BIND_

Use Cases for the 11th Edition of BIND

Detailed company profiles and specifications

GRUPO spri TALDEA

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Document Structure

46

use cases published

All the use cases prioritised by the 57 partner companies will be published as part of the open call and targeted scouting of start-ups.

11

thematic groups

Many use cases are related and can be resolved using the same solution; so just one start-up can provide a cross-cutting solution that covers several related use cases at once.

This results in 11 more specific and narrowed down groups, in which each original use case is maintained as a line of work.

Open call for start-ups

2 JULY – 4 SEPTEMBER

Each **start-up may present** up to three project proposals, each **of which must focus on a different group.**

Further details can be found in this document:

- List of use cases included in each group.
- Interested companies by group and by use case.
- Technologies demanded by companies.
- Some specifications provided by the companies that better define their requirements for each use case.

Groups of use cases

GROUP 1_ Automation and robotisation of industrial plants and warehouses to reduce the need for manual intervention

Use cases: ID05, ID06, ID11

GROUP 2_ Monitoring, simulation and maintenance of industrial assets to anticipate failures and ensure process and product quality

Use cases: ID01, ID02, ID03, ID04, ID07

GROUP 3_ Design, manufacture and life cycle analysis of industrial products

Use cases: ID08, ID09, ID10

GROUP 4_ Fleet management, distribution logistics and electrification of industrial mobility

Use cases: ID12, ID14, ID15, ID23

GROUP 5_ Cybersecurity, physical security, employee health and regulatory compliance

Use cases: ID37, ID38, ID39, ID40

GROUP 6_ Digitalisation of internal processes, knowledge and talent management within the organisation

Use cases: ID31, ID32, ID33, ID34, ID36, ID41, ID42

Smart Industry Efficient organisation Energy and sustainability Commercial

Groups of use cases

GROUP 7_ Energy efficiency, consumption traceability and measurement of environmental impact

Use cases: ID16, ID17, ID18, ID30, ID49, ID50

GROUP 8_ Reduction and management of environmental impact: CO_2, water and industrial waste

Use cases: ID24, ID25, ID27, ID28

GROUP 9_ Generation, storage and integration of renewable energy in industrial environments

Use cases: ID19, ID20, ID21, ID22, ID51

GROUP 10_ Demand forecasting, supply chain management and commercial intelligence

Use cases: ID13, ID43, ID44

GROUP 11_ Customer relations and development of new business models

Use cases: ID47, ID48

Smart Industry Efficient organisation Energy and sustainability Commercial

SMART INDUSTRY_ GROUP 1

Automation and robotisation of industrial plants and warehouses to reduce the need for manual intervention

GROUP 1_ Automation and robotisation of industrial plants and warehouses to reduce the need for manual intervention

ID05. Automation of plant tasks using advanced and collaborative robotics

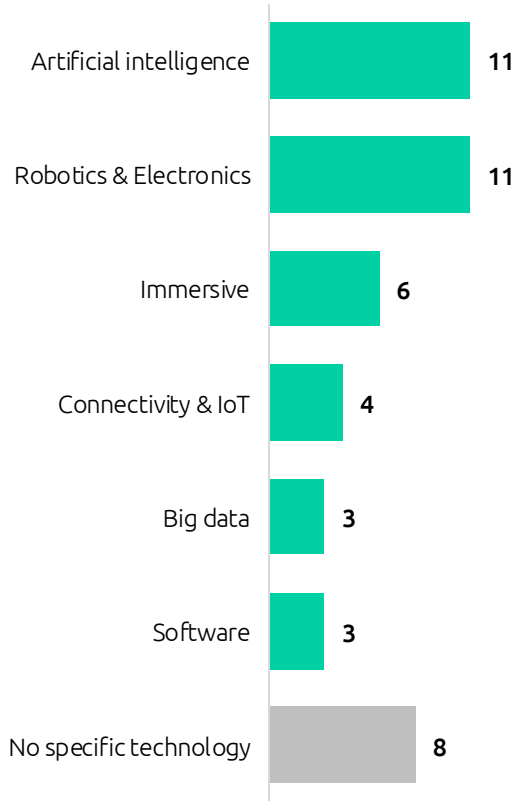
ID06. Improving operator tasks through solutions based on human-machine interfaces (HMIs)

ID11. Automation and robotisation of logistics warehouses (e.g. stock management, etc.)

Interested companies_

agaleus, DIMECO, ojmar, Orona, ABB, AQUAMBIENTE, betsaide MORE THAN IRON, sidenor, Talgo, Gestamp, COFARES, DANOBATGROUP, Petronor REPSOL, Rubi, TME Logistics innovation, GUREAK, CAF, sacyr, ITP AERO, Hettich

Technologies demanded_

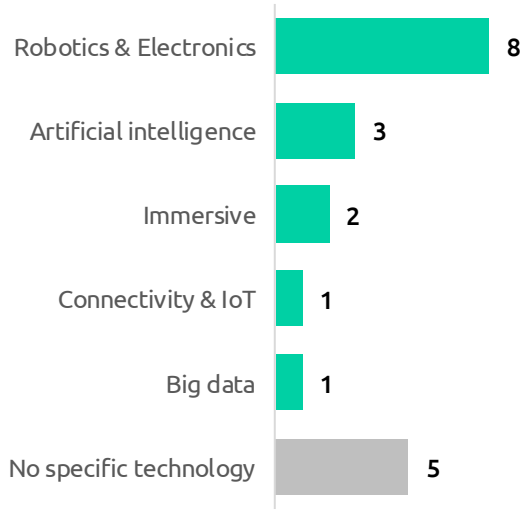


ID05. Automation of plant tasks using advanced and collaborative robotics

Specifications provided

- Flexible robotics for handling and assembly. Automatic 3D scanning.
- System for cutting up/reducing the volume of bulky plastic containers for subsequent management.
- Optimisation of activities and tasks in our warehouses is an ongoing challenge of great interest.
- Automatic on-site troubleshooting using humanoids. A humanoid robot (or similar) monitors the status of the assembly cells. On receiving a failure signal, the robot autonomously enters the affected cell, diagnoses the fault and carries out the necessary actions to resolve it.
- Unmanned manufacturing, operator-assisted automation or monitoring systems.
- The use of humanoids in the final customisation of products.
- Robotics to automate construction processes in civil engineering and construction.
- Use of collaborative robots to increase the flexibility, ergonomics and efficiency of workstations at the plant, as well as picking and preparing orders.

Technologies demanded



Interested companies_

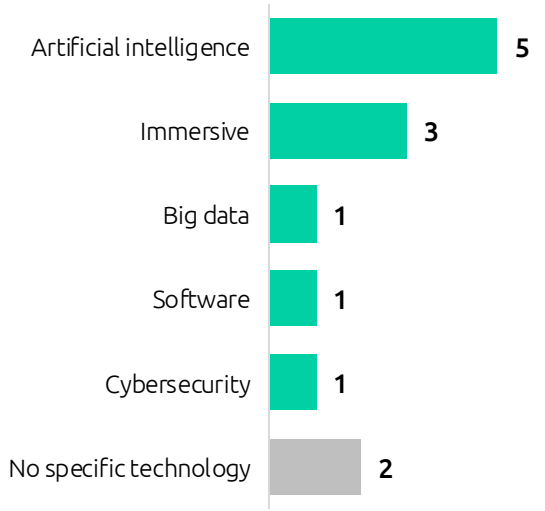
Petronor REPSOL · betsaide · Gestamp · Hettich · ABB · ojmar · AQUAMBIENTE · agaleus · DANOBATGROUP · ITP AERO · COFARES · sacyr · Rubi

ID06. Improving operator tasks through solutions based on human-machine interfaces (HMIs)

Specifications provided

- Creation of montage videos.
- Troubleshooting whilst the machines are in use and prompt assistance for operators.
- Troubleshooting whilst the machines are in use and prompt assistance for operators.
- Smart assistant (Generative AI) for on-site troubleshooting.
- Tools that streamline onboarding and lengthy staff training processes.

Technologies demanded



Interested companies_

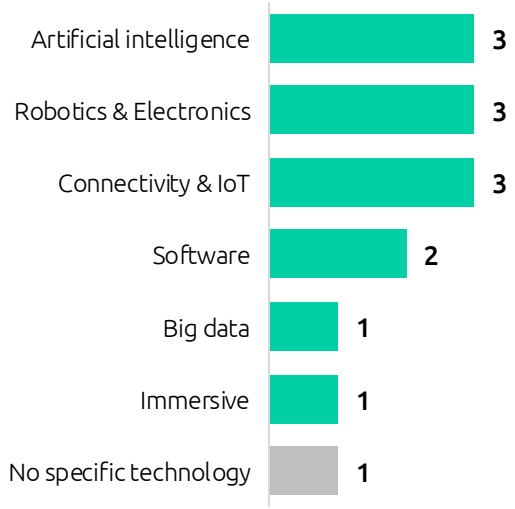
CAF · DIMECO · Gestamp · GUREAK · ITP AERO · Orona · COFARES · DANOBATGROUP

ID11. Automation and robotisation of logistics warehouses (e.g. stock management, etc.)

Specifications provided

- Optimisation of warehouse activities. We handle a huge volume of references with an extremely high stock turnover, requiring zero margin for error. The automation and robotisation of picking and stock management are key to absorb the growth of the healthcare logistics market and maintain operational excellence without compromising strict dispatch times.
- Increased storage capacity that is maximised through automation and new storage strategies.
- Transformation of the existing warehouse management model into an intelligent, autonomous and customer-focused system, powered by generative AI.
- Modernisation of our factories by adapting them to the challenges facing both the company and the sector.

Technologies demanded



Interested companies_

ITP AERO · Rubi · TME Logistics innovation · COFARES · sidenor · Talgo

SMART INDUSTRY_ GROUP 2

Monitoring, simulation and maintenance of industrial assets to anticipate failures and ensure process and product quality

GROUP 2_ Monitoring, simulation and maintenance of industrial assets to anticipate failures and ensure process and product quality

ID01. On-site monitoring of processes and machinery (advanced sensors and data collection)

ID02. Smart monitoring of infrastructures and facilities

ID07. Advanced virtualisation and simulation of processes, products and facilities

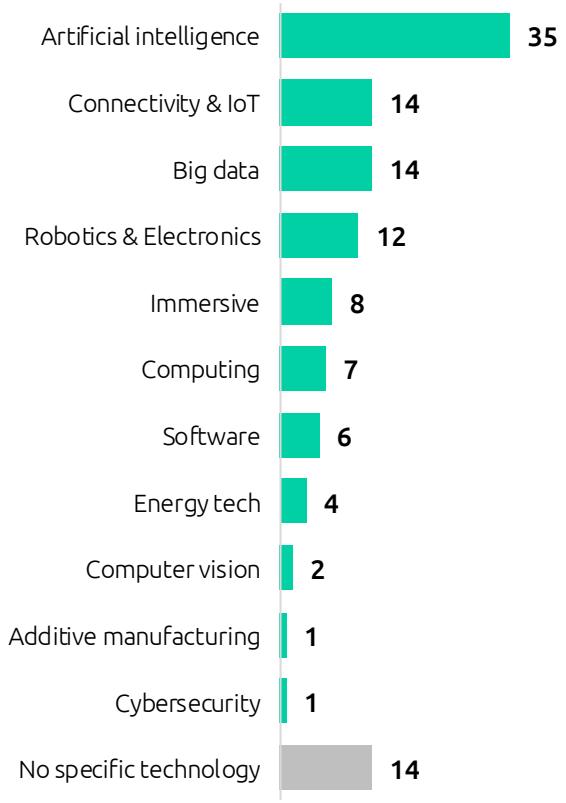
ID03. Traditional or predictive industrial maintenance

ID04. Quality control

Interested companies_

VALORIZA, serveo, Tubos Reunidos Group, Tubacex Group, Aquambiente, euskaltel, ITP Aero, arteche, BM bronymec, Rubi, ERREKA, arania, Gestamp, Danobat Group, ormazabal velatia, Uvesco, Talgo, Vicrila, ABB, vidrala, GARAY, i+Med, betsaide, exolum, Loramendi, Iberdrola, enagas, sacyr, ramondin, ansareo, CELSA, Mondragon, eika

Technologies demanded_

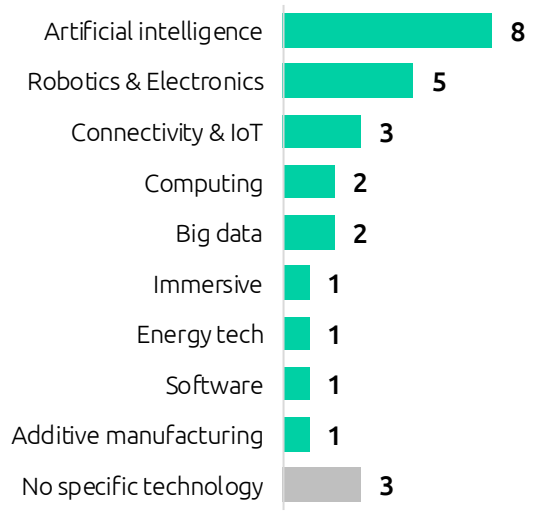


ID01. On-site monitoring of processes and machinery using advanced sensors and data collection systems

Specifications provided

- Monitoring of machinery.
- Monitoring of the traceability of batches in the warehouse.
- Sensors and data collection systems for industrial use, which can be incorporated into workshop environments with machinery, shavings, coolants, etc.
- Real-time quality control of water, optimising resource and energy consumption and early detection of leaks or anomalies in the network. Therefore, operational efficiency is maximised, environmental impact is reduced and there is a shift towards a predictive maintenance model based on accurate data.
- Predictive analysis of defects, enabling an improvement in the % of defects. Cross-reference with break-downs.
- Monitoring of machinery at different stages of digitalisation (upgrading existing machinery with IoT devices and integrating them onto the same platform as new machines with built-in IoT).

Technologies demanded



Interested companies_

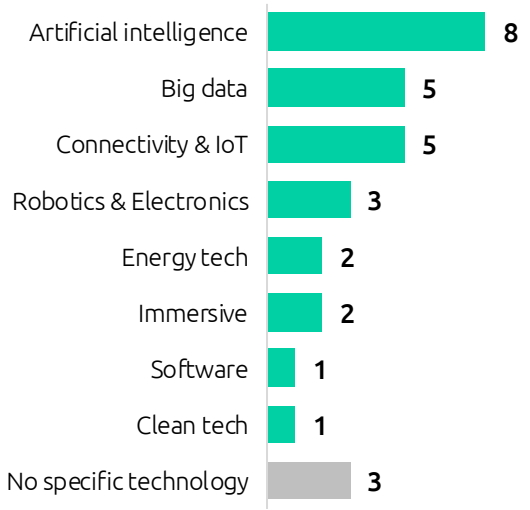
DANOBATGROUP · IBERDROLA · Loramendi · arania · ITP AERO · ramondin · TUBACEX GROUP · VICRILA · vidrala · ABB · UVesco · AQUAMBIENTE · Talgo

ID02. Smart monitoring of infrastructures and facilities

Specifications provided

- Water networks.
- IoT and digital technologies for efficiency and safety in the monitoring of infrastructures (pipelines, terminals, ports and airports).
- Robotic inspection technologies, sensors or digital twins applicable to water networks, sewerage systems or water treatment plants.
- Inspection of infrastructures, construction projects, roads in operation, etc.
- Increase in operational efficiency and service quality in maintenance contracts for infrastructures and facilities. We are looking for solutions that enable smart monitoring through sensors, data analytics and artificial intelligence, facilitating the early detection of incidents, predictive maintenance and the optimisation of resources. The aim is to validate pilot schemes in a real environment, enabling: operating costs and response times to be reduced and the availability and performance of the facilities to be improved, as well as increasing occupational health and safety (OHS).
- Installing sensors on the transmission network for more digitalised operation and maintenance.
- Gas and odour emissions in plants; Gas detection and confined spaces.
- Monitoring of infrastructures and facilities for predictive maintenance.

Technologies demanded



Interested companies_

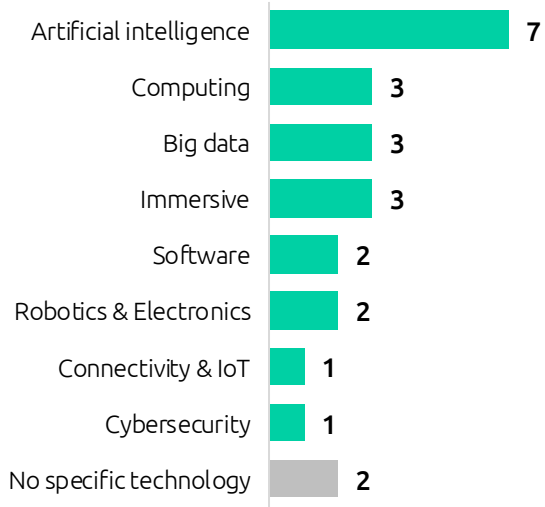
DANOBATGROUP · IBERDROLA · VALORIZA · serveo · exolum · betsaide · Loramendi · ansareo · AQUAMBIENTE · sacyr · TUBOS REUNIDOS GROUP · arteche · euskaltel · enagas

ID07. Advanced virtualisation and simulation of processes, products and facilities

Specifications provided

- Control and prediction of the cooling rate in dies; Smart optimisation of the furnace-press transfer; Digital twin of the hot-stamping process for troubleshooting; Improved simulation for thermal compensation and phase change; Virtual commissioning of the entire plant.
- Digitalisation of products and processes can help a company remain competitive through agility, concepts such as approvals and/or predictive certifications can be the key to success in the commodities market
- Virtualisation and simulation of infrastructures and processes, particularly in complex environments, such as industry, corporate settings and data centres, where operational and energy optimisation is key. We are looking for solutions that enable virtual models of facilities and assets (digital twins) to be created in order to analyse their behaviour, optimise operations and simulate scenarios without affecting actual operations. The aim is to validate pilot projects in real environments, enabling: the performance of critical facilities to be optimised; operational and energy consumption scenarios to be simulated; decision-making based on data to be improved; risks to be reduced and operational efficiency to be increased. Solutions that can be integrated with real data (IoT, BMS, management systems) and with the potential to be scaled across different types of assets and customers will be considered positively.

Technologies demanded



Interested companies_

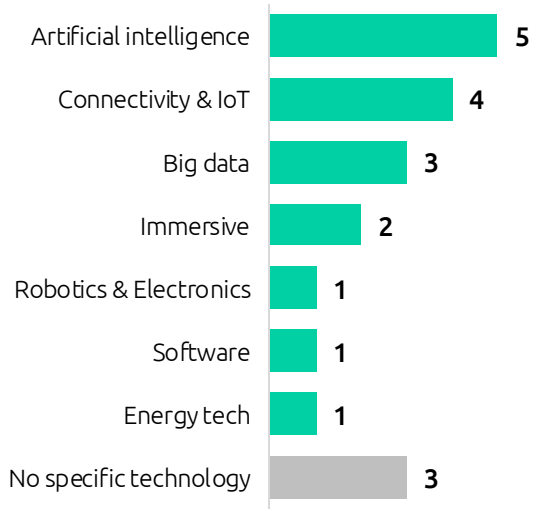
arteche · Gestamp · Rubi · serveo · betsaide · ITP AERO · ERREKA · eika · Loramendi

ID03. Traditional or predictive industrial maintenance

Specifications provided

- Implement an efficient system of predictive maintenance for machinery. Ensure that machines are stopped sensibly and smartly.
- Development of models based on AI and Machine Learning to predict failures, optimise maintenance and monitor critical parameters of the rolling mill in real time (gearboxes, oil quality, cooling and process performance).
- Predictive maintenance to optimise costs, increase asset availability and service quality. We are looking for solutions that enable us to move from reactive or preventive maintenance models to data-driven predictive models, through the use of advanced analytics and artificial intelligence. The aim is to validate pilot schemes in a real environment that will enable us to: anticipate failures and reduce critical incidents, optimise maintenance and resource planning, reduce operating costs and downtime, increase safety and minimise risks associated with asset failures. Mature solutions that can be integrated with GMAO/CMMS and other existing systems and which can be scaled to suit different contracts and sectors will be considered positively.
- Predictive maintenance of infrastructures and facilities based on their monitoring.

Technologies demanded



Interested companies_

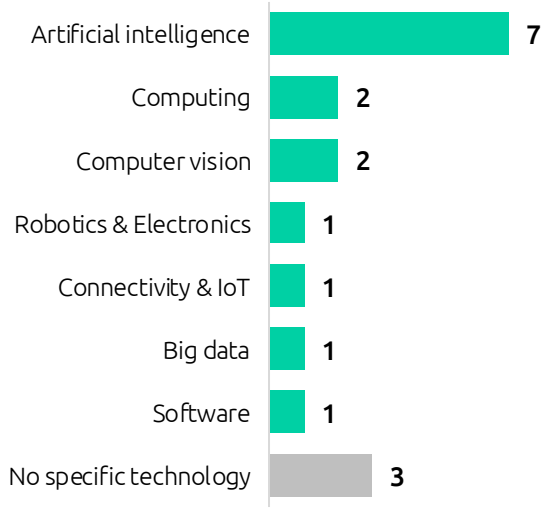
serveo · arania · IBERDROLA · CELSA · vidrala · BM bronymec · TUBACEX GROUP · TUBOS REUNIDOS GROUP · Loramendi · euskaltel

ID04. Quality control

Specifications provided

- Real-time crack prediction; Non-destructive in-line measurement of mechanical properties; Platform to eliminate trial and error in the fine tuning of dies.
- Identification of defects (marks, scratches, etc.) using vision or other technologies; in-line verification of weld quality to optimise parameters.
- Computer vision technologies operating in the non-visible spectrum (NIR, SWIR, UV, MWIR, etc.) to detect properties or anomalies beyond the capabilities of conventional imaging, supporting advanced industrial inspection and quality control.
- Use of artificial vision and Deep Learning for the automatic control of in-line product geometry and the early detection of wear on critical components in the round bar and wire rod rolling process.
- Quality control of processes and products to increase competitiveness.
- An industrial chatbot capable of consulting and analysing the manufacturer's technical, operational, process and quality documentation.
- Automatic 3D scanning
- AI relating to image and data processing.

Technologies demanded



Interested companies_

Gestamp · GARAY · CELSA · Rubi · TUBACEX GROUP · vidrala · DANOBATGROUP · Loramendi · MONDRAGON · ormazabal velatia · ABB · i+Med BIOMEDICAL INTELLIGENCE

SMART INDUSTRY_ GROUP 3

Design, manufacture and life cycle analysis of industrial products

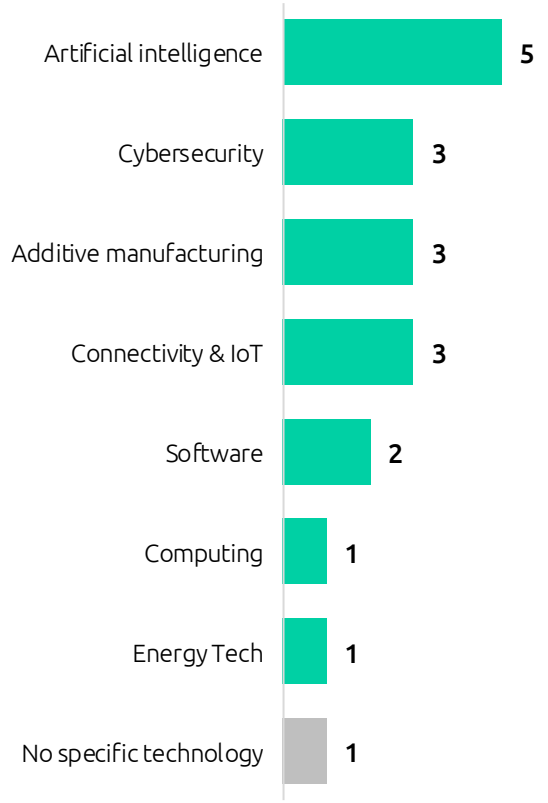
GROUP 3_ Design, manufacture and life cycle analysis of industrial products

ID10. Product life cycle assessment (LCA)

ID09. Advanced product design and development, incorporating embedded intelligence and functionalities

ID08. Additive manufacturing for production and prototyping

Technologies demanded_



Interested companies_

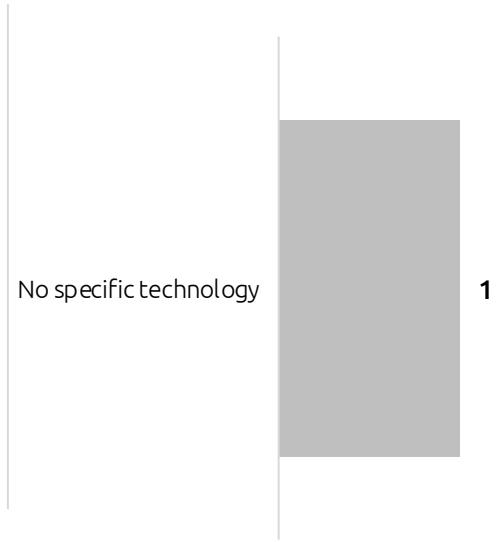
arteche · GH CRANES & COMPONENTS · ojmar · Copreci · Orona · Gestamp · i+Med BIOMEDICAL INTELLIGENCE · ArcelorMittal · H2SITE · ABB · VICRILA · sacyr · eika

ID10. Product life cycle assessment (LCA)

Specifications provided

- Be able to understand what stage of the life cycle our products are at.

Technologies demanded



Interested companies_

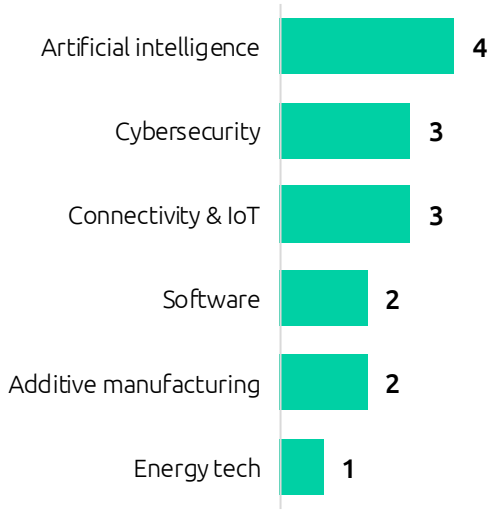
VICRILA

ID09. Advanced product design and development, incorporating embedded intelligence and functionalities

Specifications provided

- Incorporate advanced features into our lock management software systems, enabling users to resolve queries and incidents and seek technical support via an interactive interface, without the need for intervention by our technical support staff.
- Parametric design.
- AI to interpret and extract information from CAD files and validate designs.
- New construction materials.
- Bioelectronics, electronics compatible with the human body / Microfluidics. Lab-on-a-Chip, Organ-on-a-Chip.
- Home-related business areas, which may include systems, devices, features or services that enhance comfort in the home, preferably those that are alternative or complementary to the heating and/or cooking, cleaning and food preparation sectors, etc.

Technologies demanded



Interested companies_

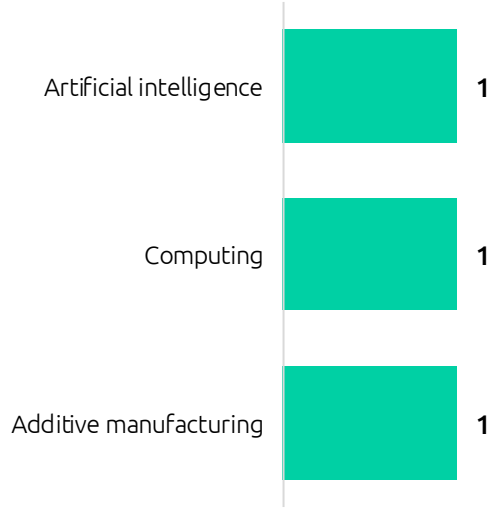
arteche · GH CRANES & COMPONENTS · ojmar · Copreci · Orona · ABB · i+Med BIOMEDICAL INTELLIGENCE · sacyr · Gestamp · eika

ID08. Additive manufacturing for production and prototyping

Specifications provided

- Additive manufacturing technologies for prototyping and initial production runs.

Technologies demanded



Interested companies_

H2SITE

ArcelorMittal

SMART INDUSTRY_ GROUP 4

Fleet management, distribution logistics and electrification of industrial mobility

GROUP 4_ Fleet management, distribution logistics and electrification of industrial mobility

ID12. Optimisation of operational logistics: routes, distribution and last-mile delivery

ID14. Comprehensive fleet management: financing, operation and maintenance

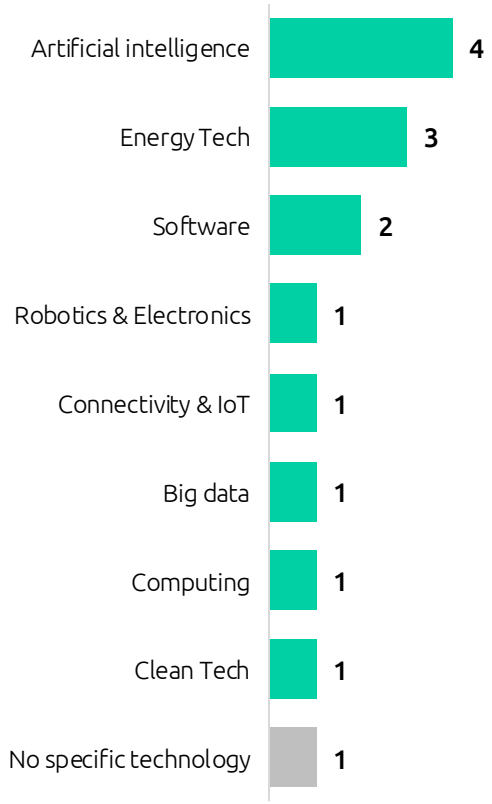
ID15. Electric, autonomous and/or connected mobility in an industrial setting

ID23. Electrification of transport and the energy transition in industrial vehicles (hydrogen, EVs) and urban services

Interested companies_

Uvesco, Rubi, TME Logistics innovation, Iberdrola, Mondragon Humanity at Work, enagas, GH Cranes & Components, Valoriza, euskaltel

Technologies demanded_

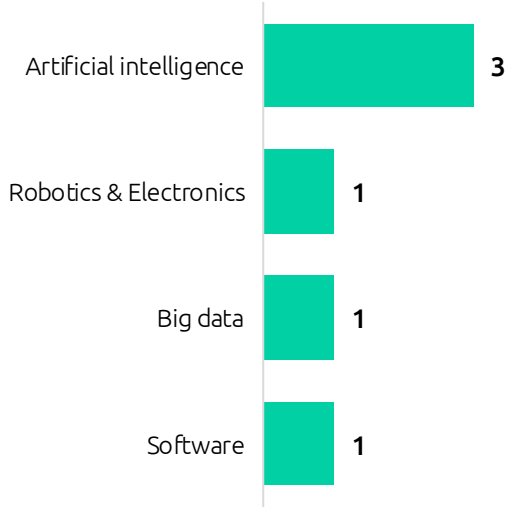


ID12. Optimisation of operational logistics: routes, distribution and last-mile delivery

Specifications provided

- Evolve transport management from a model based on static planning to a dynamic, intelligent and adaptive real-time system, supported by generative AI.

Technologies demanded



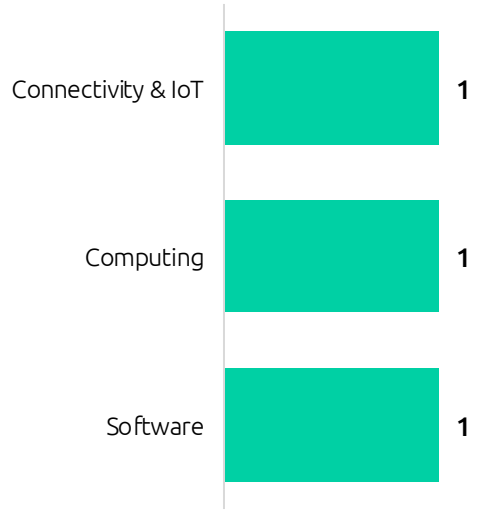
Interested companies_

ID14. Comprehensive fleet management: financing, operation and maintenance

Specifications provided

- Standardised sensor installation across the fleet, particularly in cases in which we have inherited machinery and cannot fit our own sensors, so that we can collect data consistently, facilitate the monitoring of all our machinery in operation, and even subsequently offer this service to customers.

Technologies demanded



Interested companies_

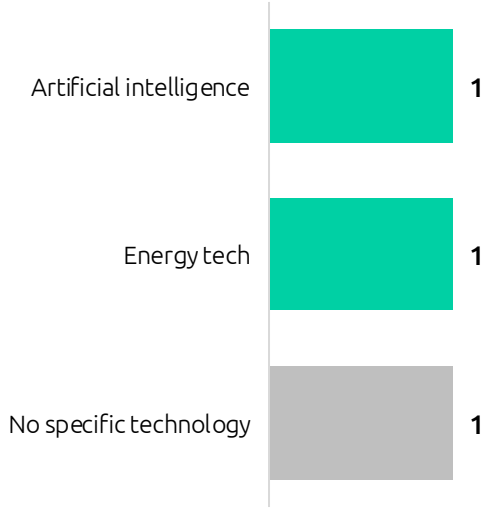
VALORIZA

ID15. Electric, autonomous and/or connected mobility in an industrial setting

Specifications provided

- N/A.

Technologies demanded



Interested companies_

GH CRANES & COMPONENTS

MONDRAGON HUMANITY AT WORK

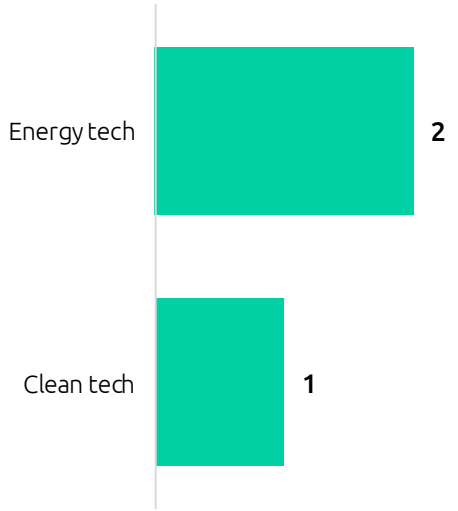
euskaltel

ID23. Electrification of transport and the energy transition in industrial vehicles (hydrogen, EVs) and urban services

Specifications provided

- N/A.

Technologies demanded



Interested companies_

IBERDROLA

enagas

EFFICIENT ORGANISATION_ GROUP 5

Cybersecurity, physical security, employee health and regulatory compliance

GROUP 5_ Cybersecurity, physical security, employee health and regulatory compliance

ID37. Logical cybersecurity (e.g. cloud, on-line services, prevention, etc.)

ID38. Physical cybersecurity and security in operational technology (OT) environments: access control, plant and line security

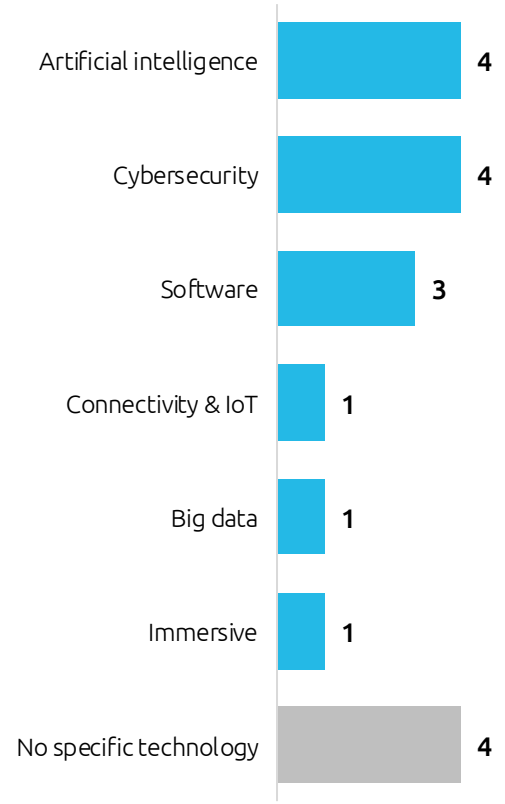
ID39. Management of employees' health, safety and well-being on site

ID40. Regulatory compliance, risk management and regulatory traceability (compliance and legal)

Interested companies_

arania · GUREAK · serveo · VALORIZA · elecnor · i+Med BIOMEDICAL INTELLIGENCE · TUBOS REUNIDOS GROUP · CAF · GARAY · sacyr · Ingeteam

Technologies demanded_

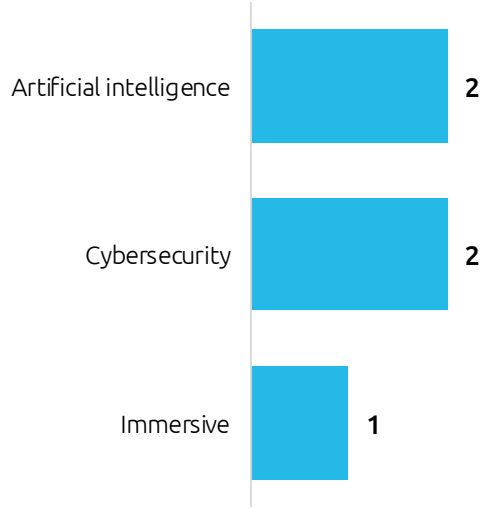


ID37. Logical cybersecurity (e.g. cloud, on-line services, prevention, etc.)

Specifications provided

- N/A.

Technologies demanded



Interested companies_

elecnor

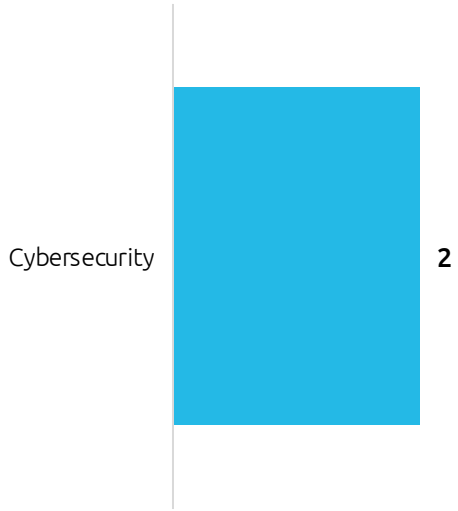
Ingeteam

ID38. Physical cybersecurity and security in operational technology (OT) environments: access control, plant and line security

Specifications provided

- N/A.

Technologies demanded



Interested companies_

TUBOS REUNIDOS GROUP

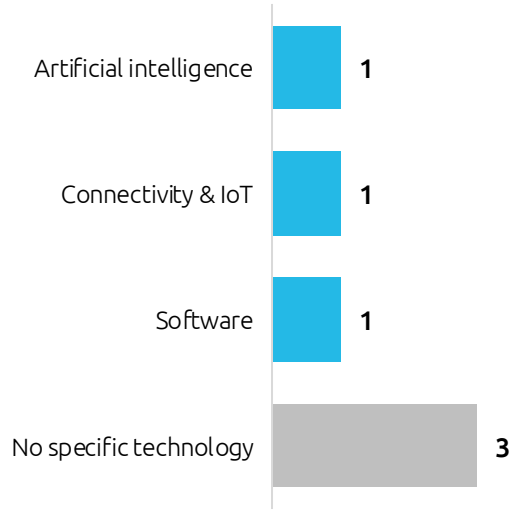
Ingeteam

ID39. Management of employees’ health, safety and well-being on site

Specifications provided

- Improve employees’ health, safety and well-being, particularly in industrial and maintenance environments where there are significant operational risks. We are looking for innovative solutions that enable us to monitor and prevent workplace risks through the use of digital technologies, thereby improving both safety and working conditions. The aim is to validate pilot schemes in a real environment that will enable: accidents and hazardous situations to be reduced; environmental and employee conditions to be monitored; ergonomics to be improved and injuries prevented, guaranteeing compliance with occupational health and safety regulations. Solutions that are easily integrated with existing operations and can be scaled to suit different types of service and customer will be considered positively.
- Road safety and employee safety in field operations (roads, motorways, construction sites, water networks or treatment plants, etc.)
- Digitalisation, management and monitoring of occupational health and safety; Individual risk assessment; Heatstroke; Overwork; Mental health; Risks associated with lorry driving.

Technologies demanded



Interested companies_

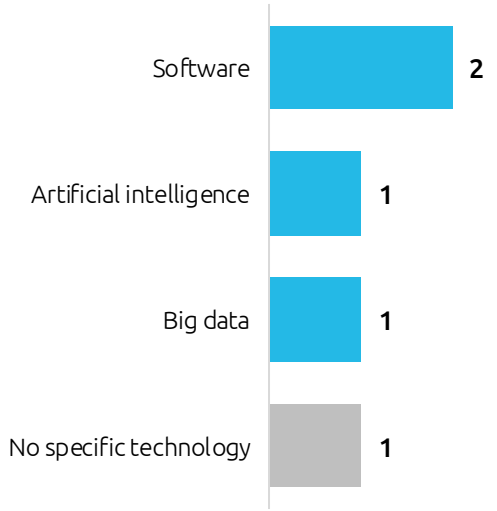
arania GUREAK serveo VALORIZA sacyr

ID40. Regulatory compliance, risk management and regulatory traceability (compliance and legal)

Specifications provided

- Contract management.
- Platforms that streamline the handling of regulatory documentation and communication with the authorities and the parties involved.

Technologies demanded



Interested companies_

GARAY

i+Med BIOMEDICAL INTELLIGENCE

CAF

EFFICIENT ORGANISATION_ GROUP 6

Digitalisation of internal processes, knowledge and talent management within the organisation

GROUP 6_ Digitalisation of internal processes, knowledge and talent management within the organisation

ID32. Automation of business processes and internal processes (BPA, RPA)

ID31. Digital management, planning and decision-support systems

ID42. Internal reporting and management systems, including monitoring and communication (e.g. CSR, ESG, SDGs, etc.)

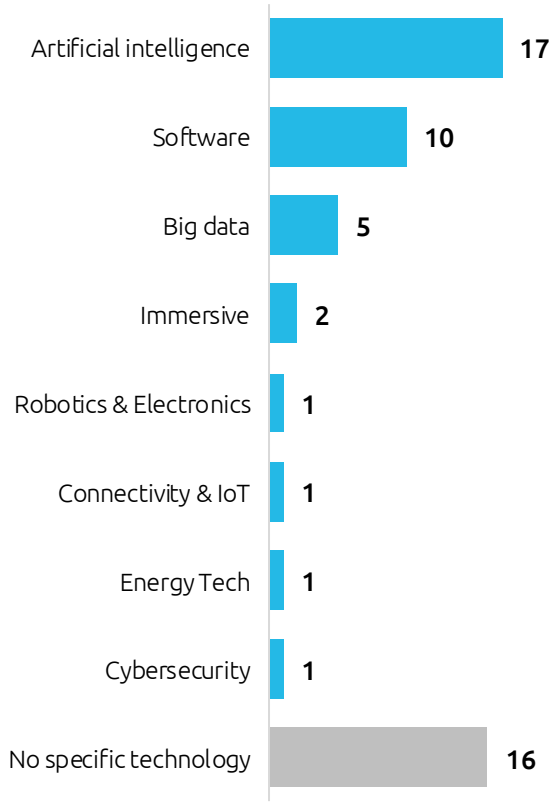
ID34. Tools and platforms for internal and remote collaboration

ID36. Knowledge management and transfer within the organisation

ID33. Increased efficiency and quality in document management

ID41. Digitalisation of talent management: recruitment, onboarding, training, upskilling, workforce planning and retention

Technologies demanded_



GROUP 6_ Digitalisation of internal processes, knowledge and talent management within the organisation

Interested companies_

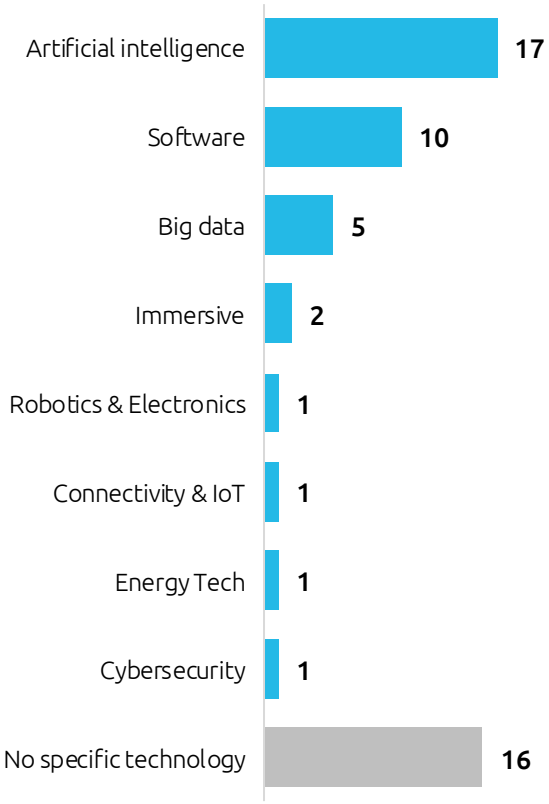
ABB · agaleus · ansareo · arania · sidenor · GH CRANES & COMPONENTS · Viuda de Sainz

CAF · VALORIZA · H2SITE · BM bronymec · eika · rpk

euskaltel · GUREAK · FAES FARMA Passion for health · ERALKI ENGINEERING SL · betsaide MORE THAN IRON · Mail

Talgo · VICRILA · UVesco · sacyr · Orona · DIMECO · ojmar

Technologies demanded_

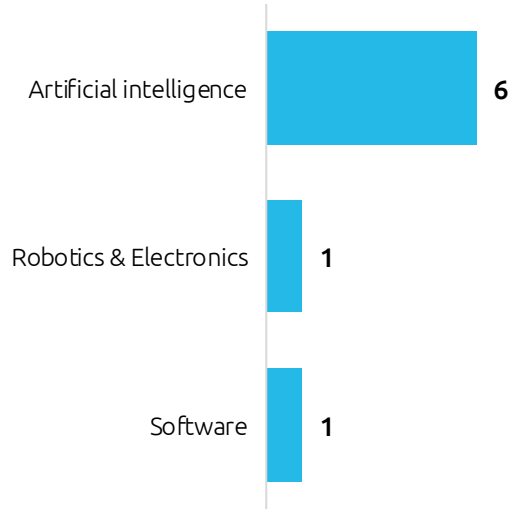


ID32. Automation of business processes and internal processes (BPA, RPA): HR management, finance, administration, marketing, etc.

Specifications provided

- Digitalise and automate specific occupational health and safety tasks for the coordination of business activities.
- Automation of processes related to human resources and all aspects of knowledge management.
- Implementation of on-premises AI-based solutions within the company's organisational processes.

Technologies demanded



Interested companies_

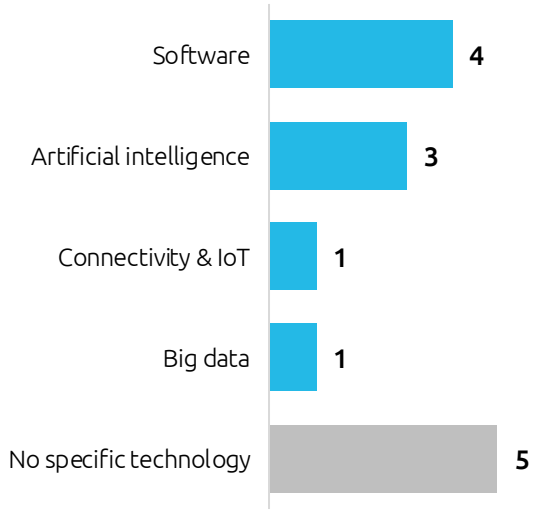
agaleus · GH CRANES & COMPONENTS · UVesco · rpk · sidenor · H2SITE

ID31. Digital management, planning and decision-support systems

Specifications provided

- Detection of discrepancies in the flow of information between departments. Optimisation of factory resources (hours, machines, etc.). Digitalisation of production control and monitoring meetings.
- Definition of the optimal management model for our organisation, treating AI as just another driving force.
- Shift management in a supermarket.
- Development of a centralised, organisation-wide control panel that is automatically fed by management systems and can be customised by the user without the need for coding.
- Solutions related to access to data from different information sources, and a cross-functional view of processes for decision-making.
- Daily incident reports are not quantified – Measurement of the impact in terms of tonnes, which can then be used in economic projections to calculate ROI and enable more specific tendering.
- Centralise supplier information and quotes so that different department heads and area managers can all access them, as a great deal of time is currently spent requesting the same or similar quotes from different people.

Technologies demanded



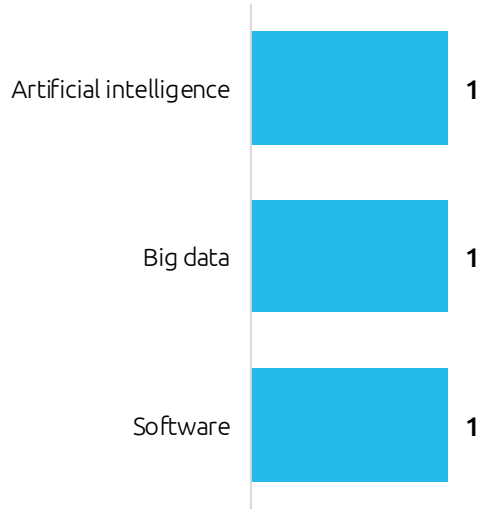
Interested companies_

ID42. Internal reporting and management systems, including monitoring and communication (e.g. CSR, ESG, SDGs, etc.)

Specifications provided

- Integration of various reporting tools.

Technologies demanded



Interested companies_

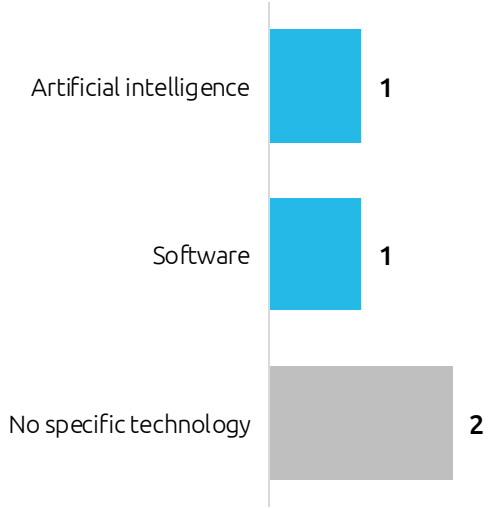
euskaltel

ID34. Tools and platforms for internal and remote collaboration

Specifications provided

- Improve the quality and process of generating product-related documentation.

Technologies demanded



Interested companies_

DIMECO

FAES FARMA
Passion for health

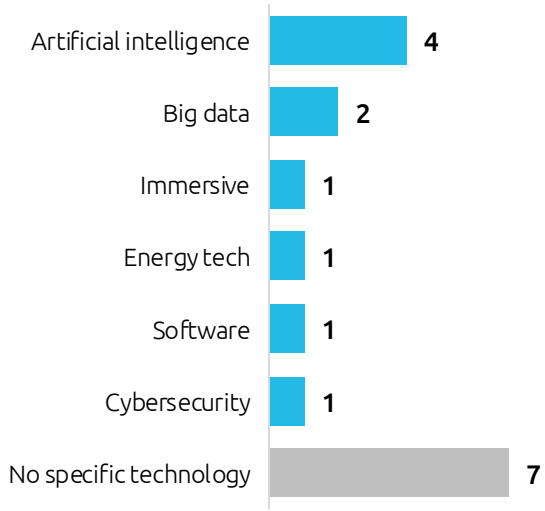
Orona

ID36. Knowledge management and transfer within the organisation

Specifications provided

- Ensure that know-how remains within the company rather than being confined to individual minds.
- Share best practice across different sites.
- Consolidate the know-how of people within the organisation.
- Handle and use knowledge to adapt processes for people with cognitive needs.
- Management of the organisation's internal strategic knowledge, maximising its value and ensuring confidentiality. Use case applied to intellectual and industrial property assets.
- Address the loss of knowledge in light of a generational shift within the company.
- Bridge the digital divide and increase the uptake of digital tools and processes by operational staff, so that they can continue to add value as the company evolves.
- Centralise and share knowledge by integrating information from different areas into a single, unequivocal source that is easy to consult.

Technologies demanded



Interested companies_

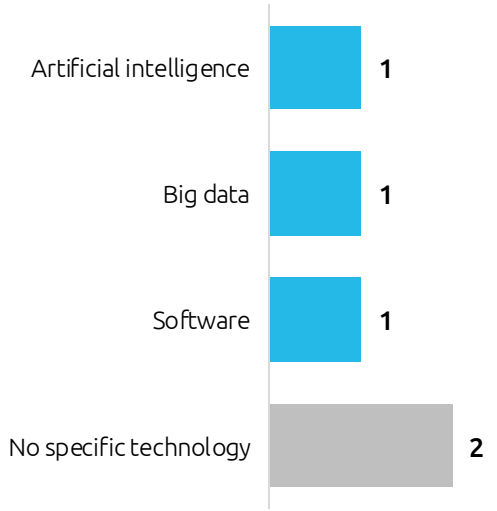
GUREAK · bronymec · H2SITE · eika · sidenor · betsaide · CAF · DIMECO · ERALKI · Orona · FAES FARMA · VALORIZA · Talgo

ID33. Increased efficiency and quality in document management

Specifications provided

- Dispersed data that is sometimes duplicated and there is a risk (or possibility) of working with outdated versions. Documents may have different file extensions, ranging from a simple .pdf to a 3D .stl.
- Our organisation manages the technical documentation generated across numerous projects and by different teams. The main challenge is to capture and organise the knowledge dispersed throughout this documentation in order to build a dataset that enables us to learn from previous projects and apply those lessons to future ones. We are looking for a solution that enables us to classify, index and extract knowledge intelligently, so that anyone on the team can access the organisation's accumulated expertise and thereby improve decision-making and efficiency in future projects.

Technologies demanded



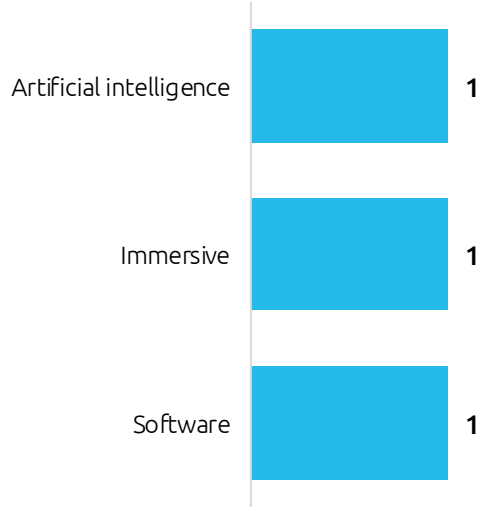
Interested companies_

ID41. Digitalisation of talent management: recruitment, onboarding, training, upskilling, workforce planning and retention

Specifications provided

- This presents a significant challenge for the company, given the need to retain talent whilst also recruiting specific profiles for which there is limited supply on the market.

Technologies demanded



Interested companies_

Talgo

ENERGY AND SUSTAINABILITY_ GROUP 7

Energy efficiency, consumption traceability and measurement of environmental impact

GROUP 7_ Energy efficiency, consumption traceability and measurement of environmental impact

ID16. Energy monitoring and traceability

ID17. Use of technology and new devices to increase energy efficiency

ID18. Predictive methods for dynamic real-time demand and consumption adjustment to support energy flexibility

ID30. Measurement of environmental impact (e.g. carbon and water footprints) and ESG / Product Passport

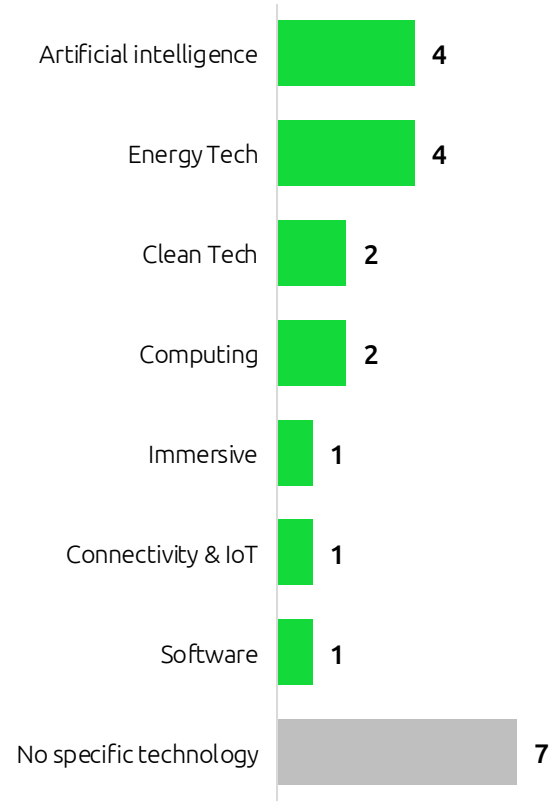
ID49. Heat recovery and its electrification in industrial processes

ID50. Industrial electrification

Interested companies_

arteche, GARAY, arania, betsaide, eika, Orona, ABB, IBERDROLA, enagas, serveo, TUBACEX GROUP, edp, Ingeteam, ArcelorMittal, Petronor, REPSOL, TUBOS REUNIDOS GROUP

Technologies demanded_

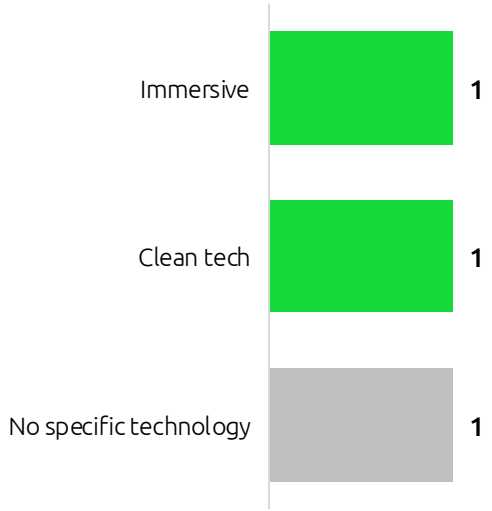


ID16. Energy monitoring and traceability

Specifications provided

- Advanced instrumentation and sensors for the reliable monitoring of gas, electricity and water consumption.
- Monitoring of waste and energy consumption. Track machine consumption during production.

Technologies demanded



Interested companies_

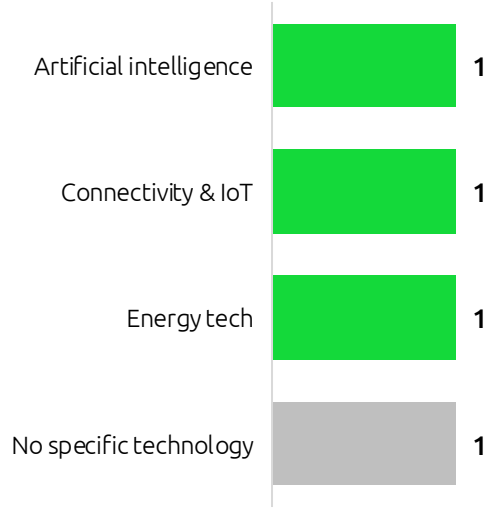
GARAY enagas ABB

ID17. Use of technology and new devices to increase energy efficiency (energy audits and increasing performance)

Specifications provided

- Increasing energy efficiency is a strategic priority, not only for its direct impact on operating costs but also for its contribution to sustainability and the reduction of emissions in the contracts managed. We are looking for solutions that enable energy consumption to be optimised in infrastructures and services through the use of advanced monitoring, analytics and control technologies. The aim is to validate pilot schemes in a real environment that will enable: inefficiencies in energy consumption to be identified; energy resource use to be optimised in real time; operating costs and the associated emissions to be reduced and energy management to be improved in different types of facilities. Solutions that can be integrated with existing systems (BMS, energy management platforms, IoT) will be considered positively.

Technologies demanded



Interested companies_

serveo

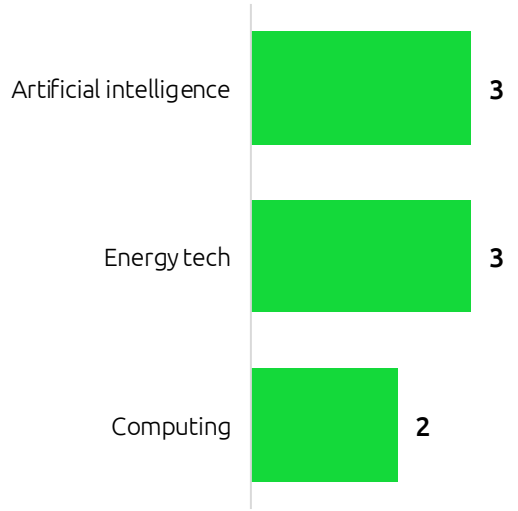
TUBACEX GROUP

ID18. Predictive methods for dynamic real-time demand and consumption adjustment to support energy flexibility

Specifications provided

- Flexibility in B2B environments (industrial customers).

Technologies demanded



Interested companies_

edp

Ingeteam

ArcelorMittal

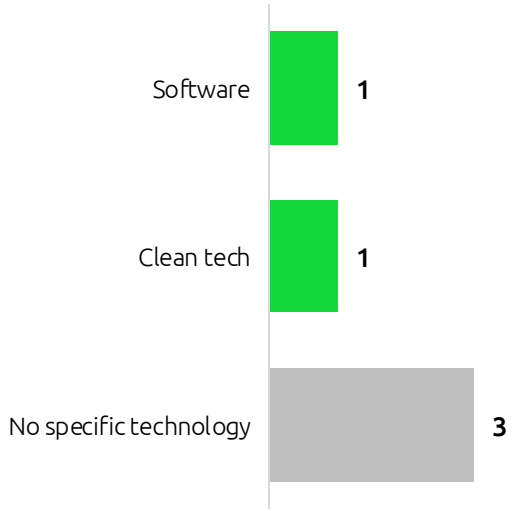
Tubos Reunidos Group

ID30. Measurement of environmental impact (e.g. carbon and water footprints) and ESG / Product Passport

Specifications provided

- A mandatory requirement for the steel industry and increasingly demanded in the automotive sector.
- DIGITAL PASSPORT, LPC and EPDs.

Technologies demanded



Interested companies_

arteche · GARAY · arania · betsaide · Orona · eika

ID49. Heat recovery and its electrification in industrial processes

Specifications provided

- Emerging heat recovery technologies (TRL <7) aimed at using waste industrial heat (typically in the range of 80–110 °C) to generate steam at temperatures above 150 °C, potentially reaching 200–400 °C, or to produce renewable energy by converting it into electricity.
- Innovative heat electrification solutions currently under development, aimed at generating heat from the industrial process at temperatures in excess of 400 °C, enabling the hybridisation or replacement of conventional furnaces and cracking units. The technologies under consideration include (but are not limited to) resistive, inductive, microwave and plasma-based solutions.

Technologies demanded

Interested companies_

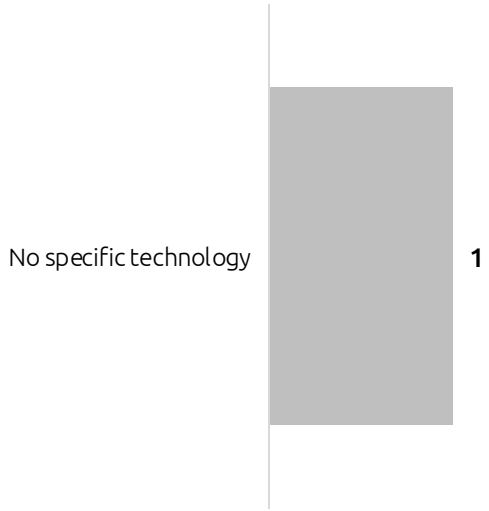
Petronor REPSOL

ID50. Industrial electrification

Specifications provided

- N/A

Technologies demanded



Interested companies_

IBERDROLA

ENERGY AND SUSTAINABILITY_ GROUP 8

Reduction and management of environmental impact: CO_2, water and industrial waste

GROUP 8_ Reduction and management of environmental impact: CO_2, water and industrial waste

ID28. Water management

ID25. CO_2 capture, collection or storage

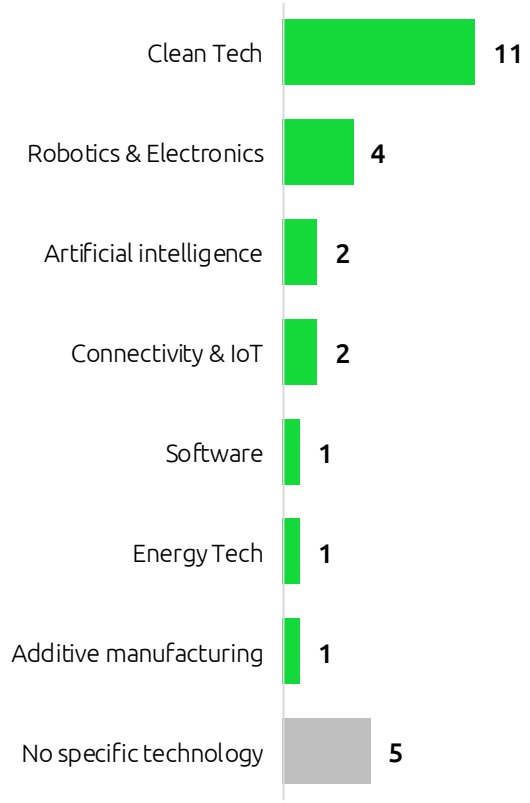
ID24. Control and reduction of pollutant emissions

ID27. Waste management and recovery, including waste from production

Interested companies_

Petronor, Repsol, ArcelorMittal, ansareo, sacyr, eika, AQUAMBIENTE, enagas, exolum, TUBACEX GROUP, Tubos Reunidos Group, H2SITE, VALORIZA, Composites Martiartu

Technologies demanded_

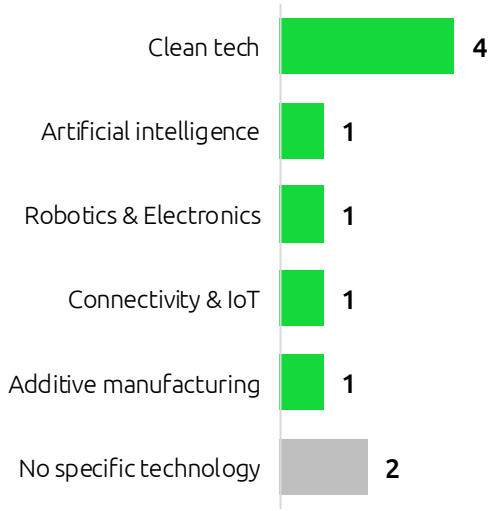


ID28. Water management

Specifications provided

- Monitoring and management of water networks.
- Developments in water treatment related to selective and precision filtration, the materials used in their development (functional technical ceramics) or disruptive alternatives serving the same purpose.
- Faced with the challenge of water scarcity, the priority is to optimise resources. Wastewater treatment for industrial reuse
- The water cycle, distribution and sewerage networks, treatment plant systems, desalination (energy efficiency, brine, etc.) and wastewater treatment (sludge, emerging contaminants, etc.)

Technologies demanded



Interested companies_

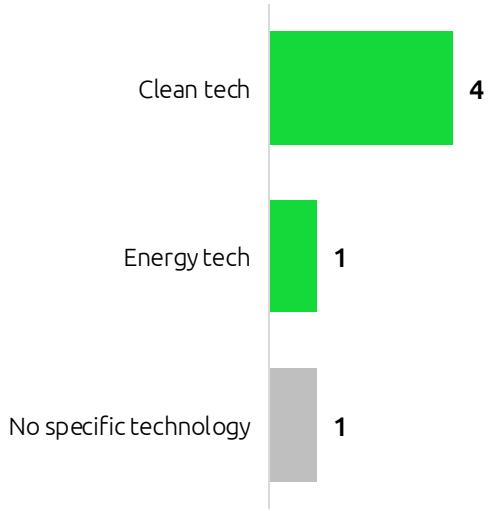
Petronor REPSOL · ArcelorMittal · ansareo · sacyr · eika · AQUAMBIENTE

ID25. CO_2 capture, collection or storage

Specifications provided

- CO_2 logistics, which involves transport by pipeline or other solutions, such as by rail, ship or lorry. Therefore, we store it and ship it by sea or use it to produce synthetic fuel. We are also interested in capture technologies.
- New materials/internal coatings for new pipes suitable for CO_2.

Technologies demanded



Interested companies_

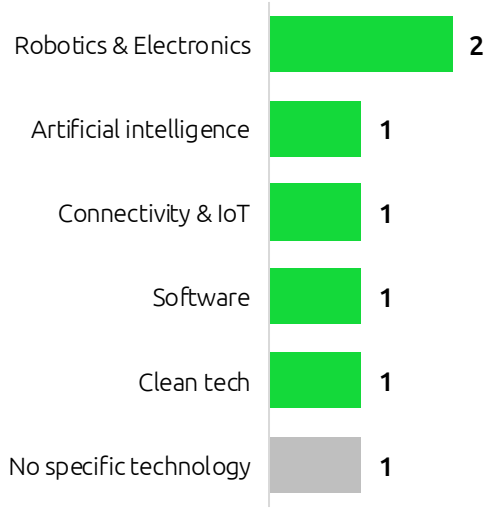
ArcelorMittal · enagas · exolum · Petronor · Repsol · Tubos Reunidos Group

ID24. Control and reduction of pollutant emissions

Specifications provided

- N/A

Technologies demanded



Interested companies_

ArcelorMittal

sacyr

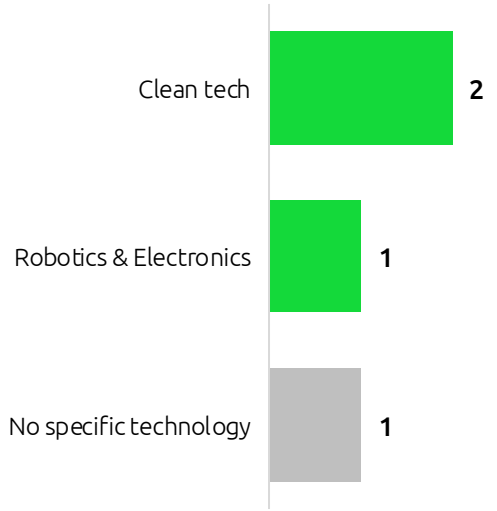
TUBACEX GROUP

ID27. Waste management and recovery, including waste from production

Specifications provided

- Recovery and recycling of precious metals: silver, palladium.
- Processing difficult materials (film, PP, PET, wood); Introducing bio-stabilised products to the market; New types of waste (batteries, PVs, blades).
- We generate approximately 40 tonnes of waste and production scrap annually from thermoset materials: SMC, Carbon Fibre SMC and Phenolic SMC. In Q1 and Q2, we have already achieved the estimated 20% increase. In Q3 and Q4, we will reach more than 30%. Exceeding estimates -1 This inert waste is currently sent to authorised landfill sites at an approximate cost of >€10,000 per year. In accordance with European environmental policies, the existing treatment of this waste will be banned or restricted in the future.

Technologies demanded



Interested companies_

H2SITE VALORIZA COMPOSITES MARTIARTU

ENERGY AND SUSTAINABILITY_ GROUP 9

Generation, storage and integration of renewable energy in industrial environments

GROUP 9_ Generation, storage and integration of renewable energy in industrial environments

ID19. Power generation and cogeneration (solar, wind, etc.)

ID22. Hydrogen-based energy solutions and electrolysis processes

ID21. Microgrids and the integration of local and distributed renewable energy in industrial environments

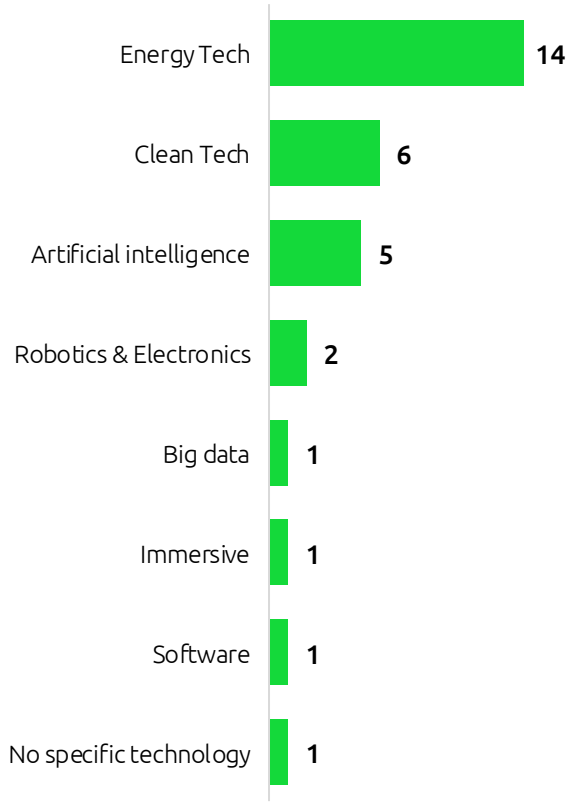
ID20. Energy storage and accumulation (e.g. batteries, hydrogen, gravitational, thermal, etc.)

ID51. Renewable fuels (biofuels, synthetic fuels, biogas)

Interested companies_

enagas, edp, CELSA, ojmar, Ingeteam, Petronor REPSOL, eika, exolum, Viuda de Sainz, arteche, IBERDROLA, Copreci

Technologies demanded_

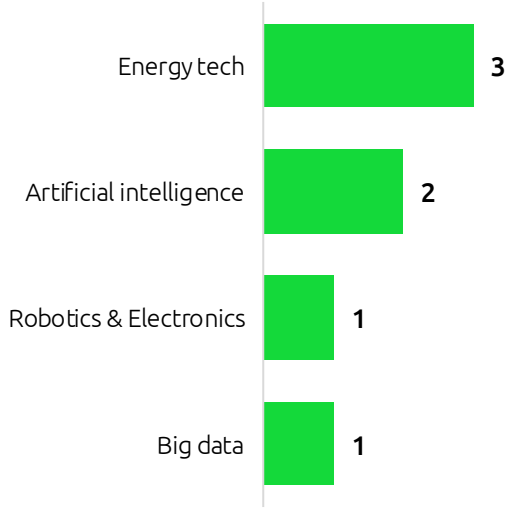


ID19. Power generation and cogeneration (solar: photovoltaic, thermal, hybrid; wind: onshore, offshore, new turbines; others)

Specifications provided

- Initiatives to reduce OPEX in O&M.
- Develop a comprehensive energy demand management plan that combines multiple technologies to optimise consumption in real time. The challenge lies in moving from a reactive model to a predictive one, that is capable of anticipating peaks in demand, dynamically adjusting consumption and intelligently coordinating different energy sources and systems. The expected outcome is a significant reduction in energy costs and increased operational efficiency.

Technologies demanded



Interested companies_

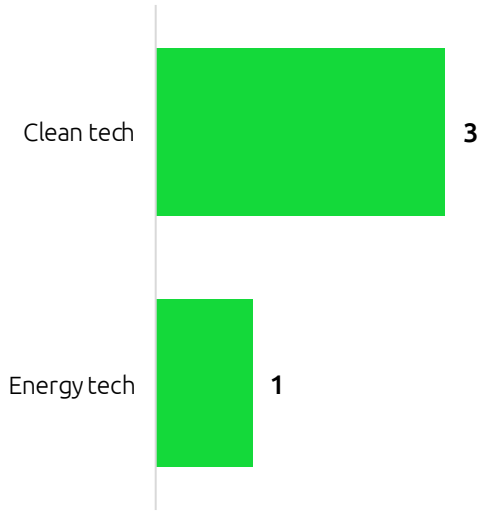
edp Ingeteam Viuda de Sainz

ID22. Hydrogen-based energy solutions and electrolysis processes

Specifications provided

- H_2 and derivatives, such as methanol and ammonia. Ultimately, our vision of ‘green molecules’ is broader: we are interested in hydrogen (whether it is produced by electrolysis or other methods, such as reforming) and its different uses, either directly (for transport or industry) or in the form of its derivatives, such as ammonia and methanol, and their various uses, for example in fertilisers or as marine fuel, to give two specific examples.

Technologies demanded



Interested companies_

enagas

exolum

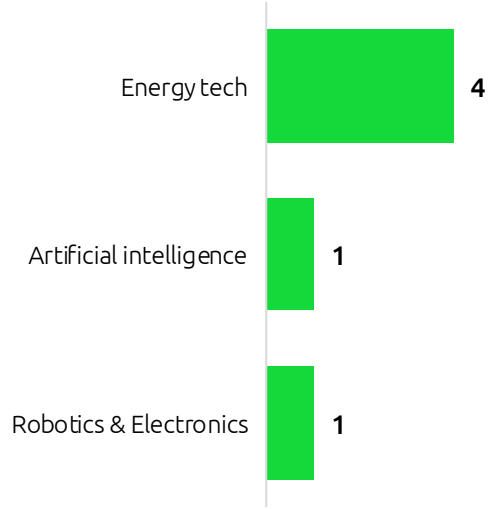
Petronor REPSOL

ID21. Microgrids and the integration of local and distributed renewable energy in industrial environments

Specifications provided

- Industrial heat decarbonisation.

Technologies demanded



Interested companies_

arteche

edp

IBERDROLA

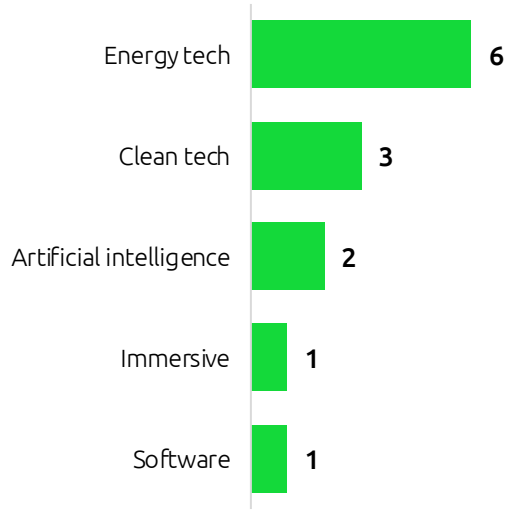
Copreci

ID20. Energy storage and accumulation (e.g. batteries, hydrogen, gravitational, thermal, etc.)

Specifications provided

- New storage technologies apart from lithium-ion.
- Guarantee a stable, secure and competitive electricity supply through advanced energy storage solutions (electrochemical batteries, thermal storage, hybrid systems, etc.) that increase the plant's operational flexibility and reduce its dependence on the grid.
- We are looking for new, sustainable ways to store energy in our battery-powered lock systems.

Technologies demanded



Interested companies_

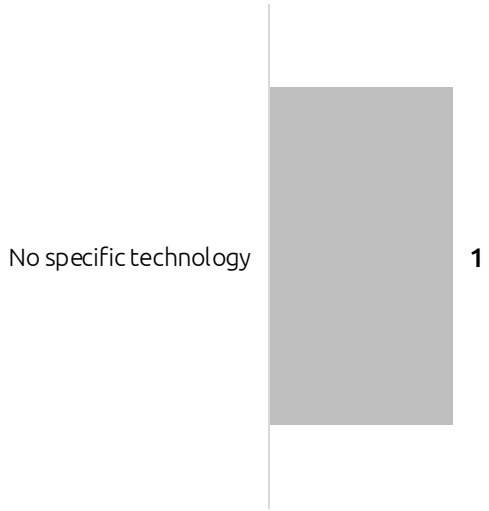
enagas edp CELSA ojmar Ingeteam Petronor REPSOL eika

ID51. Renewable fuels (biofuels, synthetic fuels, biogas)

Specifications provided

- New production routes and/or improvements to existing routes.

Technologies demanded



Interested companies_

Petronor REPSOL

COMMERCIAL_ GROUP 10

Demand forecasting, supply chain management and commercial intelligence

GROUP 10_ Demand forecasting, supply chain management and commercial intelligence

ID43. Predictive models applied to demand forecasting

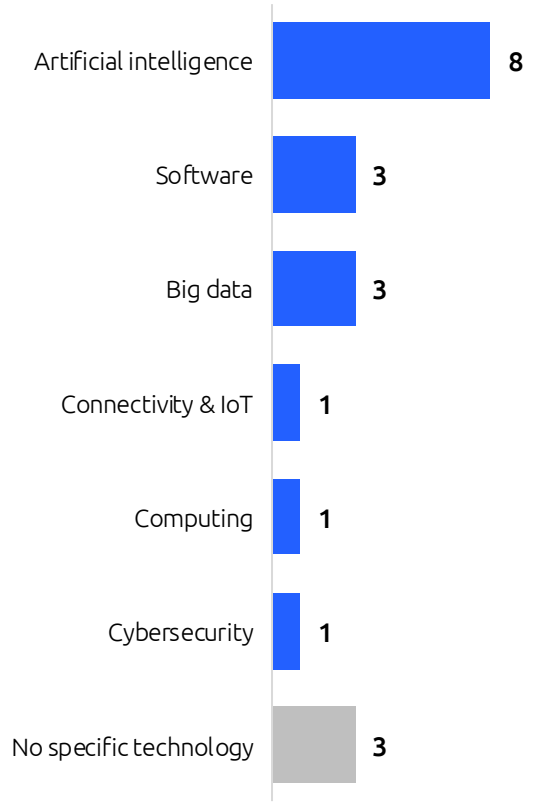
ID13. Optimisation of the supply chain for planning, procurement and supplier management

ID44. Commercial intelligence and B2B prospecting (e.g. identifying opportunities, market monitoring, etc.)

Interested companies_

DIMECO, H2SITE, euskaltel, GUREAK, CAF, TME, FAES FARMA, GH, i+Med, ojmar, Talgo, Copreci

Technologies demanded_

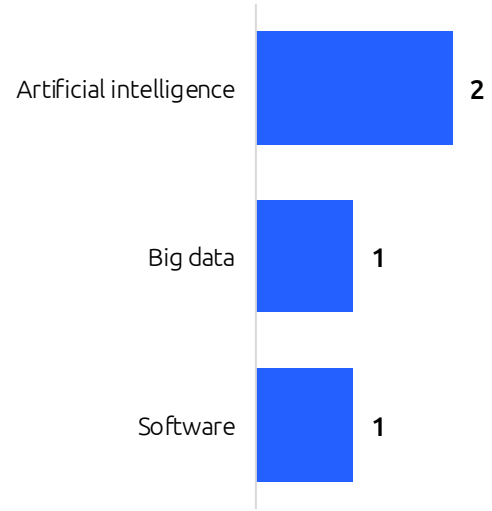


ID43. Predictive models applied to demand forecasting

Specifications provided

- We currently have a Back Office team with in-depth knowledge of the market and the products with the ability to communicate in several languages. We want to modernise their processes by using Artificial Intelligence in order to free up time to focus on other, higher-value tasks.

Technologies demanded



Interested companies_

i+Med BIOMEDICAL INTELLIGENCE

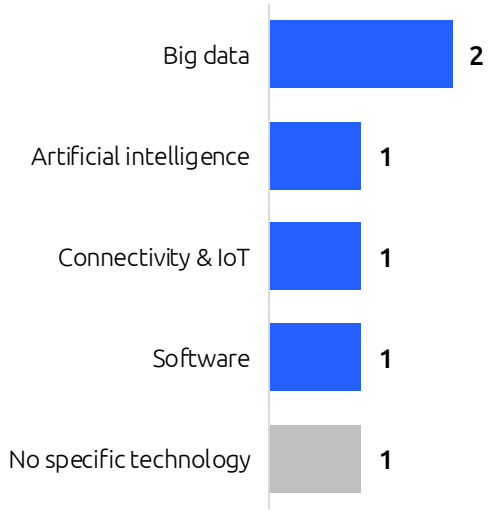
ojmar

ID13. Optimisation of the supply chain for planning, procurement and supplier management

Specifications provided

- The challenge is to move from a reactive logistics model to a predictive, collaborative and customer-focused system that is capable of anticipating needs and optimising the supply chain intelligently.

Technologies demanded



Interested companies_

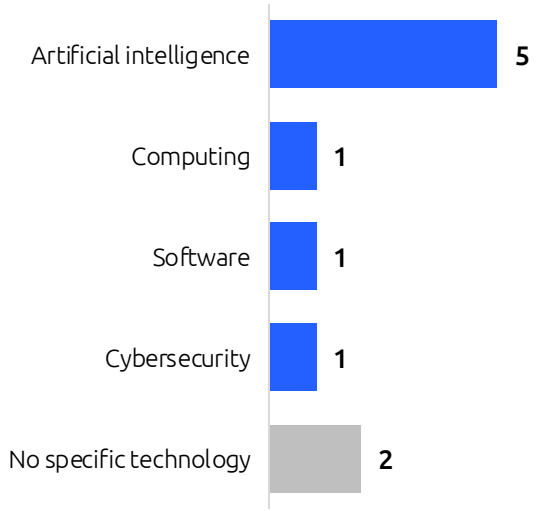
CAF · Talgo · Copreci · TME Logistics Innovation

ID44. Commercial intelligence and B2B prospecting (e.g. identifying opportunities, market monitoring, etc.)

Specifications provided

- Develop a strategy and implement digital marketing tools, including AI as a potential driving force.
- Search for new TECHCO opportunities with B2B customers using advanced technologies.
- Competitive intelligence system, identification of opportunities and suppliers.

Technologies demanded



Interested companies_

DIMECO · H2SITE · euskaltel · GUREAK · CAF · GH · FAES FARMA Passion for health

COMMERCIAL_ GROUP 11_

Customer relations and development of new business models

GROUP 11_ Customer relations, loyalty and development of new business models

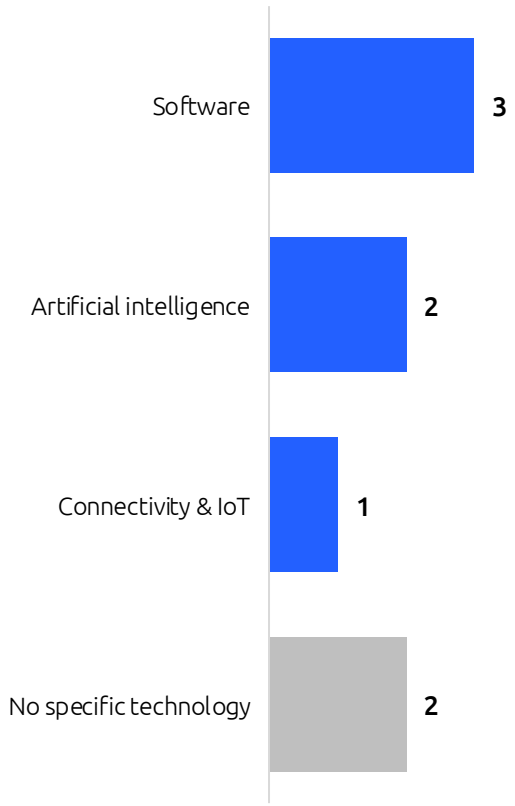
ID47. Optimisation of the customer/user relationship model, loyalty and retention

ID48. Implementation of new business models (e.g. subscription, delivery, marketplaces, etc.)

Interested companies_

COFARES · GH · Uvesco · GUREAK

Technologies demanded_

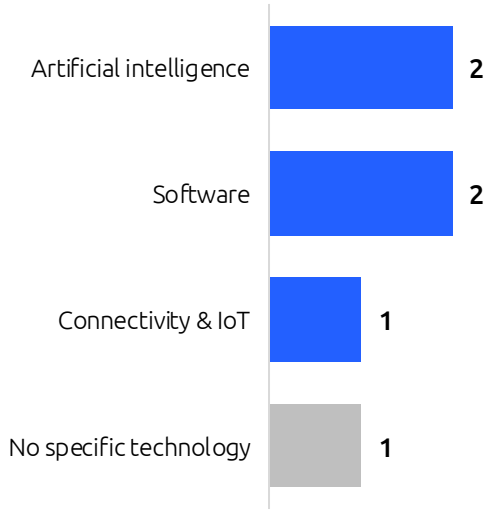


ID47. Optimisation of the customer/user relationship model, loyalty and retention

Specifications provided

- Tools to reach consumers are of great interest, particularly in the B2B2C model. Pharmacies are at the heart of our strategy and we want to provide them with the best value-added digital tools. The success of these new models of digital engagement depends on the prior logistics infrastructure functioning flawlessly.

Technologies demanded



Interested companies_

COFARES

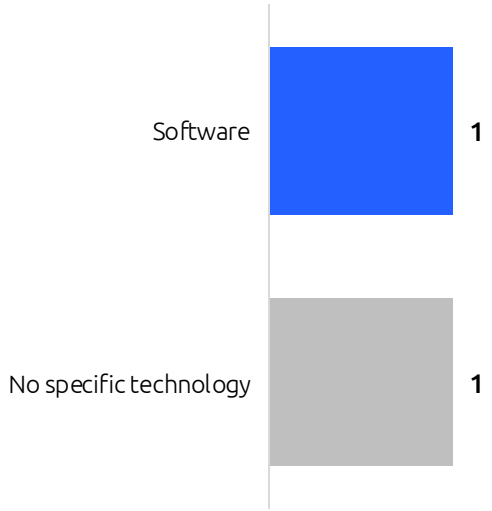
GH
CRANES & COMPONENTS

ID48. Implementation of new business models (e.g. subscription, delivery, marketplaces, etc.)

Specifications provided

- Subscriptions for customers.
- Subscription models.

Technologies demanded



Interested companies_

GUREAK

Uvesco

BIND_
Basque Open Innovation Platform

GRUPO spri TALDEA

EUSKO JAURLARITZA
GOBIERNO VASCO

INDUSTRIA, TRANTSIZIO ENERGETIKO ETA JASANGARRITASUN SAILA

DEPARTAMENTO DE INDUSTRIA, TRANSICIÓN ENERGÉTICA Y SOSTENIBILIDAD