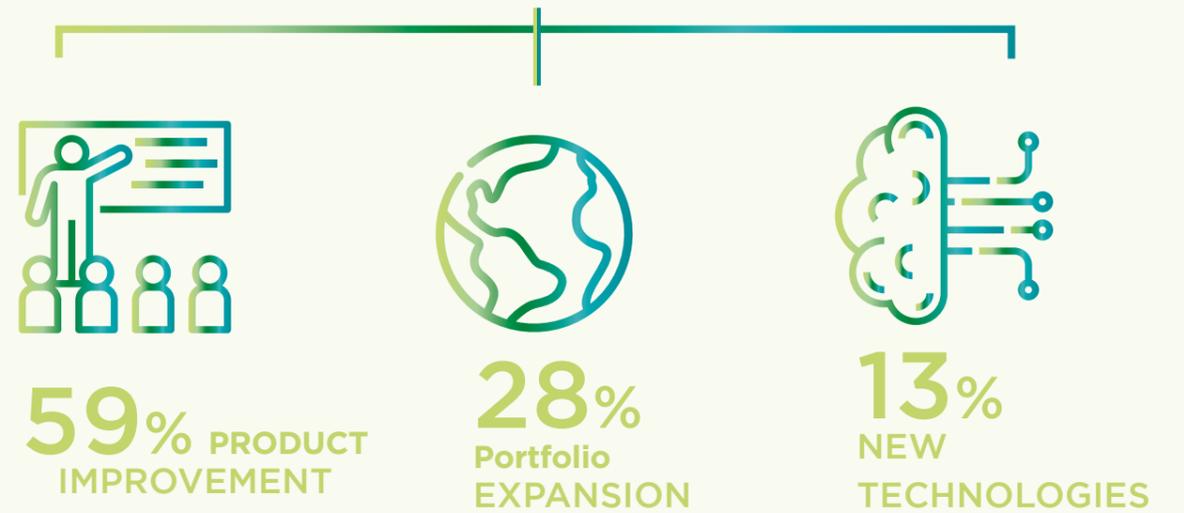


PROJECTS

R&D PROJECTS ALWAYS UNDERWAY TO KEEP US AT THE FOREFRONT OF THE SECTOR



208 R&D PROJECTS in the 2018-2020 period



BENEFITS



3.3 INNOVATION: OUTSTANDING MILESTONES

Committed to cybersecurity, we set up a specialized Laboratory and became ISO 27001 certified

Cybersecurity in the high and medium voltage power grid is becoming more and more important all the time. This is especially true for the electronic equipment known as IEDs (Intelligent Electronic Devices), the characteristics and remote communication capacities of which make them critical points on Smart Grids.

As a manufacturer of substation control and automation equipment designed under the IEC 61850 philosophy, we're developing the equipment

and technologies needed to guarantee the security and resilience of the electric power distribution network.

To help ensure a more secure power grid, we've created the **Arteche Cybersecurity Lab**, which is a physically and digitally isolated space with all the necessary security measures in place in accordance with the criticality thereof where cybersecurity tests are performed.

Moreover, we've obtained certification under the international standard



ISO/IEC 27001:2013 (Information Security System) which guarantees the confidentiality and integrity of data and information as well as of the systems that process them.

An all-new patented design for an explosion-proof transformer

We've patented a new explosion-proof transformer with **enhanced performance and behavior when subject to short circuiting** that exceeds the design specifications for the United States market (IEEE C65.13).

This new design improves transformer behavior when there are connection errors with field equipment.

The new design combines enhanced techniques that give the transformers special characteristics.



RTE's Ringo Project to Store Renewable Electricity

We participated in the Ringo project led by the French electric power operator RTE, the purpose of which is to evaluate the storage of electricity to manage transportation network flows. The experiment, which is distributed among three French sites, **tests the storage of isolated surplus renewable energy** (wind and solar).

One of the aims of the RINGO project is to limit losses in the production of electricity from renewable sources and **thus help reduce CO₂ emissions from the energy mix**. Besides making the electricity transportation system more flexible, this



experiment contributes to the **development of the French** electricity storage industry.

Arteche joined this visionary project by supplying RTE with **high-precision high voltage meter sets** with special transformation ratios.

ABB relies on us as a supplier for its GIS substations

Following the development of models that meet the ABB requirements, a world reference, the **first GIS substations for 145 kV** have been supplied and work is currently being done to develop the needed 170kV equipment.

This trust consolidates our role as a **reliable manufacturer of instrument transformers for gas insulated substations**.



New Test Block

Arteche's new 18-contact test block, saTECH TSB 18, enables **easy and safe secondary equipment testing**.

The all-new saTECH TSB 18 can isolate circuits and IEDs, separating them from field elements. This means users have no access to any live parts during the insertion or extraction of a wiring comb, thereby eliminating any risk. Moreover, **both sequences prevent tripping and unintentional operations**. With a compact design and 18 poles, it can be used

in any type of protective configuration. A configuration tool helps determine the reference that best suits each particular protective configuration.

The low resistance of the contacts guarantees excellent behavior in all types of uses, including testing of the most modern highly sensitive digital equipment.

This new equipment is now being offered alongside the 14-contact test block saTECH TSB 14 after more



than 30,000 units of the latter have been installed in 35 countries in the last several years.

Opening Up the Market with Our New Submersible Underground Voltage Transformers

Pacific Gas & Electric (PG&E) is the largest utility company in the United States with more than 5.5 million customers and covering most of Northern and Central California.

PG&E had a **need that no other supplier was fulfilling**: a submersible

underground voltage transformer that could withstand highly contaminated water over long periods of time.

The voltage transformers being used by PG&E would fail as the arcs filled with contaminated muddy water. These problems

caused the company costly repairs.

Our UENS and VENS voltage transformers were installed at pilot sites in Central California where they **proved to be fully reliable**. We thus resolved a critical need for PG&E with a solution that's unique on the market.



Transitory Response with Capacitor Voltage Transformers

The cost competitiveness and immunity from ferroresonance are some of the **advantages of high voltage capacitive transformers** over inductive voltage transformers. However, one of the disadvantages is the speed of response in situations

of transitory phenomena, especially as far as sudden voltage drops.

At Arteche, **we've developed solutions and determined the behavior** thereof under this service condition using simulation tools.

This has allowed us to serve different customers in countries like Australia, France, the United States, South Africa and Thailand and thus **contribute to market diversification and consolidation** where we're present with our capacitive voltage transformers.

New voltage measurement adapter



The new VMAC voltage measurement adaptor makes it possible to transparently connect voltage sensors (Low Power Voltage Transformers, LPVT) to IEDs equipped with conventional analog inputs. Likewise, it makes it possible to connect low-voltage transformers to multi-purpose protective equipment with inputs only for conventional instrument transformers.

This equipment **amplifies the output signal on**

the sensor, all while maintaining precision in order **to adjust it to a signal that is equivalent to that of a conventional voltage transformer**.

Secondary distribution is currently facing the **challenge involved with the grid power flow no longer being one-way when new generation points are added for distributed generation**.

In order to determine the direction of flow, the

voltage must be measured so the current signal can be polarized and the direction or, rather, the power flow direction, defined.

This way, we can use the VMAC with three voltage sensors (LPVT) instead of three conventional voltage transformers, which requires less space. The process of installing this metering equipment is quite simple due to **the smaller size and lower weight in comparison to the conventional type**.

New Distribution Automation Controller

The adaTECH CMDO is a new aerial distribution automation controller designed to control and monitor load break switches (LBS).

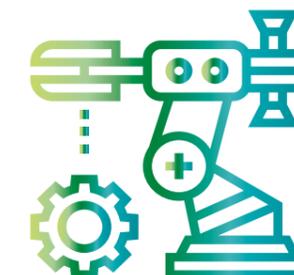
Distribution automation controllers are field terminal units (field RTUs) that offer a complete view of the grid as well as **control functions to deploy distribution automation services**, such as fault isolation, resetting and service switch management, load balancing and Volt/VAR optimization.

In combination with low-power instrument transformers, the new adaTECH CMDO offers an **engineering solution to operate and manage**

motorized load break switches (LBS), and supply real-time data on the status of the grid and equipment from the field to the company's asset management and distribution services.

Their flexibility, low maintenance and compact

size make them a reliable solution for **updating the MV installed LBS base as well as for improving newly-manufactured MV equipment**.



3.4 OUR SOLUTIONS



1. Electricity metering



Instrument transformers

- High-voltage instrument transformers for up to 800 kV
- Low and medium-voltage instrument transformers
- Low power instrument transformers

Power Voltage Transformers

- Power supply for auxiliary service substations
- Power supply for telecommunications and surveillance systems
- Rural electrification for isolated populations
- Temporary electricity supply

2. Relays and test blocks



- Auxiliary, trip and supervision relays for HV/MV electrical systems and highly demanding environments

- Relays for the railway industry under standard EN-50155 and other highly demanding standards

3. Substation automation



Power Grid Automation Systems

- SAS engineering and project management
- SAS consulting and training
- SAS servicing and support
- Photovoltaic power plant control systems

Substation Automation and Control Devices

- IEC 61850 substation automation and control devices
- P&C panels and cabinets
- Distribution automation IEDs
- Substation grade control and metering devices

4. Transport and Distribution Network Automation



Automation and Distribution Controllers

- Multi-purpose field terminal unit
- Controllers designed to monitor the aerial and underground distribution network
- Controllers designed to control MV switching equipment

Reclosers

- Three-phase recloser
- Vacuum interruption
- Pursuant to ANSI C37.60, IEC 62271-111, IEC 61000-1 and IEC 60255
- Post or substation structure assembly

5. Power Quality for Renewables



Power Quality

- Power factor correction
- Voltage regulation
- Grid code compliance
- Capacitor banks and harmonic filtering
- Power quality consulting and engineering services

Technical Consulting for Grid Connection of Renewables

- Electrical studies
- Grid code compliance verification
- Electrical system modelling and simulation
- Equipment specifications and solutions
- Power quality parameter measurement

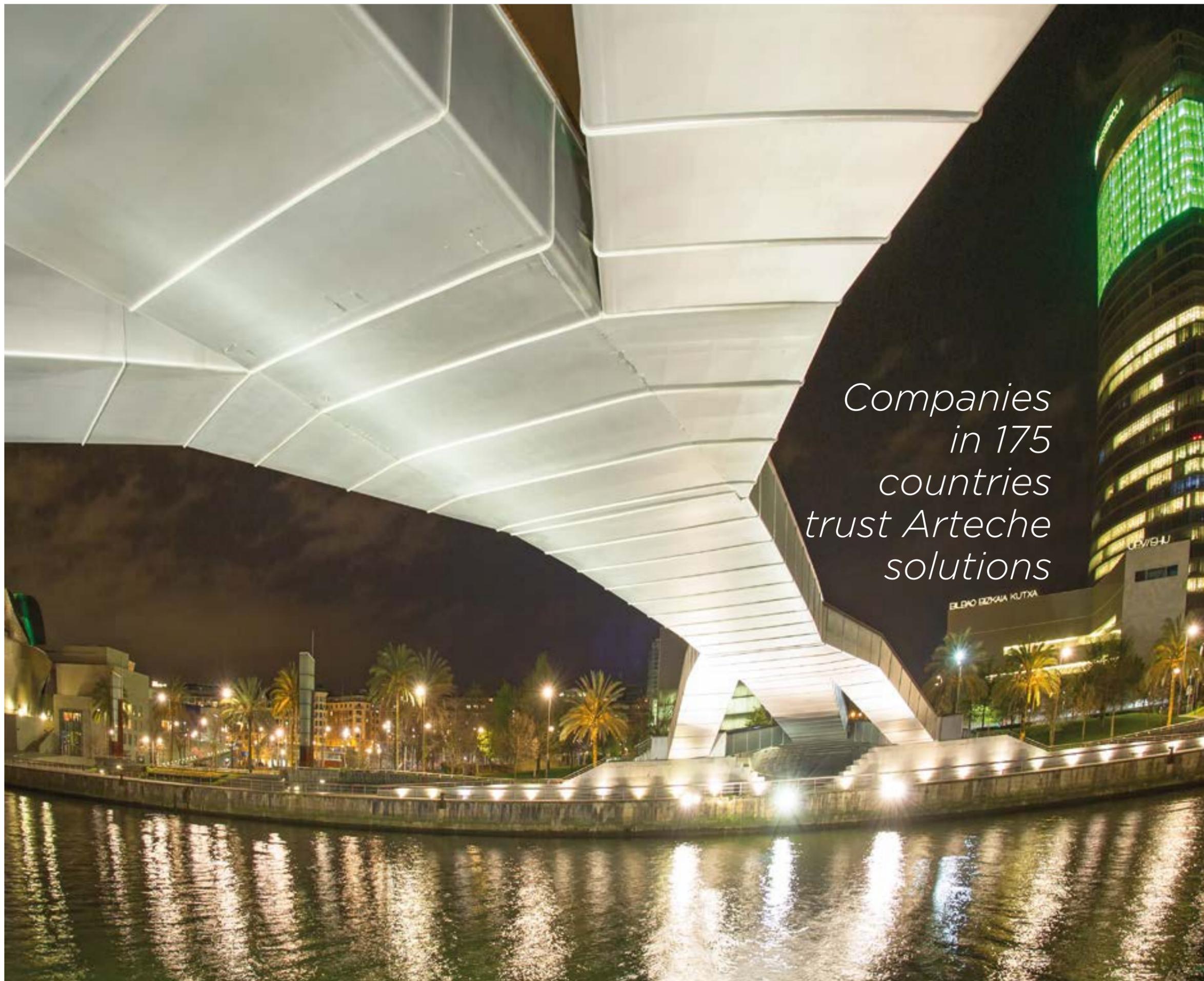
6. Specialized Services



- Training courses
- Lifecycle services: pre-operational testing, diagnostics, preventive and corrective maintenance

- Technical consulting
- Lab electrical testing
- Specialized consulting

CUSTOMERS 4



*Companies
in 175
countries
trust Arteché
solutions*

4.1

LETTER FROM TOMÁS SOLÍS
DIRECTOR OF SALES AND MARKETING

INTERNATIONALIZATION AND LEADERSHIP

Arteche is a leading technology company in the power sector and an international reference. With our business lines, we've given special attention to renewable energy connectivity and have been able to supply products and solutions to connect a total of more than 35 GW since 2018.

In 2020, we were able to develop some of the most important projects in our 75-year history alongside our customers and this was possible because we've successfully been able to blend being a multi-national company with our essence of close and friendly relations with customers.

Looking back, the year 2020 stands out partly due to the size of the projects we've handled, especially in the field of clean energy, despite the complicated situation. Large companies have trusted in Arteche for some of the most complex applications in their operations. Thus, we've reinforced our capabilities in the Project and Services area to handle projects associated with renewable energy with complete power quality and grid connection solutions.

Of our most outstanding milestones, it is with great pride that we can say the largest turbine in the world at the Maasvlakte Rotterdam port is equipped with one of our transformers. Yet we've also expanded our presence in renewable energies by providing solutions to guarantee grid code compliance on four continents

and in countries as diverse as Australia, Chile, Egypt, Dubai, the United States, Mexico and Spain.

Innovation and sustainability will take us to doing bigger and better things yet trust and a search for excellence will continue to be the underlying principles

Without a doubt we're also highly satisfied to have the trust of our customers in projects to push for sustainability in the sector such as the agreement with Iberdrola and another four Basque companies to develop renewable energies in the Basque Country in addition to research as is the case of the agreement with Acciona to perform dynamic and static studies of reactive power compensation as well as harmonics studies for the largest onshore wind power project in Australia with 1 GW of power. These are all long-term relationships we're very thankful for. Just to get a better idea, our relationships with our main customers have now lasted more



Internationalization and leadership

Arteche is a leading technology company in the electric power sector and an international reference.

Focus on Renewable Energies

We're strengthening the capacity of the P&S area to handle projects associated with renewable energies with complete solutions for energy quality and grid connection.

than 40 years and, in some cases, these customers have been with us from the very beginning.

Our international dimension has led to having references with more than 1,500 utility companies including the leading ones worldwide. This means 90% of the major electrical companies on the planet trust in Arteche. We believe innovation and sustainability are what will take us to doing bigger and better things yet trust and

a search for excellence will continue to be the underlying principles of the Arteche formula in the future.

TOMÁS SOLÍS
Director of Marketing and Sales

4.2 CUSTOMERS: MAIN MAGNITUDES

BIG COMPANIES

BIG COMPANIES TRUST ARTECHE FOR SOME OF THE MOST COMPLEX APPLICATIONS IN THEIR OPERATIONS

DIVERSIFIED CUSTOMER BASE

Officially approved
by more than
1,500 utility
companies around the
world



90% of all
utility companies
in the world trust in
Artech

LONG-LASTING RELATIONSHIPS

LONG-LASTING RELATIONSHIPS WITH OUR CUSTOMERS

40 years of
RELATIONS on
AVERAGE with
our FIVE MAIN
CUSTOMERS



>55%
RECURRENT
CUSTOMERS
IN 2020



>45
FRAMEWORK
AGREEMENTS
with UTILITY
COMPANIE
around THE
WORLD



4.3 CUSTOMERS: OUTSTANDING MILESTONES

Our Power Voltage Transformers in the Largest Offshore Wind Turbine in the World

The largest offshore wind turbine in the world, and the first for 12 MW, has already begun generating energy. The prototype, which is installed at the Maasvlakte Rotterdam port in Holland, is 260 meters tall and capable of generating energy for 16,000 homes.

In order to reduce losses, simplify commissioning, improve efficiency and

increase the gross capacity factor, the Haliade X turbine is equipped with a gas insulated substation in the lower section of the tower. The GIS model developed has our Power Voltage Transformer (PVT or SSVT), which provides the turbine with energy during windless periods. These PVT or SSVT are a highly reliable source of power within the substation itself.

This equipment has also been installed in large projects throughout the year such as at the Núñez de Balboa photovoltaic power plant operated by Iberdrola which will supply clean energy to 250,000 people, thereby preventing the emission of 215,000 tons of CO₂.



Greater Presence in Renewable Energies to Guarantee Compliance with the Grid Code Throughout the World

The Tolpán Sur wind power plant, which has the capacity to produce clean energy for 125,000 Chilean households; High Lonesome in Texas, which will prevent the emission of more than 1.2 million tons of CO₂ per year; and Maverick Creek, a plant with 127 wind power turbines, are just some of the projects that have used our power quality solutions around the world.

Renewable energy plants must comply with strict requirements established by

grid codes. Understanding these requirements and the real state of each electrical system is the basis for attaining a technically and economically optimal solution. In order to ensure the feasibility of these projects as well as their performance, we work with our customers from the design phase all the way to plant commissioning.

We conduct the initial measurements at the connection point as well as technical studies on

harmonics components, load flows, the TRV and quick changes in voltage. These studies help define the optimal equipment, given that the sizing and design are key factors. Post-delivery, we help customers commission the equipment at the substation. Plus, we verify that the energy supplied complies with applicable Grid Codes with final measurements on site, thereby validating the solution delivered and installed.

Arteche Relays for the ESA Ariane 6 Deluge System Project

Our high-performance relays for critical applications have been included in the Ariane 6 Deluge System Project. This system is one of the most critical of all those installed on the ground at the Ariane 6 launch pad, the new European Space Agency (ESA) launch vehicle.

These time delay relays are the heart of the Ariane 6 Deluge system implemented in the Launch Zone (ZL4). This system is responsible for acoustic and thermal protection for each shuttle launch.

The system is comprised of a set of pipes and valves that

project jets of water onto different places of the ZL4. At the same time, it's made up of four sub-systems:

- The **Table Deluge** (acoustic protection).
- The **Carneau Deluge** (acoustic protection).
- The **Guide Jet Deluge** (thermal protection around the main engine Vulcain).
- The **Deflector Deluge** (thermal protection).

The Table Deluge and Carneau Deluge sub-systems are activated during the final sequence by means of an automatism equipped with our TDJ8 relays.



With more than 60 years of experience manufacturing high-quality relays, Arteche is now an international reference on critical applications, where safety, reliability and high-performing features are by no means optional. That's why we were chosen for this project.

Four IEC 61850 Substations Operating in Brazil with our saTECH BCU

We've set up four 230 kV substations for CELG-GT, the electric company for the region of Goiás, in Brazil, with a grid of more than 750 kilometers. To do so, we designed the control and protection system, the boards and the system engineering pursuant to standard IEC 61850.

The SAS for the substations Firminópolis, Paranaíba, Palmeiras and Xavantes includes saTECH BCU bay control units. This equipment receives signals from the primary equipment and power transformers directly from the substation switchyard (process bus)

and integrates them with the SCADA using IEC 61850. Moreover, they enable acquisition of the information provided by the temperature and power transformer regulation and parallelism system sensors through the DNP3.0 protocol.

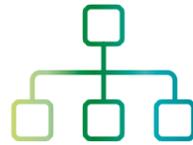
Likewise, the boards supplied are equipped with Arteche trip and lockout relays designed for critical

applications and the most demanding operating environments. Also included are 14-contact Test Blocks which make it easier to perform secondary injection testing.

This 230 kV bus protection system features PRP network redundancy pursuant to the Brazilian National Electrical System Operator's grid procedures.



New REE Control and Protection System



The new Arteché multi-functional control and protection system improves the availability, operation, exploitation and maintenance of the national power system managed by Red Eléctrica de España (REE).

Arteché is the **first company to deploy this new solution**. The first installations were done on the islands of Majorca and Menorca which are no longer islands,

electrically-speaking, thanks to the Peninsula-Balearic Islands and Majorca-Menorca underwater cables installed.

Guaranteeing the stability of an island electrical system is highly complex due to the difficulty of **getting support from associated systems**. With a view to enhancing its system, REE has established an all-new protection strategy defined by its “multi-functionality”, which reduces position equipment

all while incorporating advantages for the operation and maintenance of the electrical system.

The complex continuous and alternating substation control system for the substations between the Peninsula and Majorca was successfully completed by Arteché and has been operating since 2012, thus **guaranteeing stability and quality for the island’s electrical supply system**.

Participation in the Work Group to Define the Technical Standard for Grid Code Compliance in Spain



As **experts on Power Quality**, we participated in the work group that defined the new Technical Supervision Standard (NTS) for Grid Code Compliance in Spain.

This new Standard makes it possible to evaluate the conformity of generating modules and establishes requirements for obtaining a Final Operational Notification (FON) and a Power Generating Module Document (PGMD). It lists the mandatory tests, simulations and certificates needed to prove **compliance with European regulation EU 2016/631 and its adaptation to the Spanish electrical**

power distribution system. Likewise, in order to adapt these European requirements to the Spanish national system, a first-version NTS was also published for Electrical Systems in Non-Peninsular Territories (SENP) concerning systems located off the Peninsula and their own characteristics.

On the other hand, pursuant to Spanish Royal Decree 647/2000, which entered into force on July 9, 2020, 24 months is the deadline as of August 1, 2020 (date of the approval of ministerial order TED/749/2020) to deliver a complete PGMD to the pertinent grid manager for

any power generating module to be connected whether for wind power, photovoltaic power, cogeneration or any other type.

This means generation plants that connect and start operating as of today’s date (the deadline was 01/08/2021) must present **a complete document for their Generating Module** while plants that had been connected to the grid prior to that date would have only needed the abbreviated certification process.

Iberdrola Agreement with Arteché to Develop Renewable Energies



Iberdrola has signed an agreement with us and another four Basque companies to **accelerate investments in renewable energies**.

The President of Iberdrola has ensured this initiative

makes it clear that “the industry in the Basque Country is at the forefront of Europe” in an area the European Commission says is **“key to recovery and the continent’s future: the energy transition”**.

The projects the agreement will be aimed at are related to **new infrastructure** for renewable energies, the **digitization** of electrical power distribution networks, **storage** systems and the development of **recharging networks** for electric cars.

Acciona Trusts Arteché for its Dynamic and Static Reactive Power Compensation Studies



In recent years, we’ve reinforced our equipment for Power Quality electrical studies and become a reference for customers of the likes of Acciona with whom we’ve worked with everywhere from Mexico to Australia.

Our approachability and technical knowledge have allowed us to sign a **Framework**

Agreement with Acciona to conduct power flow, maneuvering and harmonics studies for all of its renewable energy projects worldwide.

Their trust in our work to perform the dynamic and static reactive energy compensation studies for the largest onshore wind power project in Australia,

with 1 GM of installed wind power, has been a technical and operational challenge as it will be integrated in a weak network that is highly sensitive to changes in active and reactive power and we must ensure the perfect integration of our hybrid solution: capacitor batteries and harmonic filters as well as **STATCOMs**.

Arteché, First PVT and CFD Supplier in Indonesia

After opening an office in Yakarta, PLN, Indonesia’s public power company decided to rely on us to **become their first supplier of Power Voltage Transformers and our Cable Fault Detector system for HV mixed lines**. Our PVT or SSVT are for a 500 kV substation that connects the main transmission network to a rural area on the island of Sumatra.



Relay / Test Block Configuration Tool

With more than 60 years of experience manufacturing high-quality electromechanical relays, **Arteche is now an international reference for critical applications.**

Our offer includes a complete range of auxiliary, trip, and trip and lockout relays as well as contractors, all specially designed for the most demanding operating environments in the

electrical and railway sectors.

Millions of Arteche relays are in service around the world ensuring the operation of electrical networks and systems.

This new configuration tool makes it easier to search among our complete range of relays to **choose the one that best suits a particular**

customer's needs, even obtaining the specific P/N and SKU reference number. This makes customer quotes easy with just a few clicks.



'Confiabilidade Project' for CTEEP

We participated in the 'Confiabilidade Project' developed by CTEEP, the company responsible for nearly 25% of the energy transmission in Brazil. The

initiative aims to **renovate and modernize the equipment at the substations** owned by the Brazilian company and **their transmission lines**. Arteche we **have contributed with**

our instrument transformers, trying to understand their needs and working to fulfill them in addition to **quickly responding to their demands**.



CFE Trusts Arteche for its SCADA REI (Smart Electric Power) Project

The Smart Electrical System Project (REI) developed by CFE, the Mexican electrical operator, seeks to modernize the country's electrical power distribution system as concerns its administration, operation, maintenance, dispatch and customer service. So, what exactly is the main challenge? Including **modern equipment for flexible, secure and efficient operation.**

To do so, they have relied on us to **supply our Metering, Protection and Control Cabinets for large-size substations** at voltage levels

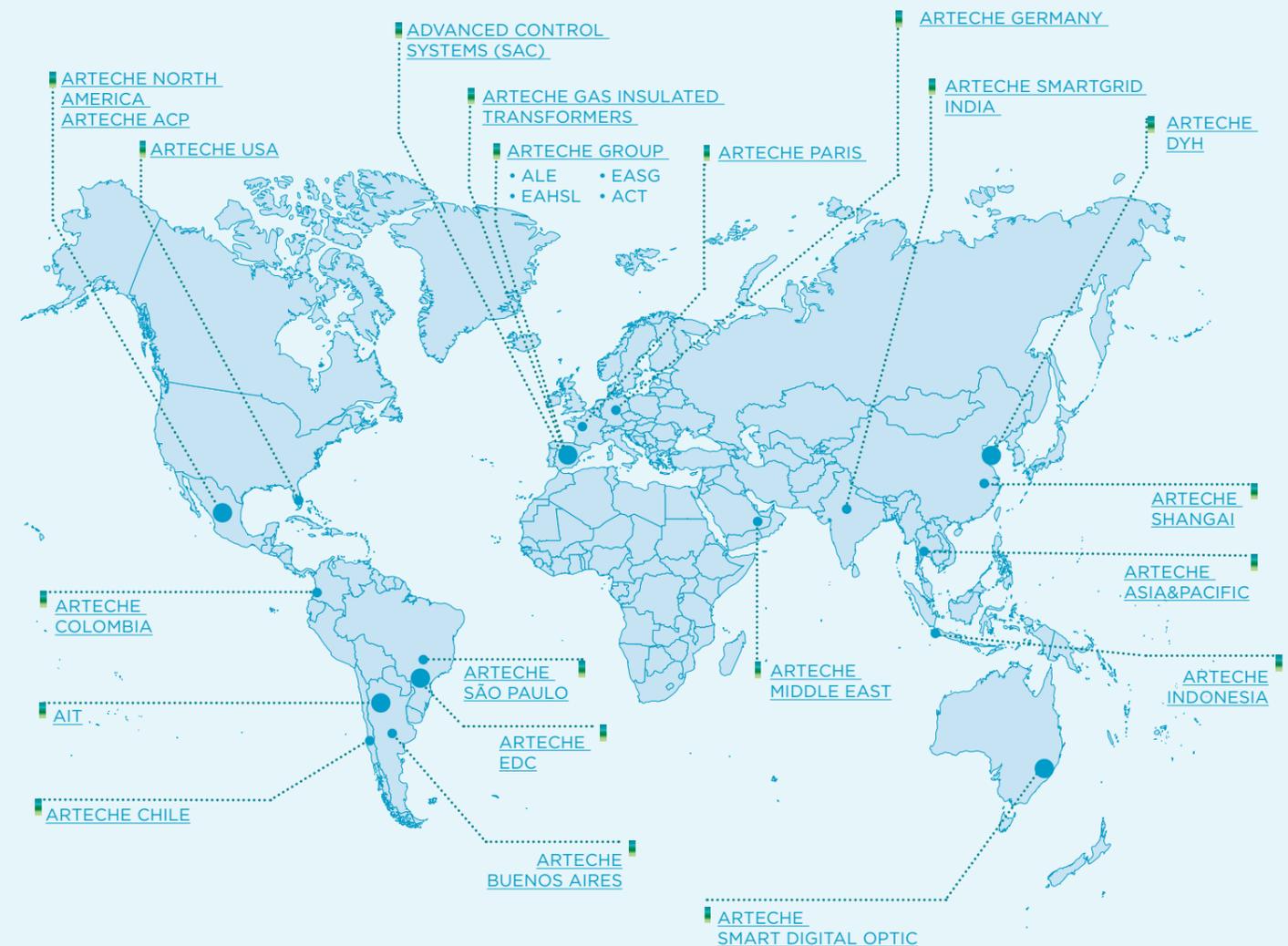
of 115 kV in Mexico. These systems, which include our IEC 61850 control and automation equipment, provide CFE with **the most advanced automation technologies.**

Their use is improving the reliability, stability, security and efficiency of the national transmission system and general distribution networks, the dynamic optimization of their operation and resources, and the development and integration of distributed generation projects so as to foster **the large-scale generation of renewable energies.**



4.4 MAP: PLANTS AND OFFICES

ARTECHE GROUP PRODUCTION PLANT AND SALES OFFICE LOCATIONS



PEOPLE 05



*We have the greatest
energy in the universe:
people*

5.1

LETTER FROM SONIA GARAI
DIRECTOR OF HUMAN RESOURCES

DIGITIZATION, GLOBALITY AND CULTURE

At Arteché, we believe in the enrichment that comes with diversity in the organization and encourage the development of our internal talent based on meritocratic policies that guarantee transparency and equal access to professional opportunities in all areas of the company.

The year 2020 was an exercise of professionalization and specialization in the Arteché Human Resources Department which led to a qualitative jump in how we serve our people at Arteché. The idea of being “people-centered” at Arteché is by no means new. Over the last 75 years, we have positioned ourselves as a technology company in the energy sector, but our path here has also situated us as a company where we believe the best way to boost people’s talent is by looking after the development they expect personally and professionally from the company in the best way possible.

People have an important role in the Arteché Strategic Plan as concerns the sector challenges we wish to take on as a company. It is the responsibility of Human Resources for the organization to be prepared for the future; in other words, for it to have the best professionals and for them to have the training, skills and attitudes necessary to achieve and share the success of all the important projects ahead of us.

Externally and even in a pandemic year, we’ve been able to create 550 quality job opportunities and, internally, we’ve developed our personnel by providing

People have an **important role** in the Arteché Strategic Plan **as concerns the sector challenges we wish to take on as a company**

nearly 35,000 hours of training. In order to overcome this challenge, we base our work on three strategic cornerstones: **digitization** (being equipped with processes and tools to get the most out of our data and applying our efforts to value-added tasks), **globality** (our more than 2,000 people work on different continents; our vocation must be to be global and up-close and our department must be a place of trust where people feel they are heard and supported in their efforts to achieve their goals) and **culture** (because when we talk about purpose, we mean a shared purpose, common values and an experience for our people that makes them choose



Diversity, Inclusion and Equality

At Arteché, we believe in diversity and defend and promote inclusion and equal opportunities in industry, science and technology.

We believe in a shared project in which our people feel motivated, heard and respected.

us as the place where they want to work every single day).

In short, we’d like the best talent in the market to choose to work at Arteché.

SONIA GARAI
Director of Human Resources

5.2 PEOPLE: MAIN MAGNITUDES

DEVELOPING PEOPLE

5
SUSTAINABILITY
PLANS
FOCUSING ON 6 SDGS



More than
2,000
PEOPLE



22%
WOMEN



More than **75%** of
OUR WORKFORCE
has an INDEFINITE
CONTRACT



AVERAGE AGE of **39**

WE CREATE OPPORTUNITIES

550 Job
OPPORTUNITIES
created in 2020



35,000
hours of TRAINING in
2020




5.3 PEOPLE: OUTSTANDING MILESTONES

As part of the Arteche Management System, we've integrated the entire scope related to Sustainability in our different processes and procedures with the functioning of the Group's Sustainability Committee and the different regional committees, always enabling access to the roadmap followed for any suggestion from

the time it's received until it's assessed and implemented.

Enabling channels for listening and responding to all of the concerns and initiatives that reach the Committee through our people is essential to making ours a shared strategy and getting more engagement and commitment from everyone who is a part of Arteche.

Sustainability Initiatives From Internal Suggestions

We have signed the Global Compact and support the 17 Sustainable Development Goals including SDG 11 Sustainable Cities and Communities. As part of our commitment to sustainable development, we have the vocation to promote and integrate a culture of responsibility with the environment and nature.



That's why we've launched the project "Arteche Forest" in collaboration with Tree-Nation. We have already planted nearly 200 trees which will capture more than 30 tons of CO₂ from the atmosphere.

These trees will be included in two reforestation projects already underway in Spain. The species -ash and oak trees- were chosen

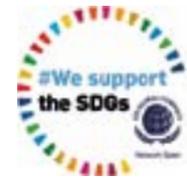
considering a respect for biodiversity in those forests as they are native to the reforested areas.

Each tree planted guarantees one day of oxygen for four people in addition to protecting the soil by preventing the wear

and erosion thereof and generating ecosystems for animals and insects.

The activity undertaken in these areas as well as the tons of CO₂ compensation can be followed via the website for our forest: <https://tree-nation.com/profile/arteche>.

Committed to the United Nations Global Compact Since 2014



In a letter sent to the Secretary General of the United Nations, we manifested in 2014 our commitment and engagement with the human and labor rights recognized in national and international law as well as the principles underlying the United Nations Global Compact.

Reaffirming our commitment to the Global Compact, we became a **"participant signatory"** in 2020.

As members of the United Nations Global Compact since the approval of the 2030 Agenda not to mention our commitment to promoting the Ten

Principles, we're fully engaged and are working on aligning our corporate management with the Sustainable Development Goals (SDG) where we're finding new business opportunities, improving our relations with our stakeholders and fostering innovation.



Sustainability Plan Achievements

At the Sustainability Committee meeting in the month of November 2020, we did some stocktaking and analysis and closed the sustainability plan established for the year. We also defined the new 2021 sustainability plan based on our analyses and on the new suggestions for improvement

received in addition to updating and officializing the governance of the Sustainability Committee by fully integrating the scope thereof throughout the organization from the group's management committee.

Overall, 2020 was quite positive in terms of

management, stability and results for the Sustainability Committee as well as in terms of the progress made on all sustainability plans launched. This is also reflected in the goods results on the improvement indicators defined for the six SDG and even more so considering the impact of COVID-19.

Gender Equality, A Shared Commitment



Boosting progress in gender equality is a common commitment we have within Arteche Group for all of our regions and worksites.

It is part of our corporate culture and has become our overall global way of thinking as we focus on emphasizing diversity from the gender perspective in all of our processes and

policies. We are not just complying with the law: we are going beyond by setting the example for bringing real equality into our sector and promoting true equality policies as concerns treatment and opportunities.

To this end, we have made a commitment to spreading visibility for and

developing female talent globally and in all of our regions. To do so, we have Equality Commissions that work around the world as well as in each of the regions to make consistent progress on gender equality issues.

Sustainable Use of Resources



We've reduced hazardous waste generation by 35% in comparison to 2019 by defining a 2020 Sustainability Plan and monitoring it all year long. We've achieved significant improvements in our generation and mana-

gement of waste at all of our plants, even considering that production levels remained steady in comparison to the year before and some planned actions had to be delayed to the consequences of COVID-19.

We'd also like to emphasize that we've implemented the "0 Plastic Cups" action at all Group plants.

Promoting Healthy Lives Through Sports

At Arteche, we promote and participate in social competitions related to companies and other local entities.

We also sponsor several sports teams and events in the places where we do business.

We're members of the Athletic Club Foundation, a non-profit organization

that uses football and the values and social scope of the Athletic Club to encourage sports and help improve the quality of life of the underprivileged in Biscay.

In Mexico, we participate in the Tepeji del Rio Tournament as well as other sporting events in competition with other companies.

We participate in the Biscay

Companies Race and in the inter-company football league.

We sponsor the football, basketball, cycling, rugby and Basque pelota teams from Mungia in addition to remaining committed to female sports by joining the efforts of the ultrarunner Ziortza Villa's sports projects as well as those undertaken by Raker Mateo, a local elite Paralympic athlete.



VI artPhoto

Nearly 700 photographs from 50 different countries participated in the VI artPhoto photography contest organized by Arteche Group.

The photographs sent in from **North America, South America, Europe, Asia, Africa and Oceania** perfectly reflected the daily use and social impact of electricity in our lives considering the **following four categories**:

- Life and electricity
- Infrastructure and electrical equipment
- Arteche Products
- Electrical framework

After the 200 professionals at Arteche Group comprising the panel of judges completed an exhaustive selection process, the photographs they believed best represented the use and impact of electricity in each one of the four categories were:



PRIYA STUDING, sent from Bangladesh by **Abdul Momin**.



TURN ON THE UNIVERSE, sent from Spain by **Begoña Villanueva Perez**.

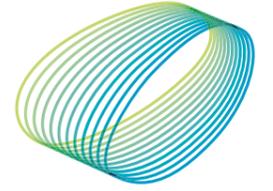


WINDING ELEC, sent by our colleague **José Alejandro González Agüero** from Mexico.



THE BALANCE OF LIFE, sent from Colombia by **Luis Henry Agudelo Cano**.

Arteche would like to congratulate the winners for their wonderful, prize-worthy photographs and thank everyone who participated in the VI artPhoto contest.



arteche

5.4 PEOPLE: OUR TEAM



ARTECHE GROUP ORGANIZATION



CONTACT CHANNELS

Any query related to this report may be made through the following channels:

- At the group's website: **www.arteche.com**
- By emailing **info@arteche.com**
- By writing to its **headquarters**:
Arteche Lantegi Elkartea, S.A.
Derio Bidea 28 48100 Mungia (Bizkaia)
T.: (34) 94 601 12 00



arteche



@GrupoArteche



arteche

Moving together