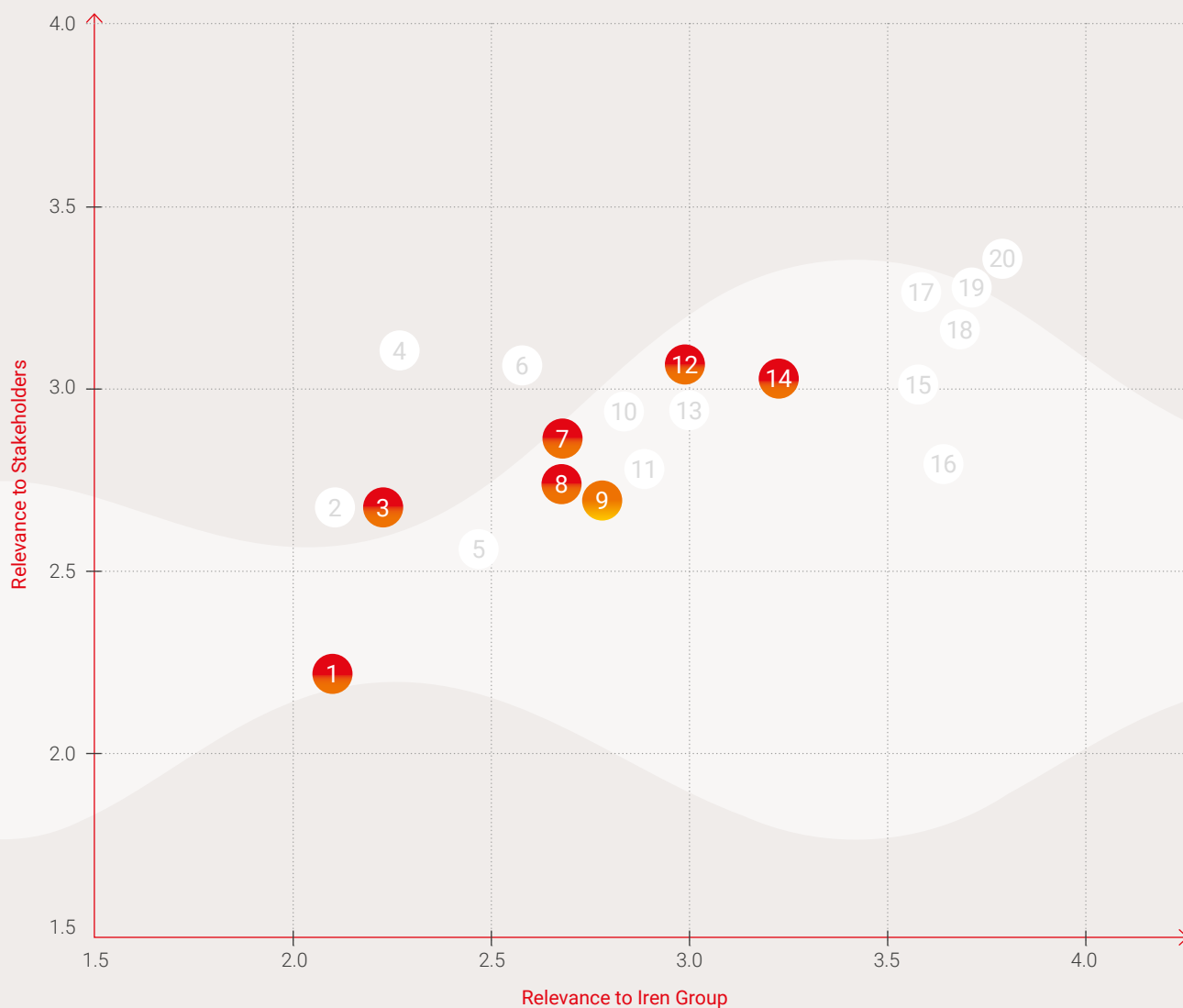




# Enabling resources



## Priority topics



**14** Employment, development of human resources and welfare



**1** Industrial relations



**12** Occupational health and safety



**8** Diversity and inclusion



**3** Protection of human rights



**7** Sustainable management of the supply chain



**9** Effective and transparent dialogue and communication with stakeholders





# Our people

[GRI 102-7, 102-8, 201-3, 401-1, 403-2, 404-2, 405-1, G4-EU15]

The growth and development of employees, especially in terms of diversity and inclusion and together with health and safety, are fundamental values for Iren Group: pillars which embody the mission and vision in the Strategic Plan (see page 47) and in the actions of personnel.

These values are even more relevant in the pandemic context, which has had a significant social and economic impact and has placed greater emphasis on the value of employment, a key factor for the Group that consider human resources as a fundamental asset for its growth.

Therefore, also in 2021, was active the **Crisis Unit** (consisting of: Chief Human Resources Officer, Head of Personnel, Head of Welfare and Safety in the Workplace and Coordinator of the Group's Occupational Health Physicians) –instituted in February 2020 as soon as the Covid-19 emergency spread, in close contact with all First-Level Managers – to prevent and monitor the spread of the infection, guarantee the continuity of the services provided, and maintain an ongoing dialogue with all Group employees. In fact, **internal communication** was constant to disseminate to all employees – via the company Intranet, e-mail and text messages – the general measures to be observed for preventive and precautionary purposes and specific additional company measures for the protection of the health of workers and business continuity.

**Remote work** for white-collar workers was prevalent for the first part of the year and was combined with face-to-face work starting in the second half of the year when the health emergency eased off; in this way it was possible to ensure the continuity of activities and, at the same time, contain the spread of infection. Employees with technical-operational roles have mainly continued **working in-person**, with procedures and means of protection appropriate to the different operational situations, avoiding situations of contact and crowding as much as possible thanks, for example, to the encouragement, where possible, of the departure from home with the operational vehicles, to the access in shifts to the canteen, to the management of meetings via tele or video conference.

After the acute phase of the pandemic, the new forms of work, in particular remote work, have been consolidated and refined by pursuing company and individual improvement objectives through a precise analysis of the way in which activities are carried out. In this context, in addition to continuing all the interventions to enable the adoption of the new working methods and avoid the risk of reducing internal cohesion, training continued for the **development of new leadership**, a fundamental factor for adequately managing the changes underway.

The Group has also contributed to the national anti-Covid vaccination plan, carrying out, in line with government guidelines, a **company vaccination campaign** aimed at all employees on a voluntary basis.

Despite the continuing health emergency, during the year the Group carried out an important **recruitment** plan, offering employment to a large number of young people.

The maintenance of adequate employment levels, the monitoring and development of skills, the health and safety of workers, are central to the pursuit of the strategies of the Group which, for this reason, is actively committed to improving working conditions and personal growth of its employees, promoting a stimulating and constructive working environment. Investments in training and development, meticulous career planning, targeted strategies to enhance talents, tailored benefits, personalised remuneration policies and an innovative corporate culture are some of the elements the Group continues to focus on.

Moreover, the involvement and engagement of collaborators are considered essential to teamwork and to developing a solid corporate culture. This approach is part of the process, launched in 2020 and continued in 2021, to **manage individual skills and knowledge** as part of a model that aims to maintain a high quality of human resources through policies that aim to increase professionalism and guarantee the necessary involvement (see page 230).

In 2021, Iren Group was awarded the Top Employer Italy certification, for the fourth consecutive year, destined for the best companies in the world in the field of human resources: those that offer excellent working conditions, that train and develop talents at all company level and that constantly strive to improve and optimise their best practices in the field of human resources.



**People are a fundamental capital for the Group, as shown by its 2021 Top Employer certification**

The Group contributes to maintaining employment levels also by promoting the development of businesses to which it outsources services and work,

requiring them to provide adequate guarantees in terms of personnel and safety policies through the application of some of its own standards. Moreover, the Group offers employees of supplier companies the possibility to use some of the services and attend training/information initiatives organised by the Group itself. Through actions aimed at increasing professional skills and improving the level of education, the Group contributes, in a broader way, to the quality of employment in its related industries and in the reference territories.

While having no specific local recruitment policy, given the specific features of the Italian labour market, a high percentage of Group employees reside in the province where their place of work is located. Furthermore, considering the type of business, the geographical areas in which the Group operates, and the procedures adopted to ensure compliance with current legislation, no risk of child labour or forced labour exists for Iren Group.

At 31 December 2021, Iren Group had 9,055 employees, up from the 8,465 employees at 31 December 2020. The main changes in workforce are due to:

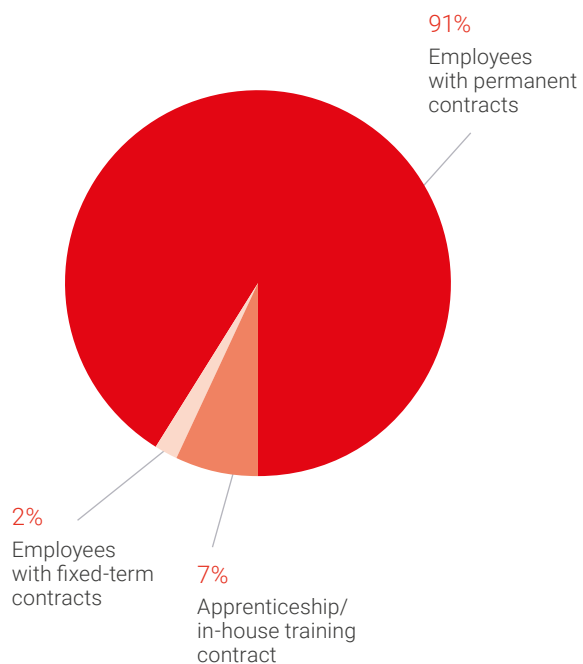
- boundary changes, mainly due to the inclusion of the companies from the former Unieco Environment Division, acquired at the end of 2020 but reported separately in the Sustainability Report 2020, for a total of 186 employees and the acquisition, at the end of 2021, of the company Bosch Energy and Building Solutions Italy, for a total of 155 employees;
- the characteristics of the annual workforce trend of the company San Germano due to the start/termination of contracted services, including those of a seasonal nature;
- continuation of the generational turnover plan.



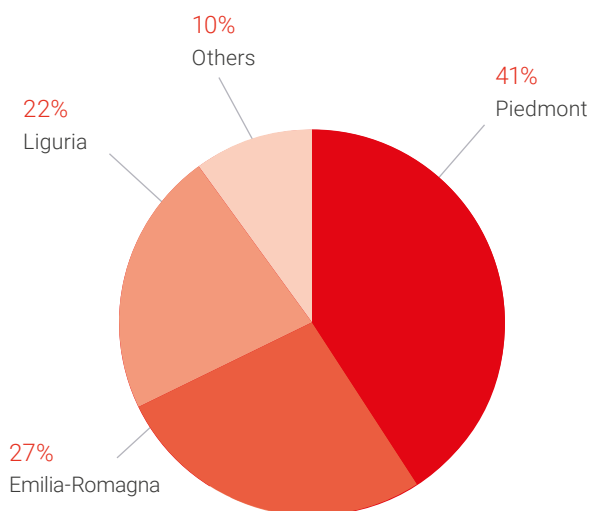
**More than 98% of the Group's employees are employed on permanent or apprenticeship contracts**

Personnel as at 31/12 by position (no.)	2021	2020	2019
Managers	104	92	94
Junior managers	345	305	314
White-collar workers	3,915	3,618	3,495
Blue-collar workers	4,691	4,450	4,199
<b>Total</b>	<b>9,055</b>	<b>8,465</b>	<b>8,102</b>

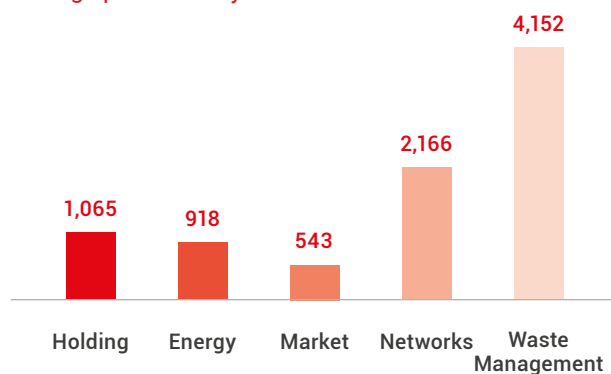
### Personnel by contract type



### Average personnel by area



### Average personnel by business unit



More than 98% of personnel are employed on permanent or, in the case of young people, apprenticeship contracts. This figure confirms that the Group favours long-term working relationships, also offering opportunities for internships with the aim of giving young people, in particular, concrete professional experience. In 2021, 99 people were given internships and 6 students took part in School-Work programmes.

39% of the employees fall within the 30 and 50 age group, while the average age is 47.6.



The Group believes that maintaining long-term relations with its own employees, in combination with life-long learning programmes, is an essential part of its corporate responsibility and is committed to avoiding any form of collective or unfair dismissal, always in compliance with legal and contractual provisions, in the case of positive economic results or otherwise those in line with shareholders' expectations. The management of redundancies, should they occur, prioritises the incentivization of voluntary resignation for those eligible to access pension funds, and the reassignment of excess personnel to other activities within or promoted by the Group, with due retraining, and the use of the available social safety nets, promoting forms of internal solidarity and, where necessary, with the internalisation of activities which had previously been outsourced. The Group is committed to protecting, in line with legal and contractual provisions, personnel belonging to protected categories and/or suffering from long-term illness, avoiding any form of discrimination in their regard.

## New hires and contract terminations

In 2021, there were 886 hires, up compared to 2020, despite the situation affected by the Covid-19 emergency, in line with the 2030 Business Plan targets.

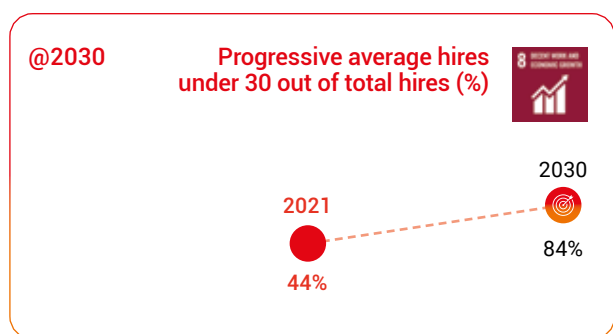


The overall figure is influenced by the characteristics of the San Germano company, which makes use of hiring under fixed-term contracts (210 in 2021) to cope with the start-up of contracted services, including those of a seasonal nature. Excluding this effect, more than 89% of new hires are on permanent or apprenticeship contracts, while the remaining hires on fixed-term are due to seasonal or replacement needs.

Hires by type of contract (no.)	2021	2020	2019
Permanent contract	350	177	202
Fixed-term contract	268	238	238
Apprenticeship contract	268	197	305
<b>Total</b>	<b>886</b>	<b>612</b>	<b>745</b>

Hires by age and gender (no.)	2021	2020	2019
under 30 years old	388	308	360
from 30 to 50 years old	373	199	296
over 50 years	125	105	89
<b>Total</b>	<b>886</b>	<b>612</b>	<b>745</b>
Men	717	515	633
Women	169	97	112
<b>Total</b>	<b>886</b>	<b>612</b>	<b>745</b>

Hires under 30 represent 44% of the total hires, a figure that is destined to grow, in line with the new objective set out in the 2030 Business Plan and demonstrating the attention that the Group pays to hiring young people.



In line with Group policies, among contracts subject to expiration during the year, 100% of apprenticeship contracts were confirmed (except for 6 cases of voluntary resignation), while fixed-term contracts were renewed within the limits of replacement needs and seasonal operations.

Employees with contracts expiring during the year (no.)	2021	2020	2019
Expiring fixed-term/apprenticeship contracts	334	176	341
of which confirmed on a permanent basis	256	132	132

The main reason for termination is related to consensual terminations of employment linked to the demographic rebalancing plan, with incentives to leave. Almost all terminations due to the expiration of fixed-term contracts depend on the San Germano company (118 in 2021). There were no collective redundancies and/or redundancies for economic reasons.

Outbound employees by reason (no.) and turnover	2021	2020	2019
Resignations	197	145	131
Voluntary termination/retirement	278	145	133
Death	14	12	14
Dismissals	36	22	26
Inability to work	5	5	15
Expiration of fixed-term contract	133	140	191
Transfer to other Group Companies <sup>1</sup>	0	0	4
<b>Total</b>	<b>663</b>	<b>469</b>	<b>514</b>
<b>Turnover<sup>2</sup></b>	<b>7.3%</b>	<b>5.5%</b>	<b>6.3%</b>

<sup>1</sup> Agreed transfer to companies which are not part of the analysed perimeter.

<sup>2</sup> Turnover was calculated as ratio of outbound employees to the number of total employees at 31/12.

The regulatory provisions provide for the possibility of encouraging the anticipation of the pension with the so-called "quota 100" (Italian Legislative Decree 4/2019, converted with amendments by Law 26/2019) for those who have reached at least 62 years of age and a minimum contribution period of 38 years. Under the agreement signed in 2019 with the Trade Unions in applying these regulatory provisions, 131 employees left in 2021.

Turnover increased compared to 2020 due to the generational turnover process, which also led to a high number of new hires and the use of pre-employment training courses.



In the preparation of the Business Plan, studies and simulations were carried out to assess the Group personnel eligible to retire over the plan period. Consequently, the Group is preparing to handle these potential terminations in the period 2021-2030, taking into account possible organisational changes and the new skills needed. In the Group there are no specific pension plans, however, all legal and contractual obligations are respected.

## Hours worked and hours of absence

Over 95% of hours worked are normal working hours.

Hours worked (no.)	2021	2020	2019
Normal working hours	13,917,526	12,778,051	12,354,017
Overtime	722,756	617,038	781,767
<b>Total</b>	<b>14,640,282</b>	<b>13,395,089</b>	<b>13,135,784</b>

In 2021, there was a slight increase in the number of hours of absence due to strikes, primarily due to the failure to renew the National Collective Labour Contract for the Environment, which involved all companies in the sector, and the national strike regarding the amendment of art. 177 of the Public Contracts Code relating to the "awarding of concessionaires".

Hours of absence by type (%)	2021	2020	2019
Sick leave	56	60	57
Maternity leave	7	4	6
Injuries	6	6	8
Strike	2	0	0
Trade Union meetings and leave	4	4	5
Other absences (paid and unpaid)	25	26	24
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

The sick leave rate<sup>1</sup> is 4.8%, down from 2020 (5.7%), although the Covid-19 emergency persists. The absenteeism rate of 5.1% also shows a decline from 2020 (5.4%)<sup>2</sup>.

## Human resources management

[GRI 102-38, 102-39, 102-41, 202-1, 401-2, 403-5, 404-1, 404-2, 404-3, 405-2]

### Selection system

At Iren Group, the process of searching and selecting human resources is based on the principles of equity and transparency, which are also declared in the Code of Ethics, and is structured in compliance with the Model 231. Candidates are recruited from outside the Group only after it has been verified that there are no potential internal candidates with profiles that are consistent with the position to be filled.

<sup>1</sup> The sickness rate is calculated as the ratio of sick leave hours to hours worked.

<sup>2</sup> The absenteeism rate is calculated as the ratio of days of absence due to sick leave, injuries, strikes and certain other types of absence to working days in the year per employee, excluding Saturdays, Sundays and public holidays, multiplied by the average number of employees.

Applications for open positions can be made via the channels on which the active searches are published: the "IrenFutura" portal, the "jobs" page of the Group's LinkedIn profile, specialist recruitment websites (Info-jobs), social media pages and specialised channels using recruiting agencies appointed by Iren following specific tenders, on the basis of specific reference profiles (operational, technical, specialist and managerial). Candidates can select the position that best meets their skills and interests or submit their application, without attaching it to a specific job posting.

Other candidates may come from the main universities and schools in the reference territories, with which the Group has built solid partnerships over time. As far as high schools and technical institutes are concerned, mutual acquaintance between the Group and candidates can also take place through "Percorsi per le Competenze Trasversali e l'Orientamento" (PCTO, formerly School-Work programmes), which allow young girls and boys to experience more closely daily working life in existing jobs within the various Group companies.

All candidates are assessed by professionals with experience in the sector, based on well-defined and transparent criteria, which are shared between the Company Departments involved, taking the Group's system of roles and competences as a reference. Every curriculum vitae is assessed on the basis of how well it matches the requirements of the vacant position. If the profile meets these requirements, it is included in the selection process; otherwise, it may be taken into consideration for other relevant positions.

The selection processes may include various types of tests (technical, practical, etc.), as well as interviews, in order to gain in-depth knowledge of applicants and to guarantee fairness and transparency. The standard selection process involves a number of pre-defined steps: identification of the most suitable profiles from the submitted CVs; an initial interview to find out the candidate's reasons for applying and discuss the experience indicated on the CV in more detail; a second interview with representatives from the HR Department and organisational departments where the candidate is to be placed. At the end of the selection process, the applicants always receive feedback on the outcome of the interviews, even in case of a negative outcome. In the event of a positive outcome, the new employee is hired into the Company according to a process defined on the basis of the position to be covered.



The Group has joined the national programme Garanzia Giovani (Youth Guarantee), activating the planned internships as the preferred search and contact tool with the labour market, and the Valore D (D Value) programme, committing itself to creating more equal conditions to promote diversity and employment for women.

### Personnel development

To implement its strategy, successfully anticipating and facing the complexity and changes of the market, regulations and technologies, Iren Group invests in order to increase the wealth of internal skills and enhance its human resources, adopting specific policies, means and tools. Discovering, developing and promoting personnel skills is a fundamental commitment of the agreement between the Company and the individual.

In order to govern all the processes connected to personnel management and development in a unified and systematic way, faced with the dual necessity of addressing the new challenges of the future and preparing consistent policies, the Group has put in place its own **performance management model**, the Group Job System, which is subject to constant update and refinement. The Job System is a model to analyse and understand the professional skills present within the Group, transversally across companies, businesses and departments in which they are found. Their main elements consist of professional areas, professional groups, the sub-groups, standard jobs and organisational roles. It is the logical infrastructure on which the main human resource management processes, including training and skills development, are based. Specifically, each standard job within the Job System is weighed, in relation to the contribution that each organisational role provides in the creation of value, with a shared platform for internal comparison, as well as with the market. Management "bands" (groupings) are identified on the basis of the weight of the positions, and are further divided into sections, into which each of the roles are characterised by the same complexities and responsibilities, managerial skills and management policies. The managerial skills that must be put into effect in order to achieve results in accordance with the procedures and values that characterise the Group, and which constitute supportive elements in evaluating individual performance, are defined alongside the band system adopted. The expected professional knowledge and skills are also defined







for each standard job, being those which are fundamental not only for the performance management system, but also for other personnel management processes (first and foremost, training and internal mobility).

In 2021, **skill-monitoring** activities continued, through dedicated tools differentiated both by band and professional group. In particular, an extensive mapping project of the Group's specialist skills was completed with the various departments and business areas, leading to the identification and description of the theoretical knowledge and practical skills required for various roles and organisational levels. This work resulted in the creation of a **catalogue of the Group's specialist skills**, which forms the basis of the skills assessment process, which will take place every two years. The activity to complete the Group's competency assessment process, launched at the end of 2020, was conducted on 6,728 Group employees, thanks also to the active participation of over 500 managers who acted as evaluators, after being trained on the process and its founding elements (organisational role, competency, expected level, etc.). The assessment phase was followed by an analysis of the competency gaps found, in terms of role, organisational function and even professional family. Based on the defined competency model and the competency evaluation system, a training and professional development plan was then initiated on a two-year basis.

In addition, the **performance management** system was further refined – aimed at all Group resources – integrated with the individual incentive system (MbO), aimed at orienting performance and behaviour towards shared values and results. During the year, the Group launched various training initiatives aimed at raising the level of awareness of the performance management process: more than 450 new participants were involved in virtual classrooms organised to introduce the system and its founding elements; in addition, training content on the key stages of assigning objectives, assessment and management of the feedback interview was made available in e-learning mode to all participants in the process.

The employability of personnel is pursued through ongoing education and training and change management programmes to support current and planned changes, also in the medium-long term, on which specific actions have been launched to support the





implementation of the Business Plan, particularly on matters related to energy transition, circular economy, sustainability and digital transformation.

As part of the overall plan for the demographic rebalancing of the workforce, projects continued for the intergenerational transfer of knowledge and, more generally, for the management of the Group's different demographic populations.

### Personnel training

Training is an instrument of primary importance for the Group. It plays a fundamental role in the professional growth and development of individuals, in disseminating corporate strategies, values, and principles and, therefore, in the overall growth of the Group's value. It focuses on the maintenance and development of competencies, with particular reference to the "core" competencies of the various professional figures, promoting lifelong learning opportunities for everyone.

Staff development is supported by creating experiences and opportunities in which everyone can learn and train their skills and increase their awareness of their role within the Group. This path to growth begins immediately, with the **Onboarding** programme dedicated to new hires. The welcoming starts from the moment the contract is signed, with the release of the "ReadyTolren" app. Next, each new hire is invited to attend the Welcome Webinar, an event where they meet colleagues from the functions of Personnel Management, Attendance, Welfare, Communications, Certified Systems, and Performance and Development. This shared step is essential to begin getting to know the Group and the people in it. In 2021, 20 Welcome Webinars (totalling approximately 2,600 hours) were held to welcome new hires. Such training sessions, extended to everyone, are followed by personalised courses based on the level of responsibility and seniority: the **induction courses** dedicated to new managers and professionals, useful for introducing new recruits to meet individually with key people for the performance of their activities (in 2021, there were 11 for a total of 123 hours) and the Virtual Learning Meetings, aimed at new graduate colleagues under 35, to allow them to develop their knowledge of the organisation and the Group's strategic projects (over 1,270 hours in total

in 2021). Learning also continues at an individual level, through a specific welcome area made available on the Intranet, where it is possible to find, in addition to informative and popular materials, slides and videos of the courses followed, videos of the management and of the new recruits of the previous years, as well as links to other areas of the Intranet, such as the Library of Online Training, the virtual tours of the main plants, the videos on the Group's values and the interviews of the Iren People project.

Investments in reskilling and upskilling of personnel have grown over the years in order to carry out training interventions dedicated both to new skills, with the aim of preparing resources to cover different roles within the Group, and on skills already possessed, to improve certain areas of competence, with particular focus on new processes and new technologies.



### Training supports development and professional growth, and meets the needs of innovation and change

The launch of the **training process**, as regards the core competencies of personnel, is carried out through the analysis of competency gaps, at the level of role, organisational function and professional family, detected through the competency assessment process (see page 231). The results of the analysis are shared with managers through specific meetings during which priorities for intervention are assigned to the gaps found, on the basis of their number or the specificity/importance of the activity to which they refer. At the end of the phase of detection and analysis of needs, possible harmonisations between common needs and between homogeneous professional families are implemented.

These needs are included in a two-year **training and development plan** – with periodic updates based on requests for changes or additions received during the year – which contains technical, specialist,

managerial and behavioural skills, mandatory training and training on strategic projects.

The **management of training** is carried out through a dedicated management application (Training Portal), which is updated continuously with employees' personal data and is connected to an open-source platform of e-learning courses. Participation is tracked and helps to enhance employees' training qualifications, which can be consulted by employees, their managers, the Personnel Department and the Prevention and Protection Service Manager. The portal is continually enriched with useful functions to automate the various phases of the training process, for example that relating to self-enrolment which allows those directly concerned, or their managers, to choose the date and location of the training courses, which are mainly mandatory, with a view to greater flexibility and on the basis of broad planning that mainly involves initiatives on safety issues. All the training provided is subject to an efficiency evaluation, through participants satisfaction and learning analysis and the monitoring of a set of indicators that provide useful details on improving the training provided; the evaluations will also be enriched by the results deriving from the skills surveys every two years.



### The paradigm shift in training: from traditional to virtual classrooms

With the development of new technologies, an evolution towards digital transformation and the spread of the pandemic, training in Iren Group has changed paradigm, moving from traditional classroom training to the use of new methods that are able to offer a greater degree of flexibility, usability and personalisation, reaching and engaging even people who work remotely, such as virtual classrooms and webinars, which have been added to the asynchronous e-learning already in use. The virtual classrooms have been used, during the pandemic period, for training in support of strategic digital transformation projects (Iren-Way, Market transformation, JustIren, WFM).

The emergency highlighted the need to accompany training linked to specific professional aspects with opportunities for growth, including personal ones, as a sign of attention and closeness to employees: values, emotions and trust were considered fundamental enablers to master this phase of uncertainty. For this reason, alongside the mandatory training, **free consultation training** was made available, accessible to all employees through their own IT equipment (PCs, tablets and smartphones). The selected contents were clustered in 9 areas (Iren Group, Iren4Digital, smart working, managerial development, a demanding challenge, a challenge in safety, personal care, transversal skills, diversity & inclusion), in the library "Online Training" on the Group's Intranet. Employees were thus able to enrich their curriculum, an opportunity also recalled by the union agreements signed in relation to the health emergency.

The Group also continued to invest in training plans through specific programmes to increase awareness of **diversity** topics and create an inclusive work

environment (see paragraph Diversity & Inclusion).

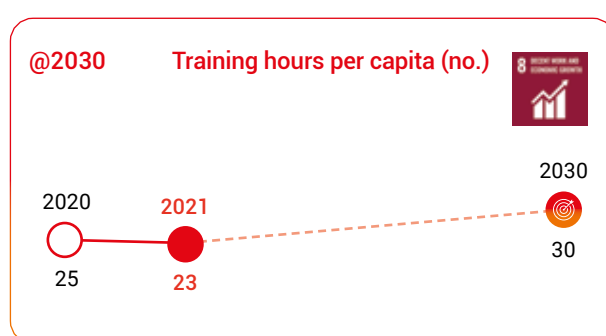
In 2021, the live sessions dedicated to the illustration of **the strategic lines of the Business Plan** to 2030 were particularly appreciated, with the participation in-person of about 300 managers and the live streaming on the company intranet of more than 2,000 people.

Simultaneously, online courses continued to be held for specific groups of employees (e.g., apprentices) on safety and regulatory requirements (e.g., for workers, supervisors and managers, Italian Legislative Decree 231, GDPR).

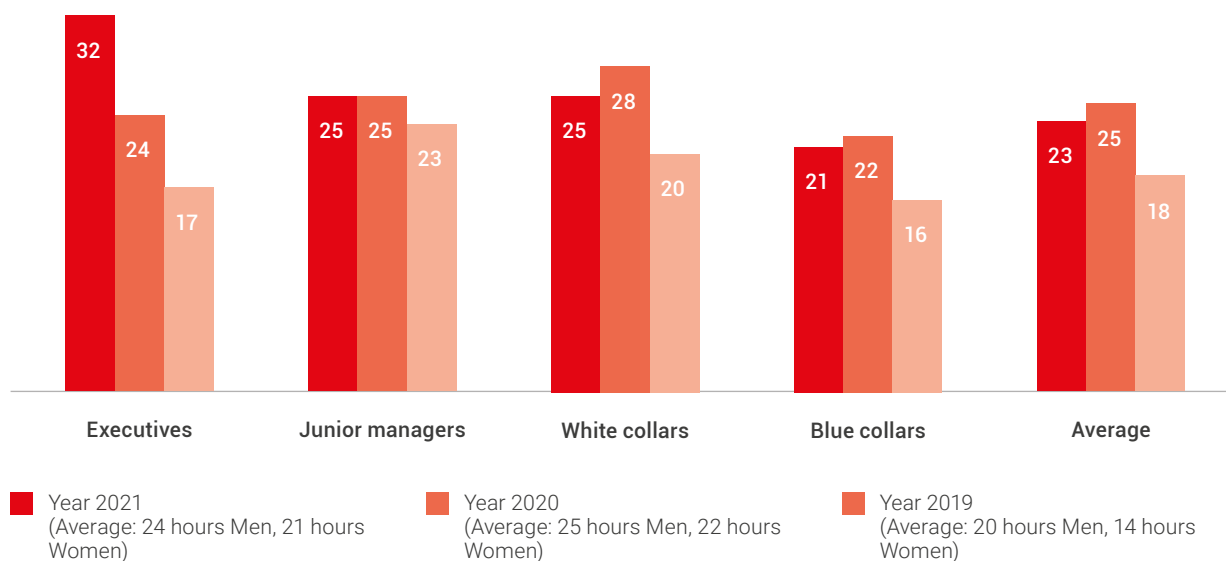
In line with the policies adopted by the Group for **cybersecurity**, the Security Awareness project was developed and, in 2021, offered employees a series of "free use" training modules aimed at increasing awareness and knowledge of IT security issues, thus making it possible to reduce the risk of system violations as well as computer fraud in work and private life. The project also involved, through specific training, the top management, who is essential to convey the culture of IT security, risk assessment and mitigation at all levels of the organisation.

Training hours totals by qualification	2021	2020	2019
Managers	3,272	2,172	1,665
Junior managers	8,477	7,846	6,975
White-collar workers	95,929	98,455	69,342
Blue-collar workers	95,468	93,616	67,253
<b>Total</b>	<b>203,146</b>	<b>202,089</b>	<b>145,235</b>

In a year still heavily impacted by the pandemic, total training hours provided to employees (including apprentices and contract workers) were more than 203,100, up from 2020 and the historical trend, and reflecting the actions taken to turn the health emergency into an opportunity for professional enrichment. The average number of training hours per capita, equal to 23 hours, is however influenced by the gradual application of Group policies to the companies acquired at the end of 2020 and in 2021, which have produced a significant increase in the number of employees.



## Training hours per capita by position and gender



There was a significant increase in the number of employees who took part in at least one training initiative, totalling 8,328 (+14.3% compared with the previous year), in line with the Group's philosophy of accompanying resources throughout their working lives (life-long learning). The percentage of trained workers is particularly positive, rising from 73% in 2020 to 86% in 2021, thanks to the intense work of acculturation to the use of the new training methods.

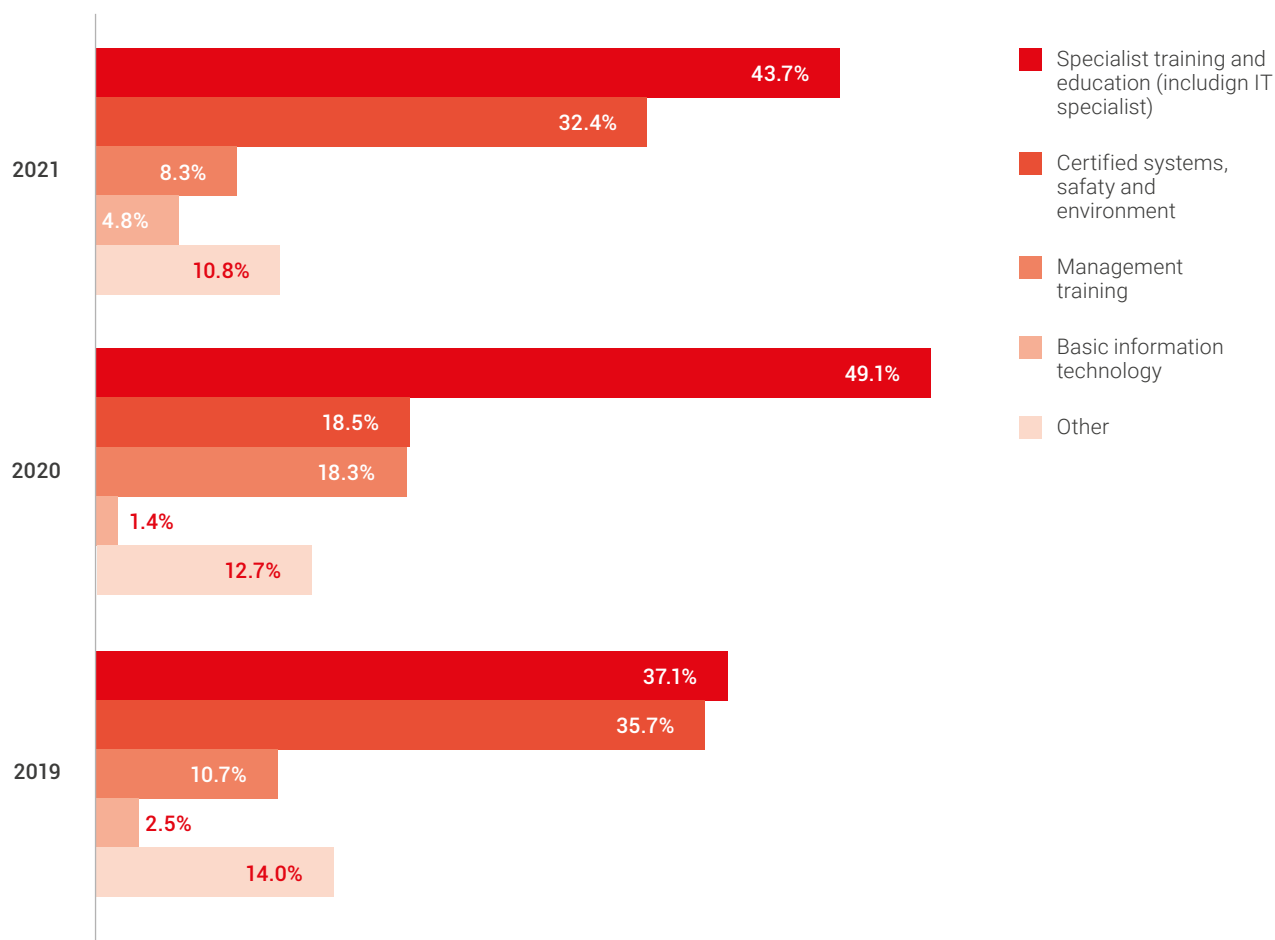
Employees involved in training activities (%) <sup>1</sup>	2021	2020	2019
Managers	100.0	100.0	100.0
Junior managers	100.0	100.0	100.0
White collar workers	100.0	100.0	95.9
Blue-collar workers	86.0	73.0	75.0
<b>Total</b>	<b>94.2</b>	<b>88.2</b>	<b>85.4</b>

<sup>1</sup> Ratio between number of people involved in at least one training event and the average annual number of employees.





## Distribution of training hours by topic (%)



In 2021, specialist training (including specialist IT) was still relevant, with an average per capita of 10 hours, recording the highest incidence (43.7%) of the total number of hours provided. This includes on-the-job training and support for more than 600 apprentices, consolidated partnerships with specialised training institutions for the provision of technical refresher courses to maintain training credits for engineers, biologists, chemists and experts, with business schools and higher education institutions for participation in master's degrees and specialised courses, as well as with organisations specialising in professional training (e.g., for qualification to operate steam generators and for mandatory transversal training for apprentices).

Regarding managerial training, which represents 8.3% of the total number of hours, particular mention should be made of the completion of the "Melagioco" path for leadership development, aimed at 119 managers, the skills assessment for a further 183 managerial figures who will be involved in the new initiative planned for 2022, the webinars and video conferences held on managerial/soft skills and scenario issues, as well as the mentoring, coaching, empowerment and leadership initiatives for women for Industry 4.0 aimed at promoting gender equality.

Internal training, characterised by the ad hoc design of content and carried out by both internal trainers and external consultants, continues to be a distinctive feature of the Group (around 72% of total hours), with 971 courses held in 3,939 sessions. The remaining 28% relates to external training and is purchased by catalogue with participation in inter-company initiatives.

Both the satisfaction index of the training activities (81.3% compared to 79% in 2020), measured on the evaluations made by the participants at the end of the activity, and the learning index (88.9% compared to 88.4% in 2020), measured through the administration of verifications and skill tests, are growing. These results depend on a strong attention to the design of the training contents and the constant support to the participants, especially during the remote sessions.

The investment in training in 2021 of approximately 1,028,000 Euro reflects the significant interventions made in the area of specialised and safety training.

The Group has also made its expertise available to schools and universities in the areas in which it operates to create work orientation initiatives for students, advanced training courses and Pathways for Transversal Competencies and Orientation (PCTO, formerly School-Work programmes). Implementation agreements have been signed with universities, mainly present in the reference areas, aimed at activating collaborations for higher education activities, including the creation of 3 research doctorates funded by the Group, and for the recruitment of recent graduates and undergraduates. Partnerships have been launched with the leading Italian business schools, providing scholarships for participants in master's degrees and/or advanced training courses on topics of specific interest to the Group (e.g. energy management). The Group has also collaborated with the Higher Technical Institutes in the reference territory, making its employees available to provide lessons on specific topics and activating internship and recruitment paths.

Although measures to deal with the Covid-19 emergency prevented many activities from being carried out, during 2021, the Group:

- created webinars and participated in some career days with partner universities, through thematic and job orientation meetings, in which students had the opportunity to get to know the reality of Iren Group more closely and improve their knowledge of the world of work and the skills sought by the Group;
- organised multi-year projects and recruiting days for graduating seniors from affiliated technical high schools;
- launched 33 curricular, 28 extracurricular and 21 internships in the framework of PCTO projects;
- activated scholarships for postgraduate masters, and doctoral training paths.

## Remuneration system

The Group adopts national collective labour agreements (CCNL) for all its employees (the main national collective labour agreements applied include: "electricity sector employees", "gas and water sector employees", "waste management services employees"), which ensure contractual salaries are paid to all employees. Generally, workers with leasing contracts receive the same remuneration as provided for in contracts of Group employees. Furthermore, no differences in benefits for full-time employees, employees with fixed-term contracts or part-time employees exist.



**Group employees receive national collective labour agreements and incentive tools in line with company values**

The remuneration policy, within the context of the defined budget guidelines, is always based on performance evaluation, taking into account, however, the remuneration package of the people holding the evaluated positions. In any case, any form of discrimination based on gender, age and/or health shall be avoided, and retraining initiatives are performed in the event that personnel are unfit for previous responsibilities.

Variable remuneration linked to performance (for example, employees working on call) and the achievement of company and individual targets is added to fixed remuneration. In 2021, the ratio of the highest annual basic salary to the median of all other employees is 4.75, while the ratio of the increase in the highest basic salary to the median basic salary increase of all other employees is -6.23. The negative trend is due to the inclusion in the 2021 boundary of the companies of the former Environment Division of Unieco, acquired at the end of 2020, and the acquisition of the company Bosch Energy and Building Solutions Italy, which have CCNLs (Metalmechanical, Fise and Chemical Industry) with lower salary levels than those applied to the rest of the Group's historical personnel. The Group's average basic salary by gender is 1.05 compared to the average local salary by gender (Source: Istat 31/12/2018).

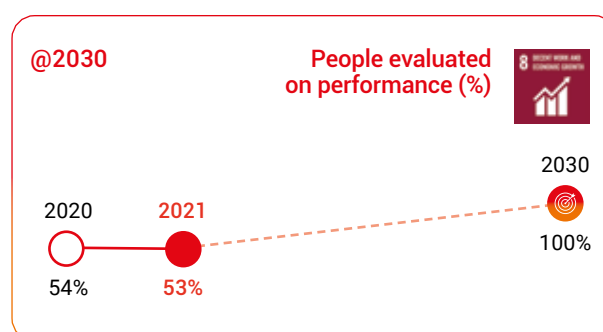
The remuneration and meritocratic policy of the Group aims to reward employees who achieve high levels of results in line with company values, the Group Job System (see page 230) and in accordance with adequate levels of quality and productivity. Personnel are required to be flexible in adapting to new working methods and to demonstrate remarkable professional commitment in terms of versatility.

**Performance bonuses.** In order to further involve staff and direct them towards the achievement of the Group's objectives, a collective performance bonus is envisaged, according to logics consistent with the strategic and management objectives, which enhance the correlation between remuneration and results obtained. Several factors are taken into account to determine the compensation, which are connected to rewarding productivity, service levels and the achievement of specific profitability objectives. Once again, in 2021, specific agreements were signed on the subject with Trade Unions based on which bonuses may be paid in the form of one-off compensation or via welfare tools to non-management personnel. Also in 2021, part of the Performance Bonus was consolidated for the current workforce, allocating an additional contribution towards the supplementary pension fund for new hires.

**One-off compensation.** Across all Group Companies a one-off incentive can be paid to employees that have achieved particularly positive results through remarkable work commitment, mainly through projects or innovative activities. Individuals to be rewarded are identified following a thorough analysis of individual performance results, carried out by the various managers.

**Management by objectives system (MbO).** In most Group Companies, all managers, junior managers and employees holding important positions are included in the incentive system (pay for results) under which individual targets are assigned that, when achieved, grant the payment of the amounts that were defined at the time of assignment. The "objective-based system" is based on the measurable indicators (economic-financial, operative, sustainability or relevant to strategic projects), in line with the Business Plan and the company mission.

In 2021, 53% of employees received a **formal evaluation of the performance** achieved, a percentage that was essentially stable compared to last year as the process is being gradually extended to newly acquired companies. The performance assessment process involves the assignment of objectives, a mid-year assessment, an end-of-year assessment and, for certain employees (about 3,610 in 2021), the process is managed through a software.



The amounts for variable remuneration are shown in the table below.

Variable remuneration (Euro/000)	2021	2020	2019
Performance bonuses	12,464	9,581	9,626
MbO <sup>1</sup>	4,687	4,148	3,829
One-off compensation <sup>1</sup>	1,645	4,468	4,534

<sup>1</sup> Amounts allocated.

## Internal communication

Internal communication is an essential tool to accelerate the development of processes, assist and support organisational changes and business strategies, and develop a common corporate culture, directing efforts towards the achievement of Group objectives, which become shared and pursuable through each individual's contribution.

The role of internal communication has been central in dealing with the crisis situation due to the pandemic. It was necessary to communicate in a timely and effective manner, so that each worker was aware of the protective measures and behaviour to be adopted to work safely in a constantly evolving health and regulatory situation. A variety of tools: e-mails and text messages, to communicate the measures adopted and regulatory updates, and the Company Intranet, where a section dedicated to the Covid-19 emergency was created, in which all internal communications, the manual for in-person activities and the single text of Group provisions for working in safety were collected. It was necessary to spread and explain the company's choices, to reassure the workers, highlighting the commitment and the actions taken to cope with the emergency and the restart, to maintain a high level of involvement in a context of low interaction, in the first half of the year, and of distrust, in the second half, when the health situation allowed the return to the office, but the company population was still intimidated by a general state of insecurity. These were challenging objectives, pursued through video messages from top management, publication of regular news bulletins, external visibility to the commitment of all the Group's resources to the continuity of essential services, possible thanks to the responsibility with which employees responded and the ability they demonstrated in reinventing their work to deal with the emergency.

The main tool for internal communication, information and sharing, was confirmed to be the **corporate intranet Noi Iren**: more than 6.7 million pages were consulted, and 150 news articles were published

to stay connected and updated, with viewing and interaction also possible through the company smartphone distributed to all staff. Noi Iren is the "common home", a place to feel part of the Group, providing a gateway to information, documentation and company services. Strategic (Business Plan, economic-financial results and sustainability data), organisational (notifications, staff structure, documentation of certified systems), regulatory (service orders, Model 231) and corporate (acquisitions, non-recurrent transactions) information is published on the Intranet. The Intranet also disseminates news from the "Iren Informa" magazine, ads on the internal notice board for the sale and exchange of items between personnel and information on cultural, environmental, sporting and social initiatives supported by the Group held in the various areas.

In 2021, the web magazine Iren Informa was the main tool to share, with about 270 articles visible internally and externally, the Group's resilience.

The video storytelling activities were enhanced with the creation of three different columns, which, with different styles and content, accompany workers and allow them to feel close, share a vision, and team up:

- *Iren people* is the column dedicated to the professions, aimed at sharing the many activities and getting to know the colleagues who deal with them. In 2021, 7 videos were made, published on YouTube, recalled on the intranet, on Iren informa and through social campaign;
- *Il tempo di un caffè (Coffee time)* is a column of interviews with business managers to engage the corporate population on long-term strategies and goals. In 2021, it was also the means of introducing everyone to the Group's new CEO;
- *Io lavoro in Iren (I work in Iren)* is the column dedicated to skills, in which expert colleagues talk about the peculiarities of the job, the training and the necessary skills. A useful tool in training new hires as well.

In a context of low internal mobility and reduced opportunities to meet, it has been necessary to devote particular attention to digital activities for the reception of new recruits. The Welcome area has therefore been implemented on the Intranet, dedicated to new people in the Group and aimed at facilitating their



integration, through the collection of information and services essential for moving within the company. In the same area training materials and recordings of onboarding speeches are published. An App was also developed for people waiting to be hired by the company, through which new colleagues can be informed and involved.

In 2021, an important event was the presentation of the Business Plan that involved about 300 managers in-person and all Iren people through a live streaming with over 2,000 connected. The recording of the event was published on the Intranet, available to all those who could not follow in real time, allowing the sharing of objectives and strategies.

The infrastructure set up also made it possible to hold the end-of-year event digitally, which saw around 2,300 employees connected and whose leitmotif was the future. The future of the company and the future envisioned by colleagues, whose voices were shared through recorded videos.

## Corporate Welfare

[GRI 102-8, 403-6]

The Group is developing a coherent and well-structured welfare system to meet the needs of the different personnel segments and to extend the best practices to the whole Group, also involving the Trade Unions. The programmes that have already begun are implemented through a series of initiatives focused on the needs of the individual and its household.

The health emergency has led to new social challenges and needs, with particular regard to the difficulties of access to health care, conditions of social and economic insecurity, new ways of organising work (smart working) and the problem of reconciling work and family. This situation has resulted in changes and new ways to develop the Group welfare plan. At the beginning of the year, an internal survey was launched to assess the perception of corporate welfare and the initiatives implemented by the Group to take care of its people and their health, with a particular focus on the effects caused by the Covid-19 pandemic. The survey, which saw significant participation, was an opportunity to verify the considerable interest in certain services, particularly those concerning the health of employees and their families, and made it possible, during the year, to expand information and to carry out further initiatives on this subject.

### Quality of life for quality of work

The Group pursues a management policy that promotes and supports the correct balance between professional and private life, providing employees with a range of opportunities that allows them to reconcile work commitments and personal needs: flexible working hours, teleworking, smart working, part time, ultra-daily flexibility, additional leave up to a maximum of 2 days to be taken, even by the hour, within the year of maturity resulting from the replacement of part of the Performance Bonus, short leave and short paid leave, integration of compulsory maternity leave, conciliation desks.

Thanks to these experiences of flexibility and the robust digitalisation process in the human resources area, also in 2021, the Group has responded effectively to the needs of the corporate population related to the pandemic, using the various forms of reconciliation.

**Smart working:** initially adopted as a way of working to better balance private and professional life, since the beginning of the pandemic it has taken on a different and more articulated meaning, offering the possibility of maintaining production capacity and continuity in the provision of the Group's services while protecting employees from the risk of contagion. The improvement of the emergency situation has allowed, in September, the resumption of activities in-person also for the personnel who had been carrying out their activities in continuous smart working since the beginning of the pandemic, while maintaining the possibility of carrying out part of their activities remotely. This allowed for a resumption of personal relationships and social cohesion within the offices, fostering collaboration and active exchange of information. In 2021, 3,435 people were involved in smart working within the Group.

**Teleworking:** Group employees can take advantage, on a voluntary basis, of part-time remote working, which was introduced to the Company with specific agreements. The Group prioritises requests motivated by work-life balance needs (caring for children and the elderly, personal or family member health problems, the distance between their home and place of work, etc.). In 2021, 102 employees worked from home.

**Part time:** all employees can request part-time hours (horizontally, vertically, or mixed), on a voluntary and always reversible basis, without the exclusion of the benefits provided for employees with full-time contracts.

Part-time contracts (no.)	2021	2020	2019
Women	284	250	262
Men	141	90	85
<b>Total</b>	<b>425</b>	<b>340</b>	<b>347</b>

### Initiatives for employee welfare

With a view to promoting the well-being of its employees, the Group has chosen to meet employees' needs in terms of health and conscious consumption in the eight active Company canteens.

In relation to the continuation of the Covid-19 emergency, the safety and hygiene measures were maintained, implemented to allow, as far as possible, the use of **Company canteens:** hygienisation of spaces, use of personal protective equipment, placement of plexiglass on tables to protect diners, restriction of access. Alongside disposable plastic materials, previously completely eliminated and necessarily reintroduced for health reasons, more eco-sustainable plastic-free solutions have also been made available, with metal cutlery wrapped in paper, to reduce waste production even compared to the use of compostable cutlery. As usual, careful checks and sampling were carried out to verify compliance with contractual and legal provisions in health safeguard, with particular attention to the quality of the raw materials used.

Additionally, the Group has implemented a benefit scheme to improve the **quality of life of its employees:** meal vouchers and discounted dining in the local areas, company cafés offering regulated prices (closed for part of 2021 due to the Covid-19 emergency), indoor parking for private cars, and subsidised tariffs or contributions for buying subscriptions to the local public transport network.

All employees are offered, voluntarily and following an agreement with the Trade Unions, the possibility of allocating part of the 2021 performance bonus to corporate welfare initiatives, benefiting, in this case, from a surcharge. Through the **Iren Welfare Portal**, employees can obtain, within the limits of the amounts allocated, refunds and/or goods and/or services in the following areas: family, healthcare fund, mortgages, supplementary pension, sports, culture, leisure and trips. The services on the portal were presented through special live webinars open to all employees, a recording of which was made available. About 6,000 employees are already registered on the Portal, which managed around 2,180,000 Euro in 2021. Following a specific agreement with the Trade Unions, an amount to be allocated to supplementary pension funds or supplementary healthcare funds was provided to all those who converted at least 30% of their bonuses into welfare benefits. The portal also allows for registration and access to a discount area to which approximately 1,900 employees are enrolled.

In 2021, the Group renewed the collaboration with a wellness provider, a path geared towards improving employee health by encouraging physical activity and availability of a platform, which has more than 2,100 sports facilities nationwide (yoga, swimming, pilates and more), which can be attended with a single monthly subscription. The agreement guarantees the Group's employees discounted rates and subscription plans of up to 60% off the market cost.

As part of this collaboration, the wellness provider has provided Group employees with new digital solutions available in response to the needs created by the pandemic to help people stay active and fit even at home.

As part of the **mobility management** activities, in 2021, the Group completed the drafting and sending to the competent Authorities of the Home-Work Travel Plans (PSCL), required by the regulations, relating to the main company offices in Genoa, La Spezia, Parma, Piacenza, Reggio Emilia, Turin and Vercelli. The elaborations, prepared on the basis of the results of a questionnaire submitted to employees in 2020, constitute the Group's "Home-Work Mobility Plan", a tool for the analysis and development of useful measures to rationalise the travel of Group personnel. In order to facilitate the daily sustainable mobility of employees, in the main company offices, to which the Turin office was added in 2021, special covered racks have been installed for the shelter and parking of bicycles and motorcycles.

From 2020, moreover, each employee can, through a specific IT tool, search, book or purchase travel tickets in real-time, in complete autonomy and compliance with company policies, doing a comparative search between the various travel services customarily required to manage a trip (flights, trains, hotels and car rentals).

Finally, all employees have the option of purchasing some of the IT and telephone equipment that they currently use at discounted rates, in the case of replacement when they become obsolete or when they terminate their service.

### Prevention programmes

Iren Group promotes the health of its employees by facilitating access to a series of services and specific initiatives as part of a broader health and prevention programme.

The **Wellness Project** offers the possibility of a voluntary two-year preventive health check-up for an individual contribution of 10 Euro, which is donated in full to local Health Authorities. The project is structured in two phases ("Health Project" and "Heart Project") (programme promoted by the Istituto Superiore di Sanità) and aims to identify in advance, through laboratory examinations and a visit aimed at preventing cardiovascular risk, the main health risk factors in relation to age and gender. A total of 971 employees were screened in 2021, making up for visits that were suspended in 2020 due to the health emergency.

In 2021, the Group launched an experimental telemedicine project in collaboration with *Generali Welion*. The innovative service, proposed to all employees, provides a tele-consultation support for general practitioners and paediatricians for the whole family, with the aim of providing answers in the medical field, safely and promptly, in a context that, due to the Covid-19 emergency, affects the timely availability of various services of the National Health Service. The service also offers access to a vast network of affiliated healthcare facilities at discounted rates, without the need to take out an insurance policy. In the first three months of the trial, 543 employees signed up for the service, making a total of 277 calls to seek medical advice.

### Supplementary pension coverage

Since the legislation reforming the supplementary pension system came into force, employees have been able to decide how to use their post-employment benefits (TFR). They can either leave it with the company or put it in one of the pension funds provided for by law, which supplements the compulsory government-managed pension and ensures a higher social security coverage. Due to the number of participants, the ones that stand out are the pension funds established by collective bargaining, which can only be joined by workers applicable for certain collective agreements. The main funds for Iren Group employees are as follows: Pegaso (CCNL electricity or gas-water), Previambiente (CCNL environment), Fon.Te (CCNL Commerce and Services), Fondo Gomma Plastica (CCNL Gomma Plastica) and Previndai for managers. As part of the unification and standardisation process for economic and regulatory treatment, in order to promote the value of supplementary pension funds among young people and to encourage enrolment in the related funds, for employees hired on permanent contracts or apprenticeships an additional payment is made every year to the supplementary pension scheme in which they are enrolled. On 31 December 2021, 7,231 employees had joined the supplementary pension funds

to which the Group had paid a total of 3,826,303 Euro during the year, by way of contribution at its own expense. Employees can also make use of a pension support and advice service.

### Insurance coverage for personnel

Almost all junior managers, white-collar and blue-collar workers are insured by a policy stipulated by the Group for death or total or partial permanent invalidity due to accidents at and outside of work. Furthermore, special insurance policies have been taken out in the event of death and/or total permanent invalidity resulting from non-occupational ill-health for electricity and gas-water sector employees, in accordance with the provisions of the respective National Collective Labour Agreements. Insurance coverage in the case of accidents (even ones which occurred outside of work and in the case of occupational illness) and life insurance are provided for all managers, as per the provisions of the Confservizi National Collective Labour Agreements for Managers. A new policy has also been taken out to cover damages involuntarily caused to third parties by the managers or his/her family members in the performance of activities relating to private life (insurance cover for "head of household" liability).

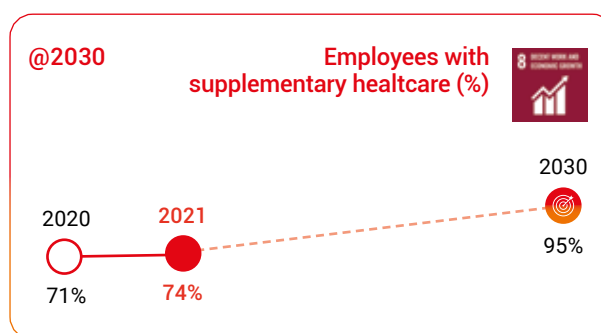
### Supplementary healthcare

Through membership of supplementary health care funds, employees are provided with health coverage in relation to the national collective labour contract to which they belong (FASIE for personnel with gas-water contracts, FASDA for personnel with environmental contracts, Utilitalia and Fise Assoambiente, Metasalute for metalworkers' contracts, EST for trade contracts and FAS G&P for plastic rubber contracts). The National Collective Labour Agreement for the electricity sector provides for the payment of contributions to CRAL associations for healthcare activities. In Parma, and for members of the CRAL ARTA association in particular, employees can join a prevention programme that includes specific health checks. Specially constituted funds manage the payment of healthcare benefits that ordinary members (employees) and their dependents can benefit from.

All managers, for whom primary healthcare coverage is provided by their membership to Fasi, are also supplied with supplementary health insurance which refunds additional healthcare costs that are not reimbursed by Fasi.

### Advance on employee severance pay

Employees may benefit on a reiterated basis – from better conditions than those provided by the legislation in force – by applying for an advance of their post-employment benefits (TFR) more than once to pay for healthcare, to buy their first house, renovate a property, restructure or modify buildings in order to remove architectural barriers and in other specific cases.



### Pension benefits

Retired employees, and their dependants, can remain members of Group leisure, cultural and sports associations and thus take advantage of a significant part of the offered services. Retired managers, whose last working relationship elapsed while holding the position of manager, which lasted not less than one year, can keep their subscription to the Fasi supplementary healthcare fund and make use of the benefits provided. The healthcare also covers any dependants and, in the case of their death, those who hold survivors' pensions.

The electricity sector National Collective Labour Agreement provides for additional monthly payments to the post-employment benefits for employees who leave service with 40 years of contributions or are 60 years of age.



### Leisure, cultural and sporting activities

Through the Company leisure clubs, recreational, leisure, sports and cultural activities are offered to employees, albeit with the limitations arising from the continuation of the pandemic in 2021. Aiming to increase sociability between employees, the following are available: the Employees' Recreational and Cultural Club in Genoa, Adaem and CRAL AMIAT in Turin, the Quercioli Club in Reggio Emilia, CRAL AMPS and CRAL ARTA in Parma, CRAL ENÌA in Piacenza, the CRAL ADAM in Vercelli and the CRAL ACAM in La Spezia. Some associations contribute to the educational expenses of employees' children, as well as allowing schoolbooks and stationery to be purchased at discounted prices. The clubs also enter into commercial agreements in the areas of interest to allow employees to purchase products and services at discounted prices. The clubs are almost entirely funded by the Group, which also makes the spaces and equipment required to carry out the activities available to them through a special free loan.

In regard to the regulations of the CRAL, discussions are under way with Trade Unions in order to harmonise the various economic and regulatory treatments provided by company supplementary agreements which have been subject to withdrawal.

Contribution paid (Euro)	2021	2020	2019
Leisure activities	900,153	927,495	847,690
Healthcare activities	2,394,082	2,346,442	2,250,435
<b>Total</b>	<b>3,294,235</b>	<b>3,273,937</b>	<b>3,098,125</b>



## Diversity and inclusion

[GRI 102-8, 401-3, 405-1, 405-2, 406-1]

Iren Group is committed, as evidenced by the corporate mission and values and the Business Plan, to enhancing the diversity present within the Company, providing a healthy work-life balance and improving the quality of the working environment. The aim is to work as a team, to add value to the outcome of individual work and to increase a feeling of belonging, creating shared social, cultural, professional and intellectual terrain.

The Group guarantees non-discrimination of personnel in selection, hiring, training, management, development and remuneration policies, as provided by the Corporate Code of Ethics. This commitment has guaranteed that no related breaches occurred in 2021, continuing the past trend.



**There were no breaches associated with discrimination practices in 2021**

For years, the Group has activated a series of articulated diversity programmes for the organic oversight of which, as of 2015, the **Welfare and Diversity** organisational unit was established, within which a specific **Welfare&Diversity** area operates. Therefore, it is a path of application of inclusion policies that recognises and values differences,

actively managing them and leveraging them to increase the competitiveness of the Group. The main areas of attention are gender, age, disability and diversity in nationality, for all of which the Group has activated, in various ways, programmes and initiatives, including the participation, together with 26 other Utilitalia-associated public service companies, to the **"Utilitalia Pact - Diversity makes the difference"** consisting of seven commitments to concretely promote inclusion and diversity of gender, age, culture and ability within company policies.

In confirmation of the importance attributed by the Group to the enhancement of diversity and the inclusion of all the resources present in the company, in 2021, the **"Policy on Diversity and Inclusion in Iren Group"** and the **"Policy on dealing with violence, harassment and bullying in the workplace"** were approved and disseminated (published on the website to which reference should be made for further details). The two Policies are directly linked to the principles of the Code of Ethics and formalise the Group's commitments to the development of an inclusive working environment, respectful of all forms of diversity, inspired by the principles of fairness and dignity in professional relations, and free from discriminatory behaviour.

As part of the diversity, equity and inclusion issues, the Group is launching the Pay Equity & ILM® Maps project, an additional analysis that will identify and correct any pay gaps.

The policies to enhance diversity are also reflected in the adoption of flexible working methods to reconcile life and work, in non-discrimination, in the enhancement of skills, in the drive towards female managerial skills and in training, through specific programmes aimed at increasing the level of awareness of the value of diversity and to create an inclusive work environment.

Reforms in labour laws and pension systems, which prolong people's tenure, have produced a significant effect: for the first time, there are at least four generations working side by side, bringing with them a different perception of work, roles and relationships. **The diversity and coexistence of different generations** offer opportunities for enrichment and openness to change, to address technological revolutions and drive innovation, leveraging the breadth of experience and knowledge. Facilitating cooperation and integration between seniors and juniors requires understanding each generation's strengths, limitations, and values toward their work and creating a company culture that actively demonstrates respect and inclusion. The Group's initiatives in support of generational diversity and training are the tool par excellence for promoting communication and the exchange of experiences between generations, stimulating productive confrontation and the transfer of knowledge and skills to ensure that differences are recognised and valued.

The effect of the policies adopted on **gender diversity** is also demonstrated by the inclusion of **Iren Group in the Bloomberg Gender-Equality Index (GEI)**, which guarantees transparency in the practices and gender policies implemented by listed companies, deepening and expanding ESG information available to investors and the financial community. The index measures gender equality based on five pillars: female leadership and talent pipeline, equal pay and gender pay equity, inclusive culture, anti-harassment policies and advocacy towards women. The inclusion in the GEI reflects a high level of transparency and overall performance consistent with the five pillars of the framework.

Aware of the fact that the path to achieving **gender equality** also passes through an adequate presence of women in all sectors that will offer the most outstanding professional and career opportunities in the future, the Group participates in different collaboration programmes with external actors. Significant in this context is the collaboration, already started in 2018, with **Valore D** – an association of companies that promotes diversity, talent and female leadership for the growth of companies and the country –, which has prepared a “manifesto” for female employment, signed by Iren Group. The document consists of nine points through which the Company undertakes, gradually and compatibly with its sector and size specificities, to adopt clear and measurable objectives, with performance indicators monitored periodically, to be shared internally. In order to achieve the objectives included in the manifesto, the Group also implemented several activities in 2021. These include webinars and talks, included in the online training available on the company Intranet, which allow for an in-depth look at topics such as: the influence of stereotypes on decisions and how to fight them, how the pandemic changes the relationship between the genders, sexism in language and awareness of language used in the workplace, and the use and amount of diversity to learn how to work better. In addition to these initiatives, a series of moments of online discussion and reflection has been added, proposed in collaboration with Valore D Talks Academy and open to all Group personnel, to raise awareness and inspiration on issues related to diversity and inclusion, applicable in their own professional and personal environment.

The framework of the fourth industrial revolution (4.0), which requires new skills and continuous personal and organisational improvement, includes the training course aimed at female staff and oriented to develop digital and managerial skills to ensure empowerment and engagement. In 2021, the **Women 4.0 Mini Master Leadership** Programme was launched to promote gender equality. The initiative, which involved 12 female colleagues of the holding company and of the different Business Units, completed the training cycle, carried out in 2020, “Empowerment & leadership of women for Industry 4.0”, aimed at increasing skills and abilities oriented to develop greater familiarity with the processes of innovation.

In 2021, the Group launched a new collaboration with **Fondazione Libellula** – an institution committed to raising awareness of all forms of violence and discrimination and supporting the development of an inclusive culture in organisations – becoming part of the network of adherents. Through this collaboration, a webinar on “**Cultural Diversity as an Opportunity**” was organised to raise awareness of the importance of inclusion and inform about the benefits of properly managing diversity through the use of cultural intelligence.

STEM (science, technology, engineering and mathematics) education currently represents a part of gender inequality, especially in the context of present and future technological revolution. Aware of this gap, the Group has contributed to the **#ValoreD4STEM** survey on women with STEM careers in organisations, administering a questionnaire to all women with a degree or who hold a technical-scientific role within the Group. On this topic, the **Role Model** project continued in 2021, in collaboration with the ELIS association, a non-profit educational organisation that targets young people, professionals, and businesses to respond to the school-work gap, youth unemployment and contribute to the sustainable development of organisations. Through the testimony of Role Models, the project aims to orientate secondary school students to follow their aspirations, with particular attention to the sensitisation of girls towards STEM disciplines. Moreover, the Group supported the fourth edition of the **Ragazze Digitali** [Digital Girls] project, a summer camp, in digital format – organised by the Reggio Emilia and Modena section of the EWMD (European Women’s Management Development)

association and the University of Modena and Reggio Emilia – aimed at young people who have completed their 3rd and 4th year at all high schools, intending to bring them closer to IT, programming and the culture of doing, and to stimulate their digital creativity using the learn by doing approach.

During the year, the Group launched a new research project with Luiss Business School on the topic **"Women Empowerment @Iren – Enhancing the role of women in companies in the energy, infrastructure and transport sector"**, with the aim of setting, from a methodological point of view, the actions already carried out and planned by Iren, in order to understand the phenomenon of gender equality from different perspectives, and to direct the future strategic lines of the Group.

Iren also took part in the 2021 edition of **4 Weeks 4 Inclusion**, the series of meetings dedicated to inclusion and the enhancement of diversity that involved more than 200 companies, in which it organised its own event for an in-depth analysis of the inclusion strategies and initiatives implemented by the Group.

Also, Iren Group guarantees disabled personnel the conditions for the best possible integration into the workforce, operating under current legislation.

Personnel belonging to protected categories	2021	2020	2019
Number of employees	379	370	383

### Female personnel

The average female presence in the Group during the year, equal to 2,195 women, represents approximately 25% of the yearly average number of employees, an increase compared to 2020 (24.3%).

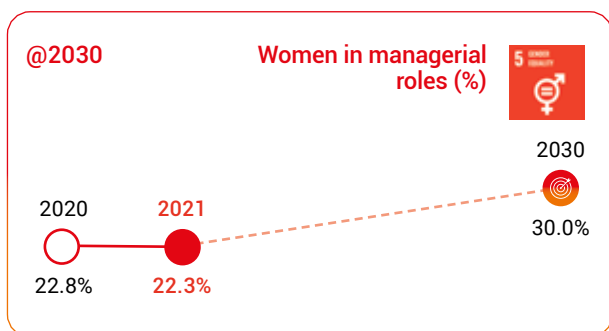
Overlooking the effect of the consolidation, as of 2019, of the company San Germano which, due to the type of activities carried out, consists primarily of male staff, the percentage of female staff (26.7% in 2021) has been steadily increasing over the last five years.

Average personnel by position and gender	2021		
	Total no.	Women no.	Women %
Managers	102	20	19,6 %
Junior managers	337	78	23,1%
White-collar workers	3,825	1,448	37,9%
Blue-collar workers	4,580	649	14,2%
<b>Total average</b>	<b>8,844</b>	<b>2,195</b>	<b>24,8%</b>

With regard to skill development, the promotion of women's managerial skills and the development of work-life conciliation tools, the anti-discrimination policies implemented during the selection stage have increased the attractiveness of the Group for women, also within professions that are typically characterised by a strong technical component traditionally "reserved" mainly for men. The recent hires of young female graduates, even into strictly technical sectors such as waste or site & network engineering, is evidence of this.

The majority of female personnel (70.4%) are managers, junior managers and white-collar workers (overall constituting 48.2% of total employees, compared to the 51.8% of blue-collar workers). The analysis, also in consideration of the mainly technical characteristics of the managed activities, revealed a non-discriminatory situation for the average female component, who represent around 36.3% in the group of managers, junior managers and white-collar workers.

The issue of female presence is taken up among the objectives of the Business Plan to 2030 in which it is foreseen to increase the number of women in managerial positions in the Group.



Equal remuneration between men and women is ensured by the application of the National Collective Labour Agreements in which minimum salaries for each employment category are defined. The average basic salary per the qualification of women (details in the section “Iren People in figures” at the end of the chapter) is, however, slightly lower than that of men, due to three types of factors: a higher percentage of women working part-time (12.5% of women compared to 2.1% of men), the lower average working seniority of women compared to that of men, high incidence of qualified technical roles that historically come from the predominantly male school system. Through selection policies relating to the topic and the introduction of a reward system with homogeneous policies for the entire company population, the Group has set itself the objective of rebalancing this situation as much as possible, in view of the reference labour market, also through specific interventions on selection policies, in order to increase the presence of women and develop a pool of female talent, not only in white-collar roles but also in technical-operational ones.

In line with the provisions of the Company’s Articles of Association and current regulations on equal access to the boards of directors and boards of statutory auditors of listed companies, a balance between genders is ensured in Iren, with 40% of its members being women. On the whole, on the Boards of Directors for Group Companies there are 39 women, amounting to approximately 24% of total members (164 people of which 33% in the 30 to 50 age group and 67% over 50).

In 2021, 336 employees (162 women and 174 men) took maternity leave (compulsory, parental leave, paternity leave and breastfeeding), of which 310 (151 men) took compulsory, early and parental leave.

Employees were also able to take advantage of the various forms of flexible working that the Group provides, above all smart working, of the specific training provided in these cases and of the services described in the paragraph on Corporate Welfare. Upon their return to work, all employees were able to resume the job they had filled before their period of absence or a job with equal professional content in cases where organisational changes occurred in the meantime that meant they could not return to the same position.

## Occupational health and safety

[GRI 403-1, 403-2, 403-3, 403-4, 403-5, 403-8, 403-9, 403-10]

The Group considers the dedication of human, professional, organisational, technological and economic resources to occupational health and safety as an investment, as it believes it to be fundamentally important to protect workers and includes among its objectives not only compliance with the provisions laid down by the law, but also measures taken with a view to continuously improving working conditions. A stringent conception of safety entails total engagement on the behalf of employees who, according to the activity performed and the respective skills and responsibilities, are required to play an active role in prevention. As such, particular attention is given to providing training and information to employees and conducting continuous monitoring, including the analysis of individual injuries, near-misses, and planned supervisory surveys.

### Covid-19 emergency safety

The Group’s safety policy was also embodied in the management of the Covid-19 emergency, which saw, as of 20 February 2020, the establishment of a permanent Crisis Unit, operational also in 2021, to deal with the situation in a coordinated and timely manner, ensuring continuity of activities and provision of services and paying the utmost attention to the safety of all employees.

The approach adopted, in continuity with 2020, was systemic, with transversal initiatives extended to all employees and other specific initiatives, concerning the differences connected with the business and the various segments of the Company population, evolving from defensive reaction to long-term growth and empowerment of all personnel, as well as the organisation.



In addition to the new and different working methods already described above, the **main measures taken to ensure the safety** of workers have been:

- updates, in line with pandemic and regulatory developments, of the “Manual for in-person activities – Covid-19 emergency management” and of the “Single text of Group provisions”, containing prevention and protection measures and practical guidance on how to behave in the work environment;
- alignment of emergency plans and procedures for each Business Unit and meetings of internal committees between management, Trade Unions and Workers’ Health and Safety Representatives;
- management and distribution to employees, through the Group’s warehouses, of over 2,000,000 items of personal protective equipment (masks, gloves, gels) worth over 700,000 Euro;
- delivery of more than 40,000 protection kits (masks, sanitizer, gloves, wipes) to office personnel at the reception desks;
- sanitisation of workplaces and work vehicles;
- organisation in shifts, as required, of personnel called upon to operate in-person to reduce any possibility of infection;
- distancing of people in offices and common areas (through access management, signage, physical partitions, etc.);
- assessments by the occupational health physicians before returning to work for all positive cases;
- more than 400 monitoring visits to identify corrective and improvement actions and to verify employees’ compliance with the rules of conduct;
- a dedicated Intranet area and extensive and timely information on all devices available to personnel (PCs, smartphones, tablets), with news, e-mail, posters;
- visual safety communication with signs at all locations;
- dedicated e-mail box available to all employees for doubts, reports and to facilitate the tracking of contacts with possible cases of infection. Over 36,000 e-mails have been handled since the start of the pandemic;
- use of online training.

In 2021, the Group also initiated a **corporate Covid-19 vaccination campaign**. The path, included

in the implementation of the national emergency management plan, was made possible thanks to the Protocol signed on 06 April 2021 between the Government and Social Parties, which gave companies the opportunity to contribute to the national vaccination campaign. Iren seized the opportunity and immediately started a massive campaign of participation, aimed at all personnel of the Group, which ended with the collection of expressions of interest, while respecting privacy through a dedicated portal. Subsequently, through specific agreements with external health facilities, based on the tipagaming and availability of the Regions, it was possible to implement vaccinations for about 600 employees.

Iren, the four parent companies (Iren Ambiente, Iren Energia, Iren Mercato and Ireti) and the main companies of the Group, have systems certified according to the international standard UNI EN ISO 45001 to guarantee the systematic control of aspects relating to the safety and health of workers, who cover 100% of the staff employed in certified companies (equal to 98% of the Group’s total staff).

### Safety management

The Group’s safety management system is supervised by a single Safety Service within the Parent Company, which guarantees the standardisation of risk assessment methods, the identification of organisational, procedural and technical measures, and the training needs of personnel in the field. Specific procedures and systematic audits allow for the monitoring and the continuous improvement of this system to be pursued. Specific improvement objectives refer to the progressive computerisation of the Safety Management System (through the “G.A.M. MA.” app which guarantees uniformity of approach and the relative monitoring activities), standardisation of the management of cross-departmental topics (including the issue of Group procedures regarding PPE, health checks, emergencies, injuries) and the progressive integration of newly acquired Companies incorporated into the Group.

Each Group Company organises at least one annual meeting on corporate security (Article 35 of the Italian Legislative Decree 81/2008), and, as a rule, one or two other meetings per year for discussion and updating attended by the Workers’ Health and Safety Representatives (HSR). Surveys and specific meetings are also carried out at the request of the HSRs and/or workers. The HSRs are also invited to

take part in the visits to the workplace with the Occupational Health Physician (Article 25 of the Italian Legislative Decree 81/2008) and are involved in audits of certified systems.

The **reporting and management of** injuries and near-misses takes place through hierarchical channels and subject to supervision by the Prevention and Protection Service according to specific procedures regulating the process, which may be computerised and are accessible to all workers. A detailed analysis of the event is carried out, aimed at identifying the causes of unwanted events, and the necessary actions and skills to prevent them. A specific app (Safety App) on the company smartphones provided to all employees enables near-misses to be reported, promoting employee participation and facilitating the introduction of any corrective actions.

The Safety System documentation (procedures, emergency plans, operating instructions, guidelines for safe working, etc.) establishes the cases and situations where workers are required to distance themselves from potentially hazardous or unexpected situations, and/or to avoid certain activities requiring specific training for which they are not qualified. In this regard, the Group companies adopted specific procedures to regulate particular situations and risks (works in confined spaces or in case of suspected pollution, outdoor operations in case of weather alerts or employees operating alone, etc.).

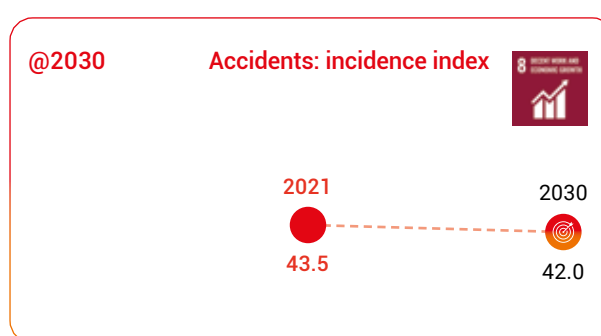
The **process of hazard identification and risk evaluation** is regulated by procedures and a dedicated software that guarantees a standardised approach. For each working activity, the risks and the appropriate prevention and protection measures, personal protective equipment (PPE) necessary to conduct said activities, proper conduct and any organisational measures or other requirements are identified and evaluated. Furthermore, workplaces are analysed to identify and evaluate the risks present, taking instrumental measurements where necessary. The assignment to each employee, directly or through groups (safety certifications) of the results of the assessments conducted on working activities and workplaces completes the risk profile of each worker, identifying the consequent general protection measures to be implemented such as the provision of necessary PPE, the need or otherwise for health checks, and the results of these, where applicable. This structured evaluation process is conducted and coordinated by the Prevention and Protection Service (PPS) of each Company, with the indispensable involvement of the operating units. The PPS also carries out periodic controls to check the correct implementation of the provisions.

Group companies with ISO 45001 certification are also subject to periodic audits planned by certified external independent auditors with the aim of verifying the correct implementation of the occupational health and safety management system. The results of these audits are brought to the attention of the management to enable the relative action to be taken.



There is a specific section dedicated to occupational health and safety in the Group's Industrial Relations Protocol and specific agreements have been signed that regulate special content (for example, business trips).

Attention to such aspects is also demonstrated by the provision, in the Business Plan and in the MbO system, of specific objectives, assigned to the managers of the operating structures most exposed to these risks.



#### Main indicators of safety

Accidents and frequency index <sup>1</sup>	u.m.	2021
Total number of accidents	no.	385
of which with serious consequences – non-fatal <sup>2</sup>	no.	3
of which with serious consequences – fatal	no.	0
Hours worked	no.	14,640,282
Frequency index		
(no. total number of accidents/hours worked x 1,000,000)		26.30
(no. total number of accidents/hours worked x 200,000)		5.26
Days of absence due to accident	no.	12,836
Severity Index		
(days of absence due to accidents/hours worked x 1,000)		0.88
Average duration of absence for accidents	days	33.34
(days of absence due to accidents/total no. accidents)		

<sup>1</sup> Accidents during travel and those not recognised by INAIL are excluded.

<sup>2</sup> Injuries lasting longer than 6 months.

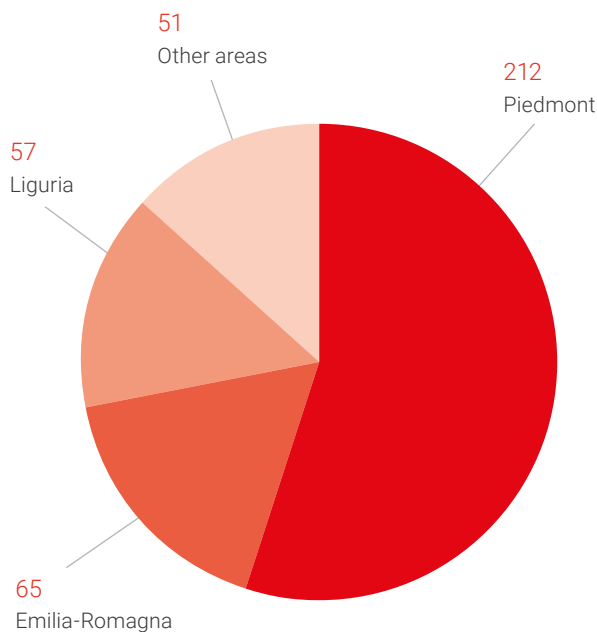
Near-misses <sup>1</sup> by region and gender (no.)	2021
Piedmont	87
Emilia-Romagna	22
Liguria	27
Other areas	22
<b>Total</b>	<b>158</b>
Women	35
Men	123
<b>Total</b>	<b>158</b>

<sup>1</sup> Near-misses pursuant to standard ISO 45001:2018.

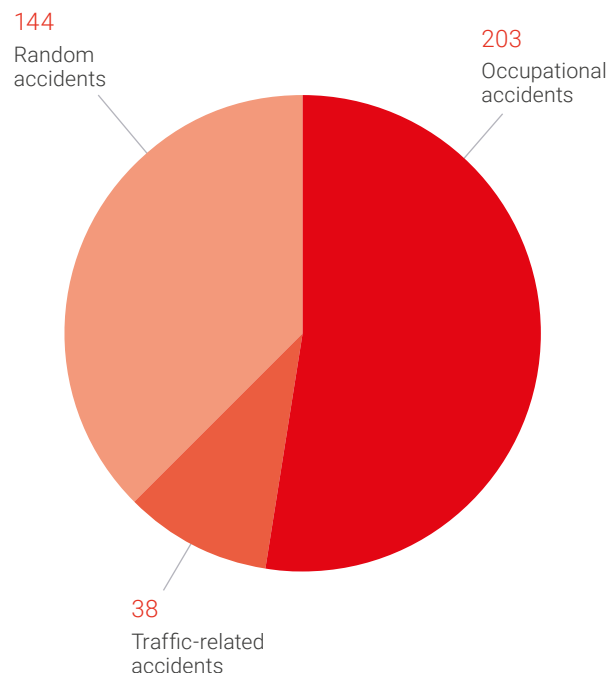
Injury trends in 2021 show a slight increase in indices compared to 2020, which was more characterised by the Covid-19 emergency, both in the frequency index, at 26.30 (24.93 in 2020) and the severity index, at 0.88 (0.82 in 2020), but significantly lower than those in 2019 (30.53 and 0.98, respectively). The average duration of absence for injuries, 33.34 days, remains almost constant (33.03 days in 2020).

The "Iren people in figures" section shows the breakdown of the accident indexes for the last three years.

Accidents by geographical area (no.)



Accidents by type (no.)



### Health checks

Employee health checks are carried out on the basis of their assigned duties; these are organised centrally by the Safety Service while diagnostic checks are planned and conducted by a specialist external company. Pursuant to current law, the medical examinations are carried out (around 9,000 in 2021) by external Occupational Health Physicians, appointed by the employers of each Group company. A specific Group procedure defines the shared approach, including the standardisation of health protocols. The correct planning and monitoring of health checks for all workers is guaranteed by the G.AM.MA. app, on which are recorded: workers' risk profiles according to the possible professional exposure level indicated in the risk assessment documents, the obligatory nature of the health checks, the date of the scheduled checks, the fit-to-work certificate and any provisions/limitations. To respect personal privacy, information contained on the G.AM.MA. app is made available to employees, managers, senior managers, medical professionals and the PPS only when relevant. The G.AM.MA. application is certified to handle the requirements of the UNI ISO 45001:2018 standard.

With regards to **occupational ill-health**, the Risk Assessment Document (RAD) is maintained constantly updated and shows a very low level of professional risk, which vastly reduces the likelihood of occurrence. This probability is minimal both upstream and downstream of the control chain implemented by the Group. Upstream, the results of the risk assessment document of Group companies are drawn up in collaboration with the Prevention and Protection Service Responsible (RSPP) and the Occupational Health Physicians and meetings are called to discuss the outcome of the RAD and as a result of the various inspections of working environments, during which, where necessary, any critical situations may be reported by the competent parties within their area of expertise, providing indications or suggestions aimed at improving working conditions. Downstream, the Occupational Health Physicians identify the residual risks and draw up a health check protocol shared at Group level, which aims to protect the mental and physical health of workers and to identify any potentially or effectively hypersensitive persons, correlating the working risk with specific diagnostic checks and enable the correct identification of any personal limitations or provisions. The Occupational Health Physician is however required by law to report any suspected occupational ill-health to the competent bodies. In 2021, two cases of occupational ill-health were recognized as such by INAIL.

No specific initiatives or programmes limited to serious work-related ill-health are envisaged; on the other hand, numerous welfare and prevention initiatives and programmes in general are envisaged, both at the level of collective agreement or special company bargaining and through the company Welfare system (see page 240).



## Health and safety training

Among the primary objectives of the Group's training activity are the improvement of behaviour and the strengthening of the culture regarding health and safety in the workplace, which continue to have a predominant role in initiatives aimed at employees. In 2021, despite the continuation of the health emergency that limited the maximum number of classroom participation and delivery methods, these topics registered a significant increase over previous years, with over 63,400 hours of training delivered, a per capita average of 7.2 hours and the involvement of 6,191 people in at least one initiative, equal to 70% of the average number of employees. The main initiatives were:

- **basic training and updates** for managers, responsables and workers, emergency and first aid officers, on specific risks (confined environments, electrical environment, asbestos, isolated work, biological risk from legionella), on the use of personal protective equipment (work at height, respiratory system, confined environments);
- **qualification and refresher courses for safety officers** (RSPP/ASPP, HSR, site safety coordinators, fire prevention officers, managers and staff responsible for asbestos removal, disposal and remediation);
- **training and refresher courses on the use of equipment** (fork-lifts trucks, earth-moving machinery, lifting platforms, cranes, tractors, etc.);
- **equipment training** (bridge cranes, mobile generators, portable ladders, trolleys for the transport of goods and people and/or lifts/cable cars, waste collection machinery and compaction and environmental hygiene, manholes lifts and hatches);
- **specific internal procedures** (production of advanced works plans covering electricity risk, management of work permits, emergency management, etc.).

The Training Portal is integrated with the "G.AM.MA." app for security management, in order to allow for training needs to be constantly updated in relation to the risks to employees and the security responsibilities assigned to them, as well as to monitor the expiry dates of the relative updates. The effectiveness of the safety training is assessed through tests or, as provided for by law, through practical assessments.

## Trade Union and industrial relations

[GRI 402-1, 419-1]

Iren Group has always focused heavily on proper industrial relations, based on legislation and company and national collective labour bargaining, in compliance with the National Collective Labour Agreements of reference and the principles of the Code of Ethics, with particular reference to the ILO conventions (see note on page 92). Iren and the Trade Unions have signed a Group **Industrial Relations Protocol**, which dictates the rules that govern relations between the parties. This has led to a model being put in place based on the sharing of business decisions, which aims to enhance the value of individual workers who, in order to enable healthy development, must be involved and grow in step with the entire organisation. The shared decisions lead to a sense of belonging and, at the same time, place the employee centre stage. The Protocol sets out the methods for approaching industrial relations based on three pillars: bargaining, participation and rules.

Industrial relations are organised on three levels:

- *Group level*, on topics of general interest and/or transversal to businesses and areas and on the trend and development of business sectors, or industrial policies, guidelines on organisational structures, the economic results of the Group and the business segments, the harmonisation of Company agreements, the coordination of reference National Collective Labour Agreements and Company integration;
- *Company level*, on topics regarding individual Companies or a cluster of Companies, for which a Unitary Union Representative Body (RSU) is established;
- *local level*, on topics regarding the single production unit, downstream of the company level, or on topics that concern several Companies located in the same area.

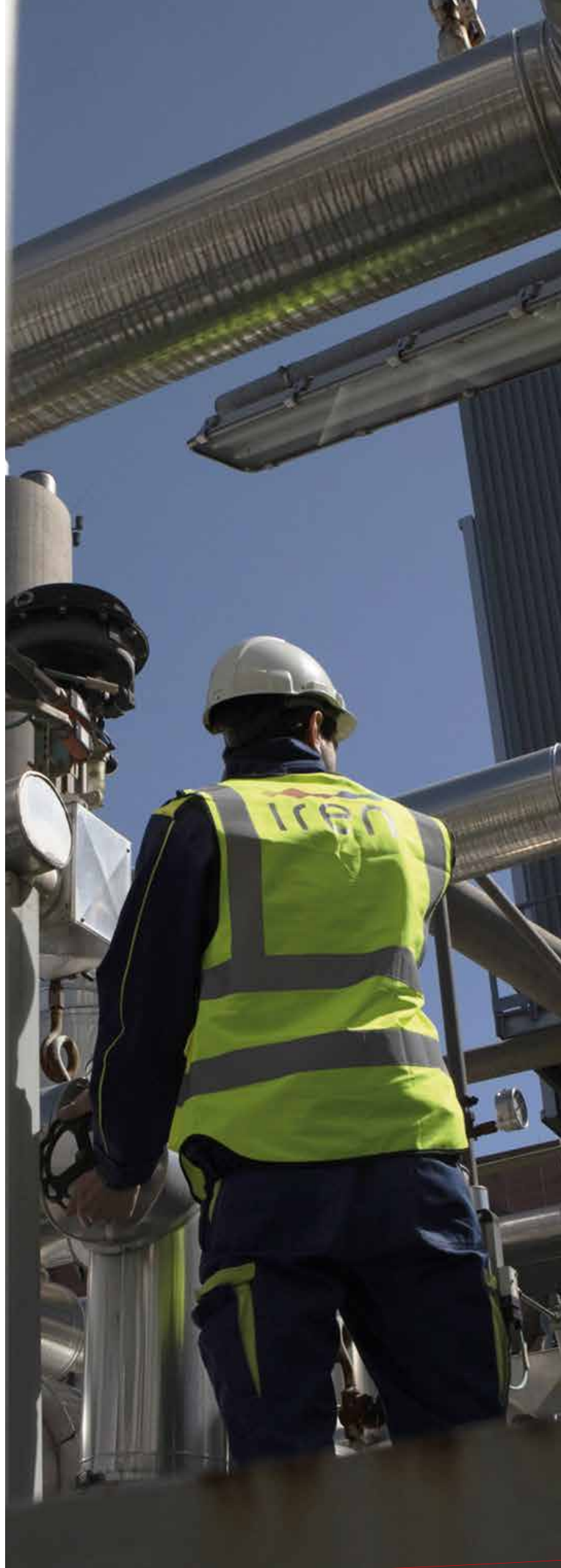
Furthermore, procedures are defined for developing relations based on information sent to the Trade Unions, discussion and consultation (exchange of information and evaluations, acquisition of opinions, requests or indications from Trade Unions, verification of phenomena on matters specifically identified to seek possible points of convergence), and negotiation (discussion between the parties aimed at reaching agreements that are binding on them).

The Group's Industrial Relations Protocol also establishes two participatory bodies: the RSU National Coordination and the RSU Executive Committees, while bilateral Committees (environment and safety, education and training, equal opportunities and welfare) are established for analysing specific issues.

Industrial relations also in 2021 were characterised and influenced almost entirely by the Covid-19 health emergency, and the Protocol facilitated, in a highly critical context, relations between the Group and the Trade Unions. The emergency legislation has contributed in this sense, in fact, based on the provisions of the Italian Ministerial Decree of 11 March 2020, the Government and the Social Partners signed (14 March 2020) the "Shared Protocol for the regulation of measures to combat and contain the spread of the Covid-19 virus in the workplace". In this context, the 9 **Committees for the application and verification of the rules of the National Protocol**, set up in March 2020 at territorial and sectoral level (made up of company representatives, Trade Unions, HSR and Occupational Health Physician), continued to operate and during the year held 25 meetings with the aim of monitoring and managing any criticality caused by the health emergency.

At Group level, in continuity with 2020, various agreements were signed with the Trade Unions, with the shared aim of seeking and adopting solutions for the management of work activities during emergencies. In 2021, four agreements of a temporary nature were signed, all involving corporate measures to manage the Covid-19 emergency, in line with regulatory provisions issued by the government.

Considering the persistence in 2021 of the critical issues caused by the pandemic, which also made it impossible to hold meetings in-person with the Trade Unions, industrial relations and the related agreements signed have had the flexibility, training and digitalisation that determine the new forms of work organisation, also involving industrial relations in the process of change. In relation to these issues and in application of the national regulations governing the New Skills Fund, the Group and the Trade Unions signed a **New Skills Fund** agreement on 28 May 2021, with the central purpose of focusing strongly on staff training and retraining with the aim of:





- developing projects and interventions to bring about a profound cultural change, with an organisation of work based on processes, objectives and results, as well as flexible working hours to encourage the right balance between private and professional life;
- acquiring and/or expanding digital, technological and soft skills, as a fundamental lever to support the processes of adaptation to new organisational and production models and professional development.

In continuation of the agreement signed with the Trade Unions in 2020, the **solidarity vacation** mechanism was also used in the first few months of the year. The Group workers and companies donated vacation entitlement to those who had used up theirs, in order to adjust the working presence of personnel to situations of reduction or suspension of activities without impacting on wages.

Moreover, on 28 June 2020, an agreement was signed on the 2021 performance bonus, a fundamental tool for redistributing company profitability and one of the main levers for stimulating worker involvement in the Group's performance and improvement.

Consolidated practices provide that, in the event of significant organisational changes (establishment of new business units or changes to the organisation of work), company management informs the Trade Unions in order to seek shared solutions, where possible. Therefore, employees are notified of these changes through formal notifications issued and distributed via the Group Intranet and/or e-mail and posted to Company notice boards. For changes to working hours, the National Collective Labour Agreements require that management inform the Trade Unions and convene a consultation meeting for the purposes of a joint review. The time frames for the conclusion of discussions on the topic may vary from 20 to 60 days, after which the Parties can take the action they deem most appropriate. The contracts also cover transfers, providing for at least 30 days' notice in the event of an employee being transferred to another municipality, with the Trade Unions being informed with adequate notice in the event of collective transfers, which are usually followed by a meeting between the Group and the Trade Unions.

In 2021, the Group lost, definitively, 16 lawsuits concerning employees and former employees with an outlay of 348,999 Euro.

## Iren People in figures

[GRI 102-7, 102-8, 401-1, 403-9, 405-1, 405-2]

Personnel at 31/12 by position, contract type and geographical area	2021		2020		2019	
POSITION						
Managers	104	1.2%	92	1.1%	94	1.2%
Junior managers	345	3.8%	305	3.6%	314	3.9%
White-collar workers	3,915	43.2%	3,618	42.7%	3,495	43.1%
Blue-collar workers	4,691	51.8	4,450	52.6%	4,199	51.8%
CONTRACT						
Employees with permanent contracts	8,254	91.1%	7,760	91.7%	7,514	92.7%
Employees with fixed-term contracts	150	1.7%	95	1.1 %	84	1.1 %
Apprenticeship/in-house training contract	651	7.2%	610	7.2%	504	6.2%
GEOGRAPHICAL AREA						
Province of Genoa	1,089	12.0%	1,066	12.6%	1,040	12.8%
Province of Parma	762	8.4%	726	8.6%	715	8.8%
Province of Piacenza	557	6.2%	553	6.5%	555	6.9%
Province of Reggio Emilia	1,117	12.3%	992	11.7%	902	11.1%
Province of La Spezia	738	8.1%	720	8.5%	721	8.9%
Province of Turin	3,204	35.4%	3,145	37.2%	3,137	38.7%
Province of Vercelli	234	2.6%	242	2.9%	239	2.9%
Other provinces	1,354	15.0%	1,021	12.0%	793	9.9%
Total	9,055	100%	8,465	100%	8,102	100%

Personnel by position and gender	2021			2020			2019		
<b>PERSONNEL AS AT 31/12</b>	<b>Total</b>	<b>Women</b>		<b>Total</b>	<b>Women</b>		<b>Total</b>	<b>Women</b>	
Managers	104	20	19.2%	92	18	19.6%	94	17	18.1%
Junior managers	345	80	23.2%	305	71	23.3%	314	76	24.2%
White-collar workers	3,915	1,518	38.8%	3,618	1,343	37.1%	3,495	1,261	36.1%
Blue-collar workers	4,691	651	13.9%	4,450	657	14.8%	4,199	586	14.0%
<b>Total</b>	<b>9,055</b>	<b>2,269</b>	<b>25.1%</b>	<b>8,465</b>	<b>2,089</b>	<b>24.7%</b>	<b>8,102</b>	<b>1,940</b>	<b>23.9%</b>
<b>AVERAGE STAFF</b>	<b>Total</b>	<b>Women</b>		<b>Total</b>	<b>Women</b>		<b>Total</b>	<b>Women</b>	
Managers	102	20	19.6%	92	17	18.5%	96	18	18.8%
Junior managers	337	78	23.1%	311	75	24.1%	307	73	23.8%
White-collar workers	3,825	1,448	37.9%	3,549	1,300	36.6%	3,443	1,229	35.7%
Blue-collar workers	4,580	649	14.2%	4,313	620	14.4%	4,144	581	14.0%
<b>Total average</b>	<b>8,844</b>	<b>2,195</b>	<b>24.8%</b>	<b>8,265</b>	<b>2,012</b>	<b>24.3%</b>	<b>7,990</b>	<b>1,901</b>	<b>23.8%</b>



Average personnel age by position (years)	2021	2020	2019
Managers	54	53	54
Junior managers	52	52	52
White-collar workers	48	48	49
Blue-collar workers	47	48	48
<b>Overall average</b>	<b>48</b>	<b>48</b>	<b>49</b>

Personnel by qualification (%)	2021	2020	2019
Compulsory education	37	38	38
Professional institutions	8	9	9
Diploma	37	36	37
Degree	18	17	16
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Average personnel by Business Unit	2021		2020		2019	
Holding	1,065	12%	1,058	13%	1,047	13%
Energy	918	10%	874	11%	855	11%
Market	543	6%	513	6%	505	6%
Networks	2,166	25%	2,161	26%	2,136	27%
Waste Management	4,152	47%	3,659	44%	3,447	43%
<b>Overall average</b>	<b>8,844</b>	<b>100%</b>	<b>8,265</b>	<b>100%</b>	<b>7,990</b>	<b>100%</b>

Average Company service of departing personnel by age and gender (years)	2021	2020	2019
<b>AGE</b>			
under 30 years old	1	1	1
from 30 to 50 years old	4	5	3
over 50 years	23	22	22
<b>GENDER</b>			
Men	15	15	14
Women	19	16	17
<b>Overall average</b>	<b>15</b>	<b>15</b>	<b>14</b>

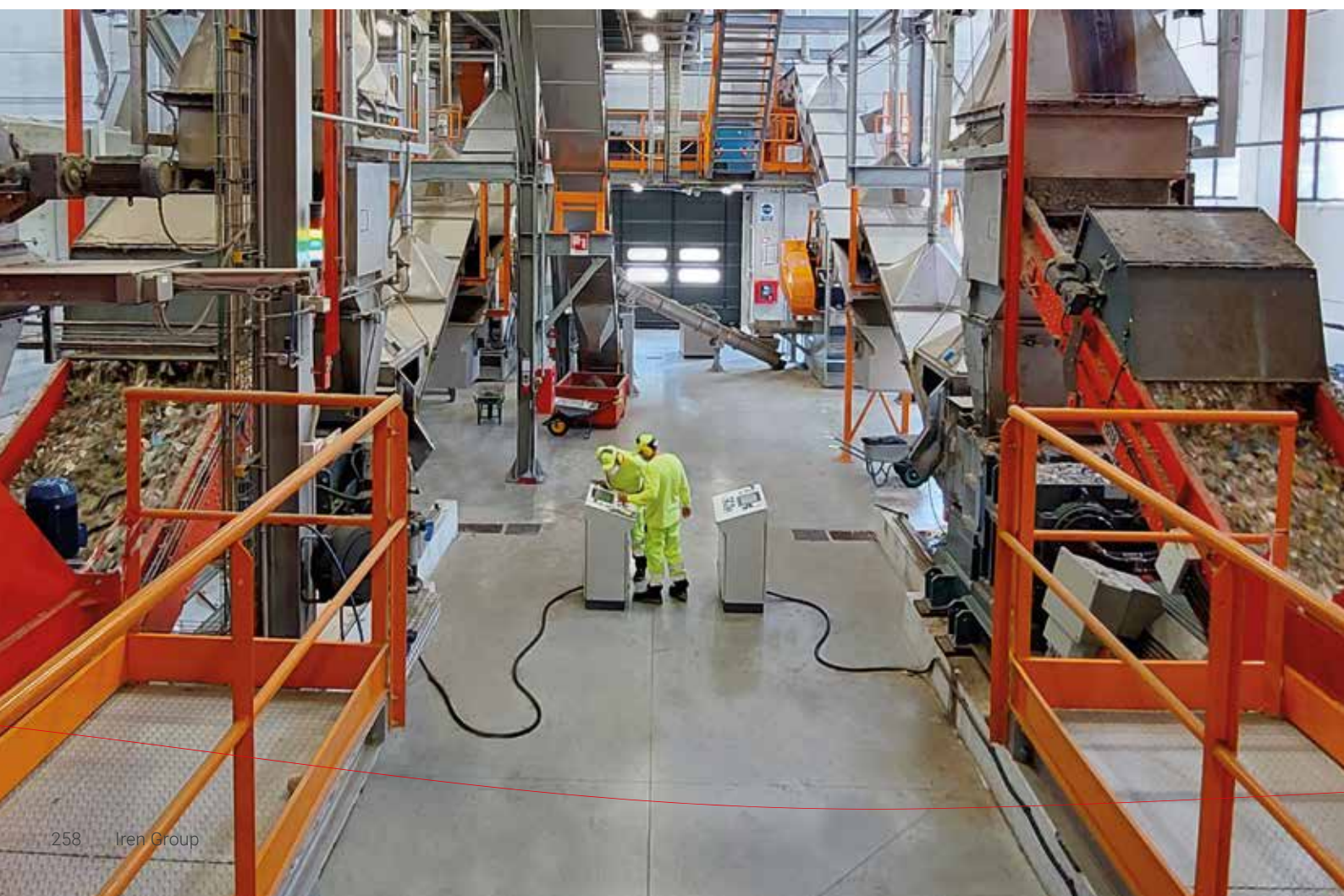
Personnel turnover by gender, province and age <sup>1</sup>	2021	2020	2019
<b>GENDER</b>			
Men	8.3%	6.7%	7.7%
Women	4.5%	1.9%	2.0%
<b>PROVINCIA</b>			
Province of Genoa	4.1%	3.1%	3.3%
Province of Parma	7.3%	3.9%	3.8%
Province of Piacenza	5.6%	3.3%	2.2%
Province of Reggio Emilia	6.2%	4.4%	5.3%
Province of La Spezia	4.6%	3.6%	4.2%
Province of Turin	6.4%	4.4%	4.3%
Province of Vercelli	9.4%	5.0%	5.4%
Other provinces	14.9%	16.6%	27.0%
<b>AGE</b>			
Under 30 years old	8.8%	8.7%	8.8%
From 30 to 50 years old	4.8%	3.4%	4.7%
Over 50 years	9.0%	6.5%	7.2%
<b>Total</b>	<b>7.3%</b>	<b>5.5%</b>	<b>6.3%</b>

<sup>1</sup> Turnover was calculated as ratio of outbound employees to the number of total employees at 31/12.

Hires during the year by gender, province and position (no.)	2021	2020	2019
<b>GENDER</b>			
Men	717	515	633
Women	169	97	112
<b>PROVINCE</b>			
Province of Genoa	74	55	64
Province of Parma	71	41	55
Province of Piacenza	34	15	27
Province of Reggio Emilia	119	62	93
Province of La Spezia	50	23	27
Province of Turin	263	197	242
Province of Vercelli	14	14	14
Other provinces	261	205	223
<b>POSITION</b>			
Managers	4	5	4
Junior managers	9	9	16
White-collar workers	248	178	229
Blue-collar workers	625	420	496
<b>Total</b>	<b>886</b>	<b>612</b>	<b>745</b>

Ratio of basic average salary by gender and position (%)	2021	2020	2019
<b>% Women/Men</b>			
Managers	90.1	89.3	89.3
Junior managers	98.3	98.3	98.3
White-collar workers	91.2	91.4	91.1
Blue-collar workers	95.1	94.7	96.7

Ratio of basic average salary by gender and geographical area (%)	2021			
	% Women/Men			
	Managers	Junior managers	White-collar workers	Blue-collar workers
Piedmont	107.8	102.0	91.8	99.5
Emilia-Romagna	75.9	101.1	93.8	77.2
Liguria	85.1	98.9	90.2	94.0
Other areas	103.7	76.2	81.8	78.3



Accidents and accident indexes <sup>1</sup>	u.m.	2021	2020	2019
<b>Total number of accidents</b>	<b>no.</b>	<b>385</b>	<b>334</b>	<b>401</b>
<i>of which accidents with serious consequences – non-fatal<sup>2</sup></i>	<i>no.</i>	<i>3</i>	<i>0</i>	<i>0</i>
<i>of which accidents with serious consequences – fatal</i>	<i>no.</i>	<i>0</i>	<i>2</i>	<i>0</i>
<b>Accidents by type</b>	<b>no.</b>	<b>385</b>	<b>334</b>	<b>401</b>
<i>of which work-related</i>	<i>no.</i>	<i>203</i>	<i>240</i>	<i>312</i>
<i>of which traffic-related</i>	<i>no.</i>	<i>38</i>	<i>31</i>	<i>33</i>
<i>of which random</i>	<i>no.</i>	<i>144</i>	<i>63</i>	<i>56</i>
<b>Frequency index</b>				
(no. total number of accidents/hours worked x 1,000,000)	-	26.30	24.93	30.53
(no. total number of accidents/hours worked x 200,000)	-	5.26	4.99	6.11
<b>Frequency index for accidents with serious consequences – non-fatal</b>				
(no. of accidents with serious non-fatal consequences/hours worked x 1,000,000)	-	0.21	-	-
<b>Frequency index for accidents with serious consequences – fatal</b>				
(no. of accidents with serious fatal consequences/hours worked x 1,000,000)	-	-	0.15	-
<b>Days of absence due to accident</b>	<b>days</b>	<b>12,836</b>	<b>11,033</b>	<b>12,851</b>
<b>Severity index</b>				
(days of absence due to accidents/hours worked x 1,000)	-	0.88	0.82	0.98
<b>Incidence index<sup>3</sup></b>				
(no. total accidents/no. total employees x 1,000)		43.53	40.41	50.19
<b>Average duration of absence for accidents</b>				
(days of absence due to accidents/no. total accidents)	days	33.34	33.03	32.05
<b>Treatments</b>	<b>no.</b>	<b>18</b>	<b>24</b>	<b>N/A</b>
<b>Accidents during travel</b>	<b>no.</b>	<b>47</b>	<b>38</b>	<b>60</b>
<i>of which non-fatal</i>	<i>no.</i>	<i>47</i>	<i>38</i>	<i>59</i>
<i>of which fatal</i>	<i>no.</i>	<i>0</i>	<i>0</i>	<i>1</i>

<sup>1</sup> Accidents during travel and those not recognised by INAIL are excluded from the accident indexes calculation.

<sup>2</sup> Injuries lasting longer than 6 months.

<sup>3</sup> The incidence index is calculated considering the average number of employees.

Accidents by gender (no.)	2021	2020	2019
Men	297	255	308
Women	88	79	93
<b>Total</b>	<b>385</b>	<b>334</b>	<b>401</b>







# Our suppliers

[GRI 102-9, 102-10, 204-1, 308-1, 308-2, 403-1, 403-2, 403-3, 403-5, 403-8, 403-9, 407-1, 408-1, 409-1, 412-3, 414-1, 414-2, 419-1, G4-EU17, EU18]

The supply chain is considered as an integral part of the sustainability process since the products and services purchased impact the quality of services offered and Iren Group's reputation.

The policies adopted by the Group in managing the Covid-19 emergency had also repercussions on the management of relations with suppliers and led to the definition of a policy to support contractors in order, in particular, to recognise their direct and indirect safety costs. For contracts subject to measures for the protection of health and safety of workers in temporary or mobile construction sites (Title IV of the Italian Legislative Decree 81/2008) specific Covid-19 containment devices were identified, and their prices were defined and included in the contracts signed.

In addition, other interventions have been implemented in support of contractors, such as the granting of extensions of the contractual deadline, the non-attributability of delays in the execution of contracts and, consequently, the non-application of penalties, the recognition of price increases of materials and the payment of what was carried out before the suspension of activities (Italian Prime Ministerial Decree 22/03/2020).

Iren Group, which has always been attentive to its impact on the environment and on the communities, is also committed to monitoring and reducing its indirect environmental and social impacts, through the adoption of policies for the selection and control of the supply chain: environmental, social and safety criteria and standards are integrated into the supplier evaluation and selection system.

With the aim of pursuing a growth strategy based on the values of its Code of Ethics and committed to achieving the Sustainable Development Goals of the UN 2030 Agenda, the Group adopts a structured procurement process that is consistent with the principles of free competition, equal treatment, non-discrimination, transparency, proportionality and publicity, in the cases provided for by law, as well as inspired by compliance with regulations on human and

workers' rights, health and safety, and environmental protection, to which the utmost importance is given. The process is also based on the traceability of information, by means of suitably profiled IT systems, on the rotation of suppliers, in order to guarantee the best competitive dynamics aimed at effectiveness and efficiency, and on the segregation of duties.

The Group's online Procurement Portal, through which public procedures and invitation to tender procedures are managed, and the Supplier Register, divided into product categories which are functional to business needs, allow for better monitoring of the supply chain, which is a strategic aspect in the management of Group's business activities.



**The Group has adopted various tools to broaden supplier involvement in the sustainable development approach**

The Procurement Portal constitutes an important opportunity for economic operators interested in becoming suppliers of the Group, by increasing opportunities for involvement. To guarantee absolute transparency and disclosure concerning engagement rules, the rules for admission to the Supplier Register, the participation rules for managed negotiation events and the general conditions of use for the platform are published on the Portal. A technical assistance service for the use of the portal is also provided for economic operators who request it.

All parties involved in any capacity in the procurement process are required, each within the scope of their jurisdiction, to scrupulously comply with the provisions of the law, the Group's Code of Ethics, Model 231 and Company procedures, particularly concerning the transparency and traceability of transactions and the confidentiality of any information they become aware.

## Qualification, selection and monitoring of suppliers

The supplier qualification system of the Group aims to guarantee that products, services and works are able to ensure quality and reliability. The supplier selection and management process is based on the principles of transparency, clarity, integrity and non-discrimination. The qualification process considers qualitative aspects and those related to sustainability, with particular emphasis on social and environmental issues and compliance with the principles and values contained in the Code of Ethics, which must be accepted by all bidders, without the possibility of making exceptions or changes.

Within the scope of contracts subject to the Public Contracts Code, art. 30 "Principles for the award and execution of contracts and concessions" requires economic operators to comply, when executing them, with environmental, social and labour obligations established by European and national legislation, collective agreements or international provisions listed in Annex X, including: ILO Conventions 87 (freedom of association and protection of the right to organise), ILO 98 (right to organise and collective bargaining), ILO 100 (equal pay), ILO 111 (discrimination in the field of labour and employment) ILO 29 (forced labour), ILO 105 (abolition of forced labour), ILO 138 (minimum age) and ILO 182 (worst forms of child labour), the Vienna Convention (protection of the ozone layer) and the Montreal Protocol (ozone-depleting substances). Explicit declaration of compliance may be requested in tender documents.

All Group contracts require that suppliers certify that they meet the general requirements and that, consequently, they have not been convicted of, among other things, offences involving the exploitation of child labour and other forms of human trafficking as defined in the Italian Legislative Decree 24/2014. In the case of public tenders, any finding of non-compliance is grounds for contract termination and reporting to ANAC (National Anti-Corruption Authority).

In case of public contracts pertaining economic values of common interest, as defined by Italian legislation, supplier selection is carried out, for each tender, by indicating the requirements of economic-financial

and technical capacity in the calls, which are directly linked to the activity to which the tender refers. These requirements must be proportional and such as to ensure competitiveness, according to the regulations in force. Furthermore, it is also possible to establish qualification systems for the tender notice by publishing a community notice. After the selection has been made using the qualification systems, negotiated procedures can be carried out, in accordance with the protocol defined by the founding regulations of the system.

In the context of public procurement procedures, the lack of criminal convictions is also verified (by indirectly consulting the Criminal Record and Record of offence related administrative sanctions) which, by nature and severity, entail the exclusion from contracts and sub-contracts (including offences related to safety, exploitation of child labour, etc.).

Together with the Prefectures of Reggio Emilia, Parma, Piacenza, Genoa and Turin, Iren Group has also executed "Legality Protocols" that aim to expand monitoring of enterprises in terms of the anti-Mafia laws, even beyond the cases envisaged by law. Based on these Protocols, contractors and subcontractors are monitored and, if they do not comply with the prefectural notices, they are excluded from contracts.



**For more extensive monitoring of supplier companies, the Group has signed Legality Protocols with the Prefectures**

With reference to contracts not regulated by the Public Contracts Code (so-called "under-threshold"), Iren Group uses supplier qualification procedures that consist of a specific questionnaire divided into sections concerning information on the company profile (attesting to information on turnover, certificates, etc.), on economic-financial capacity (balance sheet indices) and on organisational-operational data. The

questionnaire also covers environmental, health and safety and corporate social responsibility issues. More specifically, for this last section, the supplier is required to declare:

- if, in line with UNI ISO 26000 guidelines on corporate responsibility, initiatives have been identified to develop a socially responsible approach to business planning and management and, if so, to describe the initiatives adopted;
- if the supplier publishes a Sustainability Report and, if so, to indicate where it can be found, or to attach a copy or excerpt of the significant sections;
- if the supplier is willing to undergo a CSR Audit, in the instance it were to sign one or more contracts with the Group, and if it is willing to take part in Iren's annual CSR survey (see page 264).

Also required is a declaration regarding the absence of serious violations, definitively ascertained, with respect to obligations relating to the payment of taxes, or social security contributions, according to Italian law or that of the State of establishment and serious violations, duly established, to the rules on health and safety at work.



### Supplier social and environmental responsibility profiles are evaluated through the certification process

The process of qualification in the Supplier Register also includes the verification of possession of valid certifications, issued by independent bodies (i.e.: ISO certifications, SOA certifications, etc.), and of the economic eligibility requirements of the tender. Furthermore, certain economic indicators are acquired via companies specialising in commercial information (both for corporations and partnerships), which also contribute to determining the supplier's score for qualification purposes. For under-threshold contracts, current provisions require the invitation of at least 5 suppliers among those included in the Supplier Register in order to guarantee competitiveness.

From the point of view of environmental protection, during qualification all potential suppliers of the Group are required to provide evidence of:

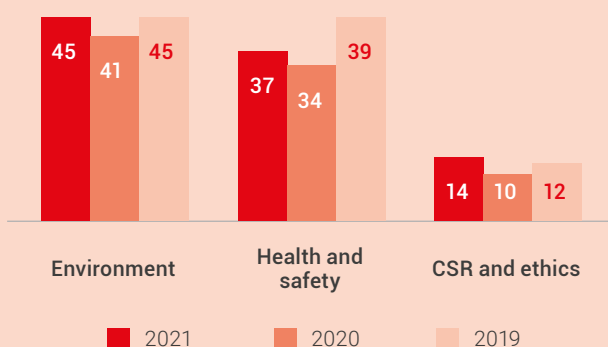
- possession of ISO 14001 certification (issued by a recognised accreditation body);
- possession of EMAS Certification;
- possession of an Environmental Product Declaration – EPD;
- possession of energy management systems in compliance with the ISO 50001 Standard;
- possession of one or more environmental labels (EU Ecolabel, FSC, PEFC, Plastica Seconda Vita (Plastic Second Life), ANAB– ICEA, Natureplus® Certification, CIC Compostability);
- the use of products from one or more of the labels mentioned above in the production process or service rendered, or of another label that highlights a focus on lowering environmental impacts;
- the use of suppliers with ISO 14001 and/or EMAS Certification;
- the use of work instructions that govern the management of waste, including hazardous waste, packaging and packaging waste, from their temporary storage to their disposal within the contract;
- the use, with reference to the categories of products supplied, of recycled or recyclable material, with low emissions and low energy consumption;
- the adoption, with reference to the categories of products supplied, of specific procedures for the storage and collection of recyclable materials in order to guarantee recycling;
- the availability, with reference to the categories of products supplied, to recover or retain packaging after delivery to be reused and to decommission products to be replaced with proof of their disposal through the recovery of the material.
- evidence of enrolment in the National Register of Environmental Managers.

From the 1,090 qualified suppliers in 2021, 757 reported having at least one of the above environmental profiles. Furthermore, more in-depth environmental profile assessments were conducted on 55 suppliers through category-specific questionnaires that require the compliance of the product/service with minimal environmental and rewarding criteria defined by the Ministry of the Environment.

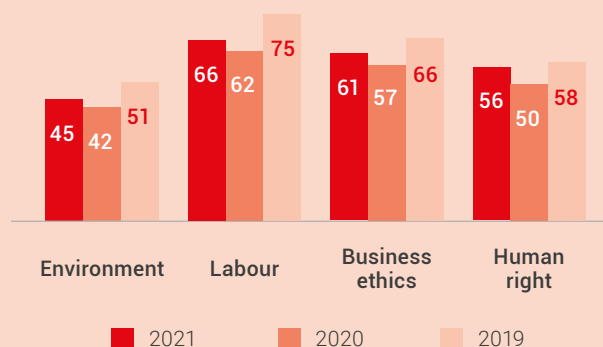
### CSR supplier survey (2021 edition)

Iren Group directly involves its suppliers in sustainability management processes to achieve mutual growth, intending to improve performance. In 2021, the Group carried out its fifth corporate social responsibility survey of 5,145 suppliers, using a questionnaire that explores how environmental, labour, business ethics and human rights policies are managed. A total of 1,332 suppliers responded to the questionnaire (26% of the total). The survey has seen a greater involvement of the suppliers belonging to the category of micro enterprises with less than 15 employees (47%) and a turnover within 1 million Euro (34%). The different composition of the base of companies that participated in the survey is also reflected in the results, summarised in the following graphs.

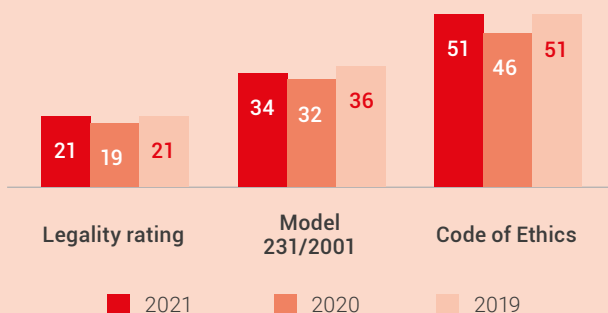
Possession of certifications (% of total)



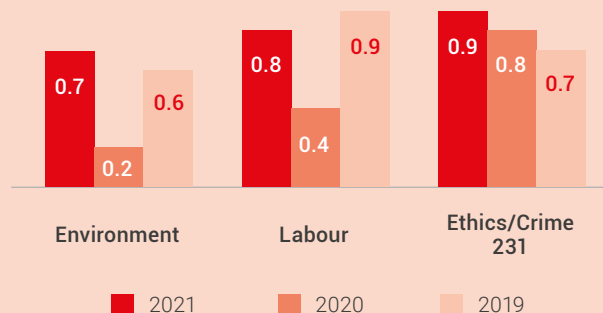
Adoption formalised policies (% of total)



Instruments used (% of total)



Regulatory violations (% of total)



47% of suppliers have a policy that engages their suppliers on sustainability issues. Furthermore, the companies that took part in the survey in 2021 hired 2,096 employees (63% of whom were permanent, 37% under 30 years of age and 32% women) and employed 1,304 workers in the activities carried out for Iren Group. 56% of suppliers adopt human rights policies (equality of opportunity and treatment, prevention of discrimination, etc.), and 20% state that they have a person within their workforce who is officially responsible for human rights issues.

On aspects regarding human rights see page 92



The most important activities carried out in 2021 to improve supply chain management include:

- the implementation of automated systems to acquire, when filling in the qualification questionnaire, the general and fiscal data, the chamber of commerce visas, the turnover and the number of employees of potential suppliers;
- the implementation of sections within the Supplier Register dedicated to Professional Services and Architecture and Engineering Services with dedicated qualification questionnaires;
- extension of the groups of suppliers subject to reputational and reliability monitoring.

Being a member of the Iren Group Supplier Register means beginning a partnership that could, over time, provide for the identification of mandatory qualification profiles, with a view to improving the supply chain that Iren Group intends to use. It also means sharing the reputational and sustainability values that make up the fundamental elements of Group policy, also by being willing to report on CSR profiles, with rewards consequent to the participation shown.



### Being part of the Supplier Register means starting a path of partnership

Many contracts envisage the allocation of technical scores awarded on the basis of the environmental impacts when carrying out the job, such as rewarding the adoption of impact mitigation measures at construction sites (dust, noise, traffic) or during the provision of the service (using low-emissions vehicles).

Compliance with the provisions related to the environment from contractors and subcontractors is required in the specifications. Furthermore, with regard to products, the Group promotes the selection of recyclable, renewable materials that minimise waste production and favour production systems with a low environmental impact. Some technical specifications also provide for the purchase of fair-trade products. Goods are tracked when the specifications require that they are sourced from a specific location.

If, in carrying out the activities that are the object of the contract, the contractor should generate situations of pollution, Iren Group will ask to implement all the necessary interventions for the safety, reclamation and environmental restoration of the area. In case of non-compliance with the environmental obligations, Iren can order the immediate suspension of the activities until the safeguard measures have been adjusted, without this resulting in requests for compensation for the interruption of the services, for the working site suspension, for the lack of profit and for any other charge connected directly or indirectly, nor constituting grounds for any extension of the contractual terms. This is without prejudice to Iren's right to terminate the contract, without prejudice to its right to bring the consequent actions for compensation and damages.

The contractual documentation expressly prescribes that the supplies and services subject to the contract are carried out in compliance with the **minimum social standards in terms of human rights** and working conditions along the supply chain as defined by the fundamental Conventions of the International Labour Organisation and the United Nations General Assembly – on health and safety in the workplace, definition of minimum wage, working hours, social security, human rights, child labour, forced labour, discrimination, trade union freedom and the right to collective bargaining – and by the national legislation in force in the countries where the stages of the supply chain are carried out. The above contractual commitment, already declared during the tender through the signing of a special declaration, involves, in case of violations, the application of a penalty, without prejudice to the right to terminate the contract.

The monitoring and verification of compliance with the provisions of the contracts, in terms of both environmental and social and safety aspects, during the execution of the works, are under the control of the Group's Works Supervision. Control occurs on two levels:

- the first is documentary and involves checking the consistency and existence of all the documents declared in the contract;
- the second is, on the other hand, the monitoring directly on the site of execution of the work, by the Works Supervisors of the Business Units and by the site assistants, of the compliance with the rules and laws in force by the contract workers operating within the site.

Qualified suppliers that have been awarded a tender are assessed by the internal departments that manage contracts and directly monitor the conduct of the supplier when carrying out the contracted works. This assessment generates a score, which is added to the qualification score. Any continuous negative outcome or serious failure in the execution of the work, of which the Procurement, Logistics and Services Department is notified, will lead to the suspension and subsequent exclusion from the Supplier Register for a set period.

In 2021, 1,323 suppliers were audited in total, 1,090 of which qualified.

## Employment in supplier companies

Iren Group is aware of the important role employment plays in ensuring the social development of the context in which it operates. It contributes to maintaining employment levels not only towards its own employees but also by promoting the development of the companies to which it commissions services and work, by requesting guarantees from them in terms of both personnel and safety policies through the application of some of its own standards; moreover, the Group often offers employees of supplier companies the possibility to use some of the Company services and attend to information/training courses organised by the Group.

Particular attention is paid during the assessment stage to compliance with the regulations relevant to the correct application of the employment contracts and the payment of the relevant mandatory insurance and social security contributions; the specifications provide for the obligation of the supplier to comply with the laws concerning the protection of the workers and the National Collective Labour Agreements in force and applicable to the sector of reference. These obligations are controlled through the regular acquisition of DURC (statement of correct fulfilment of welfare contribution obligations) and the documents provided by occupational safety legislation (OSP – Operational Safety Plan, and DUVRI – Interference Risk Assessment Document). In the case of non-compliance with remuneration and social security contributions, specific laws are applied which require that employees and social security funds are paid directly and these amounts are deducted from the amount paid to the contractors. Subcontracts are also authorised and monitored in compliance with the law. As well as fully implementing the regulations for employee health and safety, in many contracts the score attributed by the Group focuses on the commitment of the incoming contractor to ensure, in line with the provisions established by the collective labour agreement (social clause) and with the organisation it intends to implement, occupational safety through the hiring of the personnel of the outgoing contractor (the latter may be scored for the maintenance of the resources used). Furthermore, regarding Contact Centre services, the awarding tenders state that the personnel costs cannot be lowered.

In order to participate in the public tenders of Iren Group, companies must comply with the obligations provided by Law 68/1999 on the recruitment of disabled workers. All the Group's specifications include clauses designed to control the problem of undeclared employment, with regard to contracts, subcontracts and sub-supplies.

During qualification procedures for the Register, and concerning information on operational and organisational capacity, companies are requested to indicate the number of employees on permanent and fixed-term contracts and to specify the ratio of permanent employees to the total number of employees, a ratio that increases the score in a directly proportional manner.

For tenders, Group contracts state that the contractor is responsible for complying with current sector legislation and responsible to achieve the results requested; therefore the contractor is entrusted to organise the means and workforce needed to obtain said result. In the context of public tenders, the bidder is required to specify the applicable National Collective Labour Agreement and the number of hours estimated for the performance of the contract. If an offer is suspected of being anomalous, when verifying its sustainability, the cost of the workforce employed to carry out the tender would also be investigated.

## Supplier health and safety

Health and safety are fundamental to the policies of Iren Group, which, in the management of the Covid-19 emergency, has also implemented a series of anti-infection measures concerning supplier companies, publishing information and communications on its Procurement Portal addressed to suppliers, aimed at defining in detail the rules for access to the Group's sites and the behaviour to adopt. In addition, the Safety and Coordination Plans and costs therein have been adjusted for contracts in progress.

During qualification in the Supplier Register, the following aspects are investigated through the evaluation questionnaire:

- the existence of a Prevention and Protection Service, either within or outside of the company;
- the appointment of a Safety Contact that deals with individual contracts/orders;
- monitoring of data relating to the number of injuries that the company has recorded in the last three years and any criminal proceedings for breach of health and safety regulations;
- benefit, at least once in the last 3 years, of the INAIL rate reduction (ref. OT24 FORM);
- availability of an Occupational Health and Safety Management System certified pursuant to Article 30 of the Italian Legislative Decree 81/08 (in 2021, 191 out of the 1,090 suppliers qualified during the year declared that they had a management system, for a total of 1,905 out of 7,280 qualified);
- existence of a training programme on the subject and systematic verification of the degree of learning achieved by each worker after each training event;
- the integration of Italian language courses within foreign workers' training.

In day-to-day management, specific measures for the protection of health, safety and hygiene at work are required in contracts. In fact, tender and contractual documentation must include the Safety and Coordination Plan (SCP) and the Interference Risk Assessment Document (DUVRI). Further obligations regarding occupational health and safety to be implemented in the operational management phase of the contracts are defined by specific procedures.

In contract/subcontract situations or, more generally, in situations where third parties operate at Group sites, relevant documentation required to identify and communicate information on workplace risks and prevention measures, as well as any interference risks relating to the performance of activities by third parties in those sites, is prepared. This documentation is prepared according to procedures specific to each Business Unit, in order to make the process as tailored as possible to the characteristics of the individual contracted or subcontracted activities.

The ISO 45001 certified systems adopted by the Group Companies are defined, documented and implemented in order to guarantee systematic control of aspects relating to the health and safety of both employees and workers of third-party companies operating on behalf of the Group, also thanks to procedures for controlling the operating methods adopted by contract workers in relation to compliance with safety requirements.

Furthermore, the Group carries out monitoring and control inspections on the activity carried out by the personnel of third-party companies working on construction sites and in plants, related to aspects of safety and hygiene at work. The monitoring of activities is guaranteed by internal supervisory inspections by the Works Supervision (pursuant to Article 26 of the Italian Legislative Decree 81/2008) or by the Coordinator during the execution phase (on temporary and mobile construction sites pursuant to Title IV of the Italian Legislative Decree 81/2008).

The Group procedure for the management of injuries provides for a specific injury report form with reference to the personnel of third-party companies, through which third parties are required to inform the Group of the occurrence of any injuries in the context of the activities carried out on behalf of the Group and/or at sites where the Group has legal responsibility. The compilation of the form requires the involvement of the supplier and the Works Supervision; information regarding the context which led to the injury is collected in a database and analysed in depth by the Prevention and Protection Service, also in collaboration with the Works Supervision. In 2021, there were 47 third-party company injuries.

Third-party accidents <sup>1</sup>	u.m.	2021	2020	2019
<b>Total number of accidents</b>	<b>no.</b>	<b>47</b>	<b>33</b>	<b>12</b>
<i>of which with serious consequences – non-fatal<sup>2</sup></i>	<i>no.</i>	<i>0</i>	<i>0</i>	<i>N/A</i>
<i>of which with serious consequences – fatal</i>	<i>no.</i>	<i>0</i>	<i>1</i>	<i>1</i>

<sup>1</sup> Accidents during travel and those not recognised by INAIL are excluded.

<sup>2</sup> Injuries lasting longer than 6 months.

### Training and information activities

In 2021, the Group provided over 204 hours of training to third-party companies, 29.5% related to health and safety at work, involving 34 employees of the companies. In addition to specialist training and operational training on procedures relating to the introduction of new IT systems for the management of activities, extensive information was provided on work equipment, on sites and the specific characteristics of workplaces, in terms of health and safety and the prevention and emergency measures adopted.

## Supplier portfolio and purchase volumes

In 2021, purchase orders were issued to 4,492 suppliers for over 1,580 million Euro.

### Impacts on the local areas

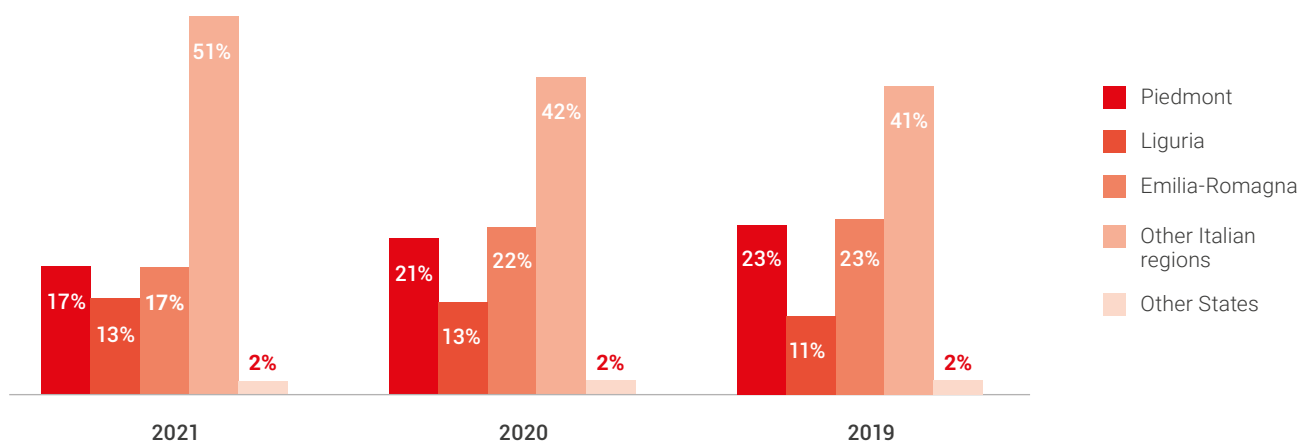
Suppliers are deeply rooted in the local areas of reference, both in terms of the number of active suppliers (48%), as well as the economic value of the orders (59%). This highlights the importance of the effects of Iren Group on the territorial areas of reference.

Within the context of public tender procedures, in compliance with current legislation and community principles which require that all companies can compete, no matter their location, the Group does not select suppliers by geographical origin, but on quality and economic criteria, favouring the best quality/price ratio as the determining factor. In order to guarantee an adequate level of competition, where feasible, it arranges the tender into functional lots, so as to allow separate awards and greater participation by economic operators, including those that are small and medium enterprises. Nonetheless, with reference to the instrumental tenders, which are carried out via invitation because excluded from the Public Contracts Code, Iren Group reserves a 50% share for local economic operators with suitable qualifications that are present in the Register when identifying the panel of qualified suppliers to invite to the tender. This measure aims to favour local development and, consequently, social cohesion.

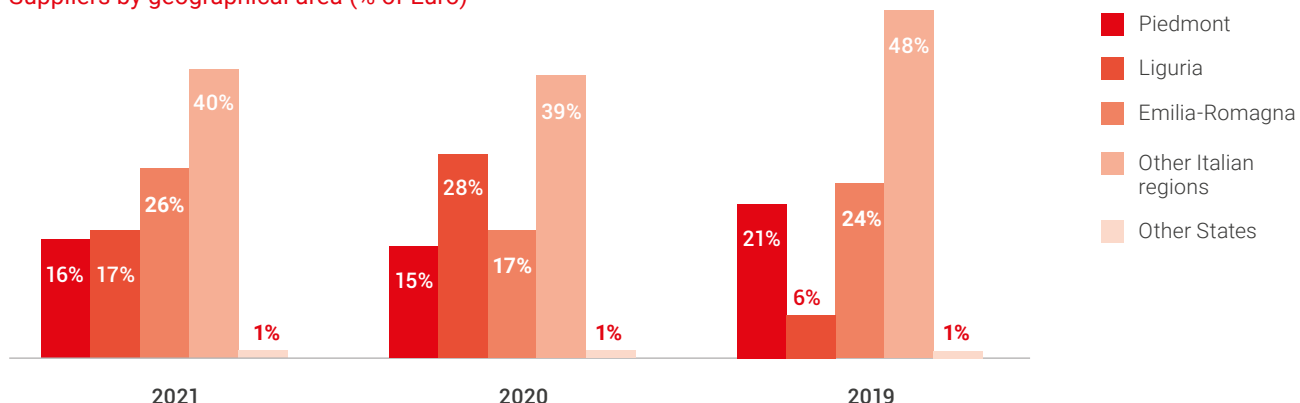
The economic impacts on local business generally occur due to subcontracting to local companies – within the limits allowed by law – that are able to work on segments of the activities and apply more competitive prices given that they are already present locally and guarantee efficient services due to their local knowledge. The large number of suppliers by geographical area and the relevant volumes ordered are shown below and refer to all purchases with exclusion of contracts for the supply of raw materials.



### Suppliers by geographical area (% of number)



### Suppliers by geographical area (% of Euro)



### Social cooperatives

The Group supports social cooperatives whose main aim is to ensure the incorporation of disadvantaged people within the labour market. Social cooperatives are particularly active in waste collection and environmental hygiene services. Within the general qualification questionnaire, suppliers are asked if the company's main purpose is the social and professional integration of disadvantaged people or those with disabilities (pursuant to Article 4, subsection 1, Law 381/1999 "Social Cooperatives Regulation").

In 2021, 4 new social cooperatives were acquired, making a total of 60 cooperatives present in the Procurement Portal. Of these, 35 have worked with Group Companies in the year. The overall order amount to social cooperatives was over 20 million Euro, representing 1.3% of the total value of Group orders. The order trends can vary significantly from one year to the next in relation to the signing of multi-year contracts, including ones for significant sums.

Coop. Social	2021	2020	2019
Suppliers (no.)	35	24	38
Orders (Euro)	20,944,620	22,209,800	95,414,752

### Disputes

In 2021, the Group lost, definitively, 28 lawsuits brought by employees of former suppliers/contractors of the Group against their employer for non-payment of wages, and in which Iren Group was held liable according to and for the effects of joint and several liabilities. In these cases, since the plaintiffs' employer failed to execute the judgement, the Group was forced to pay the amounts owed to the employees directly and subsequently implemented all suitable measures for the recovery of the amounts paid.

The Group also incurred an outlay of approximately 1,000 Euro as part of a dispute regarding compensation paid to a supplier for promotional activities carried out by the latter.

# Innovation and digitalisation

[GRI 102-12]

Innovation in Iren Group is central to the strategic choices and the definition of the products and services offered. The Business Plan to 2030 provides for over 2 billion Euro of investments in new technologies and digitalisation which will be carried out, over the course of the plan, in the development of all sectors of operation, with the aim of making the Group an example of excellence in the multi-utility sector.

Considering the macro-trends on which the Business Plan is based – decarbonization, development of energy production from renewable sources, circular economy, energy efficiency and safeguarding of natural resources – the main innovation activities are aimed at **researching and adopting technologies and processes to support the sustainable development** of the reference businesses. The main research, development and innovation areas in which Iren Group is investing include:

- energy efficiency, applied across multiple levels and assets;
- study of new solutions for the recovery of energy waste and the integration of renewable sources on different assets (e.g. district heating networks);
- solutions for the production of renewable hydrogen and fuel/chemical/synthetic materials combined with the capture of carbon dioxide;
- thermal, electric and hybrid storage systems (e.g. Power-to-X);
- study of business models and analysis of platforms for the implementation of energy communities;
- processes for maximising energy and material recovery from waste;
- systems for reducing quantity and the recovery of material and/or energy from wastewater sludge;
- automation and robotics in waste treatment plants;
- Internet of Things (IoT), home automation and data intelligence ICT tools;
- optimised management of the integrated water cycle (districtualisation, pre-localisation, identification and reduction of network leaks) and tools to support field sensors;

- detection and removal of pathogens present in water samples;
- innovative solutions related to electric mobility and related charging infrastructures;
- electric distribution cybersecurity systems that take into account the progressive digitalisation of assets;
- electric mobility and systems for smart charging and vehicle to grid (V2G);
- “industry 4.0” solutions supporting the personnel involved in plant operation and maintenance activities, for predictive maintenance and monitoring in the field.

Iren Group manages innovation processes through an **open innovation** model and, consistently, has launched profitable collaborations with Universities, Research Centres, Innovation Hubs and start-ups. Additionally, it takes an active part in working groups and associations on specific research and development and promotes events such as conferences, workshops and hackathons.



**The Business Plan to 2030 provides for more than 2 billion investments in innovative technologies and for digitalisation**

The year 2021 was also characterised by the continuation of technical activities related to the Group's various co-financed projects and by the development, in partnership with innovative companies and start-ups, of internal technological projects on the basis of planning which, starting from an analysis of the long-term scenario, is aimed at giving the Group the tools needed to seize the opportunities and mitigate the risks deriving from the evolution of the markets in which it operates.

The activities of **Iren Up**, the **Corporate Venture Capital programme** launched in 2018, also continued, with the aim of supporting high-potential Italian start-ups in the cleantech sector, from green technologies to the circular economy, through the provision of a unique service package that includes trials, technical support, legal consultancy, market tests, commercial and/or business agreements. The programme envisages investments with tickets ranging from 100,000 Euro to 2 million Euro, depending on the start-up's development phase and requirements.

As in 2020, due to the continuation of the Covid-19 emergency, the usual Iren **Startup Award** event dedicated to the search for start-ups did not take place, but the scouting activity continued through collaboration with local and international accelerators.

The management of equity investments in start-ups in which the Group has invested saw the conclusion of several supplementary agreements and the disbursement of tranches upon achieving the milestones conceived in these agreements. Among these, an important investment in **Enerbrain**, a start-up active in the field of energy efficiency: the operation, which involved national and international financial and industrial operators, will allow the start-up to expand its business abroad, consolidating its growth. In addition to this, an initial investment was made in polyurethane recycling start-up **Remat**.

Among the initiatives in which Iren has participated, bringing its own contribution in terms of process innovation and applied research, there is, in continuity with previous years, the participation to the Competence Centres (promoted by the Ministries of Economic Development and Economy) established in Turin (Competence Industry Manufacturing 4.0 s.c.a.r.l.) and Genoa ("Competence Centre for the Security and Optimisation of Critical Infrastructures" Association – START 4.0).

In light of the results achieved and the significant projects managed, in 2021, Iren received the **Smau 2021 Innovation Award** as a recognition of Italian excellence for the model of innovation between companies and public bodies.

## Research and innovation projects

In 2021, Iren actively took part in **20 research and innovation projects** for a total multi-year commitment of around 8.6 million Euro, half of which was financed by research and innovation tenders managed by institutions such as the European Union, the Italian State, State bodies and Regions (for example, Horizon 2020, MIUR, MATTM, POR FESR, etc.). Over the year, these projects consisted in a commitment of around 2,165,000 Euro, of which approximately 1,280,000 Euro was funded through tenders. These projects actively involve around 137 Group employees from different business areas, and guarantee collaborations with numerous businesses and academic institutions located in over 100 European cities.

Project	Description
<b>Pump-Heat</b> (European Horizon 2020 programme)	Concluded at the end of 2021, it is an example of international collaboration with 14 partners from 8 different European countries that aimed to introduce innovative solutions to increase the flexibility of major power generation plants in favour of renewable sources. At the Moncalieri (TO) power plant, a pilot project was carried out in which the technologies studied and developed during the project (high temperature heat pump and phase change storage system) were tested.
<b>Planet</b> (European Horizon 2020 programme)	Concluded in January 2021, it studied technologies and analyses of regulatory constraints for the synergistic exploitation of distribution networks (electricity, gas and thermal). Iren Group has been involved in the development of a physical pilot project in which a heat pump connected to a thermal storage for heating has been tested, capable of modulating the load, putting into system the needs of the building with those of the electrical network.
<b>eVolution2G</b> (EMEurope Call 2016)	The project ended in January 2021 and saw Iren Group involved in the study and field testing of enabling technologies for vehicle to grid (V2G), i.e. a system in which electric vehicles play a balancing role on the electricity grids. For this purpose, two direct current recharging columns have been installed and tested with the possibility of bidirectional energy exchange.

Project	Description
<b>Recovery of material from WEEE</b> (Ministry of the Environment Call for Tenders)	Concluded in August 2021, the project aimed to develop highly replicable and transferable technologies to the industrial world, aimed at optimising the management of waste from electrical and electronic equipment (WEEE) and in particular the recovery of polyurethane from refrigerators as a secondary raw material and the optimisation of the separation of cement from the carcasses of washing machines.
<b>Prelude</b> (European Horizon 2020 programme)	Testing of innovative solutions in building and plant management, maximising the interaction with users to optimise consumption. Iren Group is in charge of the development of the Italian pilot, which will focus on a residential building in the municipality of Turin and in particular on the tenants of 8 apartments within it.
<b>Chester</b> (European Horizon 2020 programme)	Development and integration of an innovative Power-to-Heat-to-Power solution to maximise the exploitation of non-programmable electricity Renewable Energy Sources (RES) and thermal RES already combined with district heating systems.
<b>RES-DHC</b> (European Horizon 2020 programme)	The project will develop programmatic and technical-economic assessment tools, actions to improve policies and regulatory frameworks, as well as innovative dissemination and communication means in 6 European pilot projects to validate their benefits and in favouring the increase of renewable sources in district heating and cooling systems.
<b>Marilia</b> (European Horizon 2020 programme)	The project develops a new low-cost, high-sensitivity, expeditious test for detecting pathogens in water samples, potentially applicable in other sectors such as food, healthcare, and agriculture. The goal is to validate the test – developed to identify a set of bacteria laying the foundations for a subsequent deployment in the field – in the laboratory, with a significant efficiency in speed and cost compared to current analytical practices.
<b>WaterTech</b> (MIUR tender)	Optimised, synergistic and innovative management of Group's assets with testing of ICT architectures enabling a multi-service smart metering system, at both end users and asset level, for the optimised management of the integrated water cycle and the study of innovative technologies for wastewater treatment and the management of water leaks.
<b>Everywh2ere</b> (European Horizon 2020 programme)	Iren, as a third party, will test a hydrogen-powered generator based on fuel cell technology for the sustainable production of electricity during events/fairs (uninterruptible power supply/mobile generator mode).
<b>INCIT-EV</b> (European Horizon 2020 programme)	Development and on-site testing of a set of electric vehicle charging infrastructure, hardware and software technologies and business models to promote large-scale adoption of electric mobility. Iren Group is developing the Italian pilot, which will be built in Turin, with the installation of 10 slow and 1 ultra-fast columns for the recharge of electric cars through the tram network.
<b>Saturno</b> (Bioeconomy Technological Platform – Piedmont Region Call for Tender)	Validation, on an industrial platform, of the conversion of the organic waste and CO <sub>2</sub> emissions from cars and industrial processes into biofuel and biochemicals. The project conceives the enhancement of the organic fraction of municipal waste by extracting high added value substances such as hydrogen, carboxylic acids, biofertilizers and biostimulants.
<b>OnlyPlastic</b> (RFCS – 2019)	Substitution of fossil carbon sources (coal, coke, petroleum coke) in the electric arc furnaces of a steel plant in northern Italy with densified polymers derived from residues from the treatment of plastic waste.
<b>PolynSPIRE</b> (European Horizon 2020 programme)	Demonstration of a range of sustainable, innovative and cost-effective solutions for the energy and material recovery of post-consumer plastics and industrial waste.
<b>5G-Solutions</b> (European Horizon 2020 programme)	Experimentation – in different on-site, functionalities, potentialities and limits tests – of the 5G network, actively participating to the activities of the “Energy” vertical in the evaluation of the benefits related to the integration and use of the 5G network for the Demand Side Management at the level of regulation of thermal loads and the recharge of electrical vehicles. Iren Group is in charge of the Italian pilots concerning the management of a heat pump central heating system and the charging of electric vehicles.



Project	Description
<b>Energy shield</b> (European Horizon 2020 programme)	Development of an integrated cyber security platform that can be used by all actors of the energy chain (network operators, distributors, aggregators, producers). Iren Group is taking part as a distributor (through Ireti), supporting the other partners in the definition of cyber security tools, carrying out feasibility tests and, where necessary, conducting "offline" field tests on one or more network subsystems (remote control, SCADA, smart meters, etc.).
<b>BestSafe4Iren</b> (Call for Tenders PRIA4.0 – Competence centre CIM4.0)	Increased levels of redundancy, security and interoperability of workers' safety equipment by integrating it with a LoRa (Long Range) wireless infrastructure and a next-generation DLT (Distributed Ledger Technology) patent capable of certifying data from field sensors in a standardised and anonymised manner on blockchain networks to ensure the appropriate level of neutrality needed for operational, regulatory, insurance and legal use. The project developed a solution that was tested with positive result, on a portion of TRM's plant and will be tested on a portion of the city of Turin's hillside where Iren operators deal with waste collection.
<b>ENERGYNIUS</b> (POR-FESR 2014-2020 Emilia-Romagna)	Definition of development models that enable communities and energy districts to carry out bidirectional exchanges with energy networks, offering energy and services to the regional/national system. Iren participates as an external partner, providing its point of view on developing the tools and possibly with pilots in the field.
<b>MULTIPLIERS</b> (European Horizon 2020 programme)	The project aims at facilitating the introduction of new ideas, practices and scientific approaches in schools, which can offer to the communities, of which teachers and pupils are part, a space for open innovation, on scientific issues that have an impact on citizens' lives.
<b>RUN</b> (Liguria Region)	The project involves the development and demonstration of a now-casting service of the flood risk in urban areas in the presence of heavy rainfall, using IoT technologies and big data analysis tools, designed for smart cities and urban drainage network managers, allowing faster actions to protect people, properties and those in charge of the maintenance of the drains, who will be able to plan interventions for optimal operation of the system.

## AMGA Foundation

The AMGA Foundation was established in 2003 with the aim of promoting and organising scientific, educational and cultural initiatives for protecting the environment and water resources and the optimal management of network services.

In particular, it looks to increase and disseminate knowledge and understanding about the water cycle and its interactions with the environment, within research and training projects orientated at allowing sustainable management of water resources and promoting economic growth and development of the local areas in which it operates. Furthermore, it is committed to research activities on organisational models of water services and, more generally, public services, in order to assess the possible management options within the various regional scenarios. The skills acquired are made available through training courses and seminars and the publication of technical and educational volumes. The Foundation's scientific results from projects and collaborations are a valid reference in the water resources, energy and environmental management sectors. In 2021, AMGA undertook such activities by coordinating research projects and promoting wide-ranging cultural and educational activities. The institutional activities carried out by the Foundation also include support for initiatives launched by other organisations aimed at the management of network services and sustainability. Among other things, the Foundation is also responsible for the management of the Water Thematic Library and the Water and Gas Museum in Genoa.

A summary of the activities realised by the Foundation in 2021 is provided below.

## Research projects

- **Application of Water Safety Plan (WSP) to the water service, methodological and informative aspects:** implementing WSP in the integrated cycle by assessing and managing risk in the supply chain of water intended for human consumption. In this context, a new methodology has been applied in the definition of potential risks, identifying sample sites and involving stakeholders (water service companies) and institutional bodies (ARPA, ATO, ASL, etc.) in the definition of potential risks.
- **Reuse of purified wastewater. Hygiene and sanitation impact analysis:** monitoring of the hygienic and sanitary quality of the wastewater leaving different treatment plants. Plants with different disinfection treatments were studied to evaluate the possible reuse of the produced wastewater for agronomic/industrial purposes. An assessment of the impact of effluents on receiving water bodies was also carried out. The analysis was carried out using, in addition to the microbiological and ecotoxicological parameters required by law, other more specific parameters in the field of hygiene and health.
- **Methods for the optimal management of urban drainage systems based on innovative monitoring of rainfall:** study and trial of a new tool for more efficient management of the sewer networks during extreme weather events, through the development and testing of advanced methods for the elaboration of two-dimensional rainfall intensity maps updated in real-time. Precipitation fields were calculated from measurements acquired by the Smart Rainfall System (SRS) network consisting of IoT sensors compatible with LoRaWAN telecommunication technology. The results of the research will provide a system that can be repeated in different contexts and refined based on the design data of the monitored sewer networks.
- **Markets in search of regulation, tenders for gas distribution concessions:** theoretic analysis of multi-unit tenders and econometric analysis of economies of scale with regard to gas distribution, aimed at estimating a benchmark distribution cost and ranking the businesses participating in each tender according to said benchmark, in order to assess the total possible savings offered by the leading operators in individual tenders.
- **The economic, environmental, and organisational performance of the Italian water sector:** measuring water service operators' performance with analysis of information on physical leaks of drinking water in distribution networks. In order to provide useful indications for the strategic management and policy choices of regulators, the relationships between the economic-environmental performance of companies and their ownership structure, as well as the effect of other impacting variables, have been analysed. For the integrated economic and environmental performance measurement phase, correct for water leaks, a non-parametric efficiency method is used, which enables the operators with the most significant leaks to be penalised.
- **Indicators of resilience in water distribution systems concerning climate and socio-economic changes:** analysis of state of the art to define a methodology for quantifying water distribution systems' resilience and measuring its variation for climate and socio-economic change scenarios. The analysis is also extended to assess possible incremental impacts on distributed water quality.
- **Regulation of water and environmental services, analysis of the factors that determine operating and capital costs and possible reflections on the models of recognition of tariff costs:** investigation of possible regulatory synergies between the water and environmental sectors and the specificities of each. The research also aims to verify, with an econometric study, the applicability of alternative regulation models based on the recognition of standard/parametric costs, or if these parametric references can lend themselves to support the definition of price limits, regulatory menus and/or reward/sanction systems in an output-based logic. In this latter logic, the survey could be integrated with a study oriented towards appreciation of the perceived value of the qualitative attributes of services, evaluating the priorities for intervention also taking into account the point of view of citizens.
- **Applicability of landfill mining to old landfill sites:** landfill mining can help to offset the post-management costs of landfill sites, remove potential sources of groundwater contamination and recover material and/or energy from the treatment of mined waste, through an analysis of the situation and management in the long term. With this in mind, guidelines will be established with a proposed method for evaluating the feasibility of landfill mining.
- **Evaluation and reduction of residual risk in effluent and sewage sludge for the presence of emerging micropollutants:** assessment of the risk associated with possible micropollutants present in effluent and sludge discharge from wastewater treatment plants and identification of the most appropriate technologies to be used for removal. Utilities will be involved in collecting the data necessary to obtain a picture of critical cost-effectiveness issues in order to achieve the goals. Project results will be a tool to support regulatory compliance to ensure protection of the aquatic ecosystem and human health.

## Research projects

- **Evaluation of the presence of viral indicators in sludge by molecular biology methods:** identify, by molecular biology analysis, the viral component present in sludge samples from wastewater treatment and organic wastewater treatment. Development of a protocol to identify, by electron microscopy, some viruses particularly significant for their impact on human health or for their role as indicators of contamination by enteric pathogens.
- **Development of an innovative technology for the degradation of emerging pollutants:** technology for the treatment of water contaminated by emerging pollutants (in particular antibiotics and drugs), based on innovative photocatalysts, consisting of titanium dioxide nanoparticles, which will be tested in a pilot treatment plant, specifically built to evaluate an industrial scale up.
- **Multifunctional nanostructures as catalysts for clean energy production and water purification:** fabrication of innovative nanostructured electrocatalysts with high activity, stability and low cost, for the production of hydrogen from water and simultaneous purification of contaminated aqueous solutions. The activities will be focused on the design and engineering of catalysts controlling their composition, structure and morphology at the nanoscale, with the aim of identifying the most suitable combinations of materials in relation to their final use in watersplitting and reforming processes. The catalysts will also be able to be activated by sunlight, a clean and renewable energy source.
- **Wastewater treatment plants, possible hot-spots in the spread of antibiotic resistance?** Water is a prime route for the propagation of bacteria that play an important role in the spread of antibiotic resistance, and wastewater treatment plants can act as a reservoir and source of release of antibiotic-resistant bacteria into the environment. The project aims to assess the spread of antibiotic resistance throughout the wastewater treatment supply chain and investigate the steps that can lead to a reduction and/or selection of antibiotic-resistant bacteria.
- **Water quality and exposome:** innovative strategies for the identification of emerging micro-contaminants and their metabolites in wastewater. Passive samplers will be used to selectively accumulate substances in situ, allowing pre-concentration with screening methods and instrumental analytical methods. The pilot study is part of a broader multidisciplinary research known as “exposome”, a strategy that can be used in various types of aqueous matrices even when environmental concentrations are very low.
- **Stabilisation of PFAS in landfill leachate:** identification and development of a technology able to remove, through a combined chemical-physical and thermal action, the fraction of PFAS (Poly- and Per-Fluoro Alkyl Substances), emerging contaminants present in landfill leachate. PFASs are used in a wide range of industrial applications because of their waterproofing properties and ability to withstand extreme environmental conditions. Although PFASs have hydrophobic properties, their functional groups make them hydrophilic and, therefore, extremely soluble and persistent in water. The lack of effectiveness of traditional treatment methods requires the application of innovative removal technologies prior to their re-entry into the water cycle.
- **Analysis of retail prices on energy markets:** investigation of the dynamics of retail prices of energy services in the national territory, analysing the information present in the portal for comparison of offers of operators, published by ARERA (Regulatory Authority for Energy Networks and Environment). The identification and contact data of the seller, the descriptive parameters of the offers, the parameters and economic conditions of the offers, including protection services, will be analysed. The analysis will make it possible to identify the entry and exit dynamics of operators in the individual local markets and their positioning choices; moreover, it will be possible to study consumer response to the proposals of the various tariff menus.
- **Integrated asset management in a context of geo-hydrological risk and climate change:** propose solutions for an efficient and resilient management of multi-utility assets for the mitigation of geomorphological hazards in contexts where there are strategic infrastructures, contributing to greater safety of urban and peri-urban areas and citizens who live there. In particular, the most functional nature-based solutions to an area and its issues will be considered, drawing on specific case studies.
- **Tariff regulation to stimulate user engagement and awareness in sustainable waste management:** assessing the ways in which the various players in waste cycle management (municipalities, companies, users) interact, providing responses that encourage the achievement of desired environmental and economic results. Through the pay-as-you-throw tariff, and the relative arrangements that foresee incentives/premiums, it is possible to orientate the behaviour of the users towards a minimisation of the production of unsorted waste and an increase in the quality of the sorted collections. These tools are enabled by technologies for the recognition of users and to calibrate the tariffs on the basis of behaviour that can also allow to use the lever of flexibility (services on demand) as an incentive, in order to offer a service that is increasingly close to the needs of citizens.

## Cultural and educational projects

- **Eco-games:** online project realised in collaboration with Liguria Digitale. The application includes a virtual playground, with 36 quizzes and interactive games in two languages, to entertain and educate to eco-sustainable behaviour in the use and management of water resources, energy and waste.
- **Un mare senza plastica (A sea without plastic) Ecomusical:** the show was proposed to children and families in the framework of the event Ocean Race and of a project on sustainability in collaboration with Liguria Region and Ente Parco Antola.
- **Un mare senza plastica e Cacche Spaziali (A Sea Without Plastic and Space Poo) Ecobooklets:** the booklets of the two shows, illustrated with funny cartoons, provide insights and educational ideas on the history of water and plastic, purification techniques, pollution caused by the abuse of plastics and virtuous behaviour to protect the environment.
- **Il canto dell'albero (The song of the tree):** green game, under construction, on the harmful effects of climate change, which will be able to support environmental protection projects.
- **Collaboration in cataloguing the Group's historical archives:** in 2021, the collaboration with Iren continued with the aim of reorganising the historical archives of the Brugnato aqueduct.
- **Summer school "The Ecological Transition between Green Deal and Recovery Plan. Relapses for the territory and the enterprises":** the initiative, organised in collaboration with the University of Genoa, provided advanced training on the effects of the ecological transition and the National Recovery and Resilience Plan for the territory and businesses.

## Digitalisation

Digitalisation and computerisation are among the enabling levers that will allow the Group to grow in line with the objectives stated in the 2030 Business Plan, which envisages a significant increase in investments (around 600 million Euro over the plan period) and operating costs to support the **Group's digital transformation and development process**.

In particular, investments will be dedicated to **technological initiatives** to:

- raise levels of cybersecurity;
- consolidate the transition to a data-driven approach by adopting a new organisational model that supports processes and effective data management;
- consolidate the business continuity strategy, through the progressive divestment of servers in favour of the use of data centres that guarantee continuity, thanks to data centres redundancy, and of the cloud for greater flexibility;
- develop the Internet of Things (IoT) through the use of 5G connectivity (sensor and field data transmission in both plant management and distribution networks) and 6G connectivity (applicability study and preliminary activities). A pilot project is planned in the management of smart dumpster sensors and data transmission of the smart metering network.

Technological **initiatives** will be integrated by **functional initiatives** to:

- enable businesses through digital transformation programmes, use of sensors, IoT platforms, wearable devices, predictive maintenance, and creation of customisation programmes for customer offers;
- digitalise processes through warehouse management software, systems for digitalising customer transactions, and integration of digital identity and electronic signature systems.

A number of actions in these areas to improve operational efficiency were initiated and continued in 2021:

- the implementation of efficient management systems for company fleets and personnel processes;
- the introduction of digital tools, such as on-board computers on waste collection vehicles, smartphones and smart containers, which make it possible to optimise plant planning and waste logistics (**Just Iren**);
- the review and standardisation of the processes and information systems supporting the technical-commercial activities of the management of the distribution networks (**Iren Way**);
- the redesign of the entire management and customer relationship process (**Market Transformation** programme).



In **telecommunications**, 2021 also saw a major increase in bandwidth usage for internet connections, especially to cloud providers. Technological upgrading of the main network nodes was planned and the equipment of the Turin metropolitan network backbone was replaced. The replacement of security equipment with new Next Generation Firewalls was completed, both to improve network traffic control and to comply with new regulations. Equipment upgrades were conducted with the goal of improving performance, cybersecurity, and monitoring, control, and resiliency mechanisms. Finally, new services were tested to make the most of the new technologies implemented: the creation of private networks with SD-WAN technology and experiments to facilitate disaster recovery projects and the cloud-based remoting of data centres.

## Cybersecurity

Particular attention is paid by the Group to activities in the field of cybersecurity, thanks to the definition and adoption of organisational models, procedures, security measures and technological tools to reduce vulnerabilities and mitigate threats.

Given the importance of the issue, the Group has adopted a **cyber risk policy** that defines the principles, provides guidelines on the subject and outlines roles and responsibilities in order to achieve an adequate level of protection of information, starting with the technical and organisational actions identified that concern:

- identification, classification, and management of information and assets;
- cybersecurity awareness and culture;
- use of computing devices and software;
- access control;
- physical and environmental security;
- communications and systems security;
- information exchange and cooperation;
- cybersecurity incident management;
- relationships with third parties;
- insurance coverage.

Consistent with this approach, the Group works to ensure the design of inherently secure systems, as well as monitoring (24 hours a day) and analysing all cybersecurity events to ensure timely interventions in case of issues. In this context, the National Cybersecurity Perimeter Risk Assessment and Analysis project and an awareness campaign on cybersecurity issues, directed at all employees, were implemented in 2021 (see page 236). In addition, the implementation of an enhanced authentication system for access to systems was completed with the adoption of a tool for the management of privileged users.

The Group has obtained **ISO27001 certification** and extended it to the main Group companies in 2021, with related risk analysis of IT assets. The certification defines the requirements for setting up and implementing an information security management system.