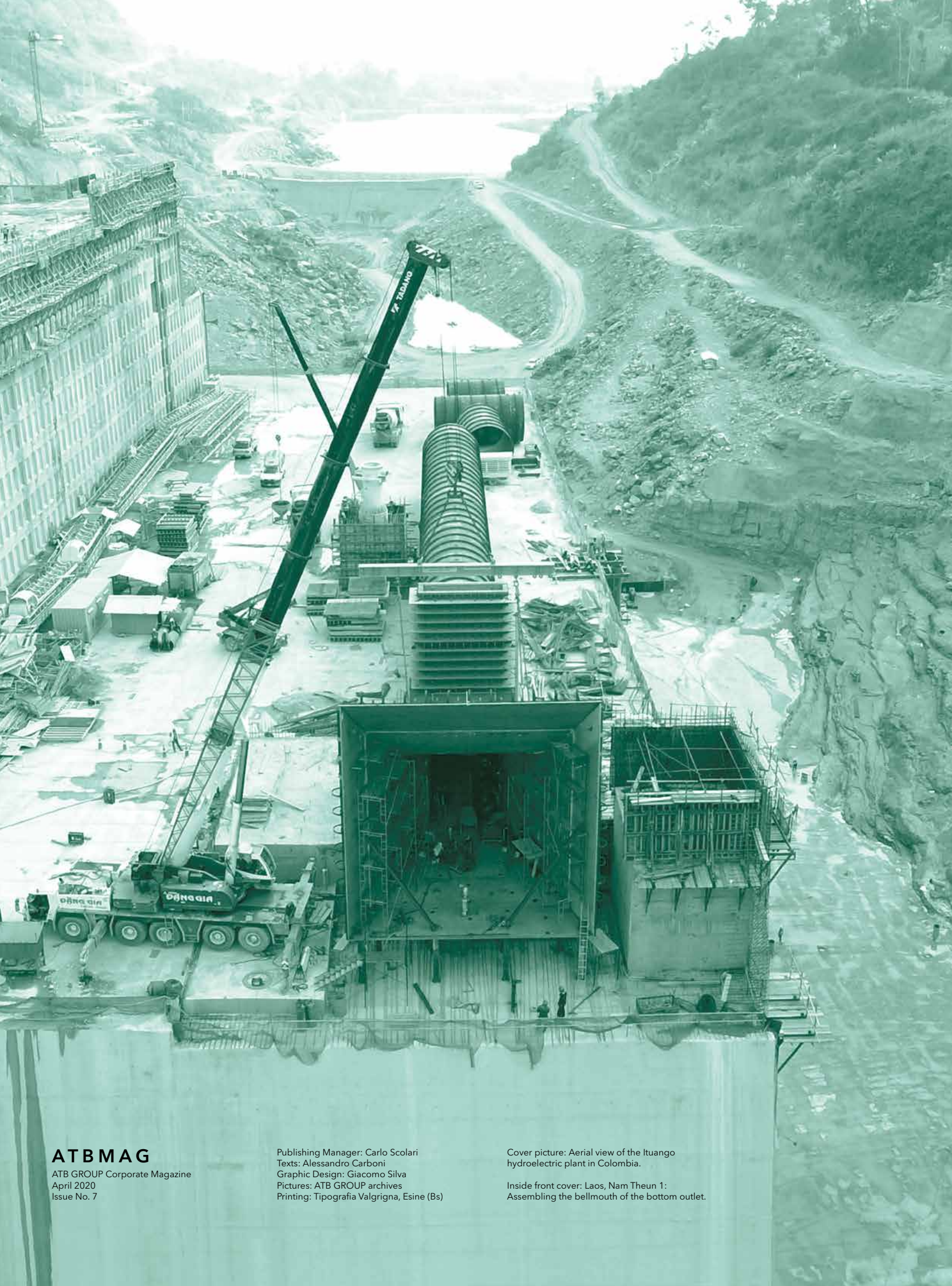


ATB MAG

IN THIS ISSUE

ATB GREEN 2020
THE FUTURE IS
SUSTAINABLE

ITUANGO: NEW USD
85 MILLION ORDER



ATBMAG

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Cover picture: Aerial view of the Ituango hydroelectric plant in Colombia.

Inside front cover: Laos, Nam Theun 1:
Assembling the bellmouth of the bottom outlet.

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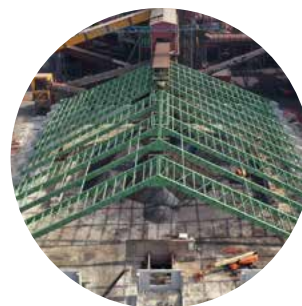
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A History for the Future

1959 - Italy, Province of Brescia





Tomorrow we will be stronger

I would like to send these words of encouragement and hope to the large ATB Group family: we are at war, but sooner or later we will come out of this nightmare that has hit the whole country. Brescia and the Lombardy provinces in particular. We have to look forward but should never forget what has happened or the friends and family members that are no longer with us.

Tomorrow we will be stronger.

I deeply thank all our employees who, from Brescia to Marghera, from Artogne to Taranto, from Verbania to all the sites and overseas offices, have relentlessly kept on working. A warm hug to all of them, and all our support for the work still to come over the months ahead.

Sergio Trombini

President of ATB Group

Brescia, April 2020

A month into the COVID-19 crisis and we do not know how long the restrictions imposed to face this pandemic will last; a pandemic that none of us could have ever imagined a few weeks ago. As a means to combat this sly and invisible enemy, schools were closed first, and then bars and restaurants as well as all other production activities throughout the country. We have asked ourselves several times how convenient it is to publish this issue of our magazine now during such difficult times, especially for our region and cities, or rather wait for better times. We decided to publish it all the same because today, more than ever before, we need to remind ourselves of what we can do, to feel we are part of something bigger, and to know that, sooner or later, these uncertain times will pass and we will go back (can't wait!) to our daily concerns that today seem like lesser trivialities.

We are going through special times that are putting us to the test. A very hard one. Personally speaking, we have to come to terms with a slight, daily fear. Many of us have had to say goodbye to someone dear to us, someone very close to us, who being weakened by this disease have left us. The elderly to the greatest extent; those men and women that we used to meet at the local watering hole, at the sports events where we took our children, or at the local festivals just to name a few. Everything did not turn out all right as the rainbow signs hanging from the balconies during the first days of contagion had predicted. The lines of military tracks and coffins have wiped

that hope away. These hard times help us all to reflect and reconsider our relationships, our scale of values, about everyday problems that mean nothing when compared to the full lockdown that has been imposed these last weeks. I believe that the new normalcy will be nothing like the normalcy we had before. But this disrupted balance, this change, is giving us the opportunity to try to be better people. We should never forget what we are going through during these dire weeks.

Italy, that has always been mistreated and criticized, has now to climb a high peak but is ill-equipped: few intensive care units, insufficient surgical masks, and lack of agreement on the paramount importance to be given to health, which should be our top priority. But, it is at these hard times that the true values onto which our country and our history are based emerge: solidarity, generosity, and the will to succeed. In spite of criticism and huge difficulties, heart-rending pictures and war bulletins, we will succeed in the end. It will take time, but we will be the country we used to be again. A much better one too.

As a company, our main- and I would say sole- aim during these days is to protect the health of all our employees. There is no room for any other thoughts in such complex times. We have closed our main offices and are handling this emergency from different points of view:

- We immediately activated the wages guarantee fund, for a 9-week period to be used by August. This is a precautionary measure only to be used should this emergency situation continue. We hope we can resort to this measure to a limited extent.
- We adopted the protocol set by Ministry of Public Health so that anyone who is currently working can do so in total safety. This will also be useful in order to correctly manage the gradual return to work. As you can imagine we will have to be very careful with personal contact for a long time.
- We quickly enabled more than 120 workstations for smart working so that those activities not directly linked to production can continue. This may be a chance to activate new working arrangements that can also be implemented during normal times.
- We took steps to find financial resources in this emergency: The Government will support this economic crisis generated by this pandemic by implementing dedicated measures. From our end, we will provide for the part recognised by the Government in order to grant continuity to our companies.
- We are closely monitoring the critical issues we may encounter in the jobs from our order book in order to confront a let-up in our production. We are clearly in a force majeure scenario that

is covered by our agreements, but we believe that in these difficult times it is better to talk to our customers instead of simply resorting to clauses in a contract (also because COVID-19 is a worldwide problem).

- We are talking to our network of suppliers since they are also extensively affected by the restrictions imposed by the Government. We will take a partnership approach to tackle all critical issues that will emerge, in the common interest to quickly get out of this situation.

Over and above all the (necessary) support that we may obtain, we have very critical months ahead of us. During this time, we will have to live with a virus that needs a vaccine to be defeated, and we will have to wipe off the desire for liberation that grows inside of us these weeks as a consequence to the freedom that we have been denied over the last month. We will have even bigger incentives that will help us all overcome these difficult times that our companies are facing. This emergency is hitting hard but it is also giving us a big chance to keep on improving.

Today, as a company and as Italians, we have no other choice than to obey the provisions that the authorities are gradually issuing and to effectively contribute to prevent problems from further escalating. I would like to thank all our colleagues who are helping to tackle this crisis working from their homes or workplaces, in the hope that we can soon go gradually back to normal. I like to think that this magazine can be a bridge between what we used to be before this Coronavirus crisis and what we will be when we get back, step by step, to being fully operational. A bridge that crosses through these difficult times that will certainly make us wiser and stronger to build a better future. A tomorrow that no one will give to us, but that, I am certain, we will be able to reach.

Enjoy your read!

Carlo Scolari
CEO, ATB Group



01

GROUP
NEWS

The Future is Sustainable

ATB G
2020



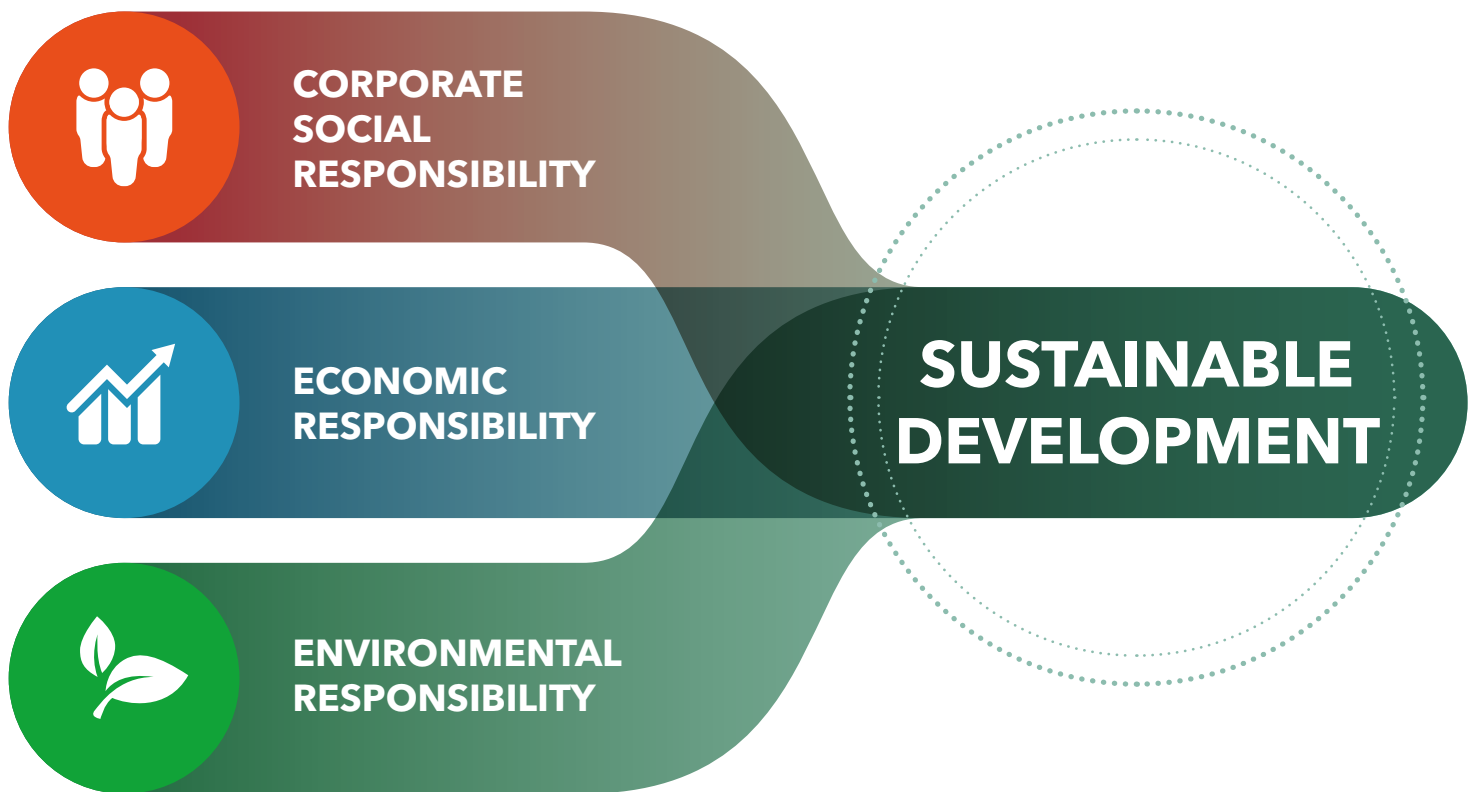
GREEN

Green light to the project endorsed by the Management for 2020.

Aim: To adopt innovative models based on both awareness and corporate, social, economic and environmental responsibility.

The world is changing, and so is our society and the dynamics that guide inter-relationships among people, markets and the economy. The general panorama induces us to imagine and put into practice a new way of doing business; a model that while paying attention to production requirements, also knows how to reconcile the common good and the development of the society through the protection of people's health and the environment. What is needed is collective awareness; starting from each individual until reaching each and every organisation. In such a context, the industry today takes a role of corporate social, economic and environmental responsibility. Since January 2020 ATB Group has decided to promote

a campaign to increase awareness on environmental protection, emission abatement, reduction of pollutant sources, energy saving, and consumption optimization. How? By means of a project that, through simple, day-to-day actions, can transform old, settled habits into good practices to be used every day at the workplace. This is a revolution that moves from bottom to top, taking small steps, which is fundamental for the change. And that is how ATB Green 2020 was born: a journey whose objective is to create a corporate organisation and production processes that aim to be sustainable from an economic, environmental and social point of view. This project, supported by ATB Group Management, actively involves all the areas of the company, and requires that all workers take



2020 OBJECTIVES

1 Reduce the volume of waste produced



2 Increase separately collected waste



**Lower
management
costs**

**Improve the
environment in
which we live**

*A group of people
sharing a common goal
can achieve the impossible*

part in it. They will be the main promoters of careful behaviour and common sense in the daily activities at the office or the plant.

«In the last few months we wanted to increase awareness on sustainability issues. We asked ourselves how we could contribute to make our company sustainable. And the answer was assuming a strong corporate social, economic and environmental responsibility that guides our choices», explains Luigi Redaelli, Managing Director of the Heavy Equipment Division of the ATB Group. «In order to turn these principles into concrete actions, we created a large-scale work group involving several core businesses of the company in a participatory planning experience, enriched by

pooling different points of view». Each team member submitted a proposition to improve internal procedures with a «green» approach. Some of these propositions became actual projects that will be launched the coming weeks.

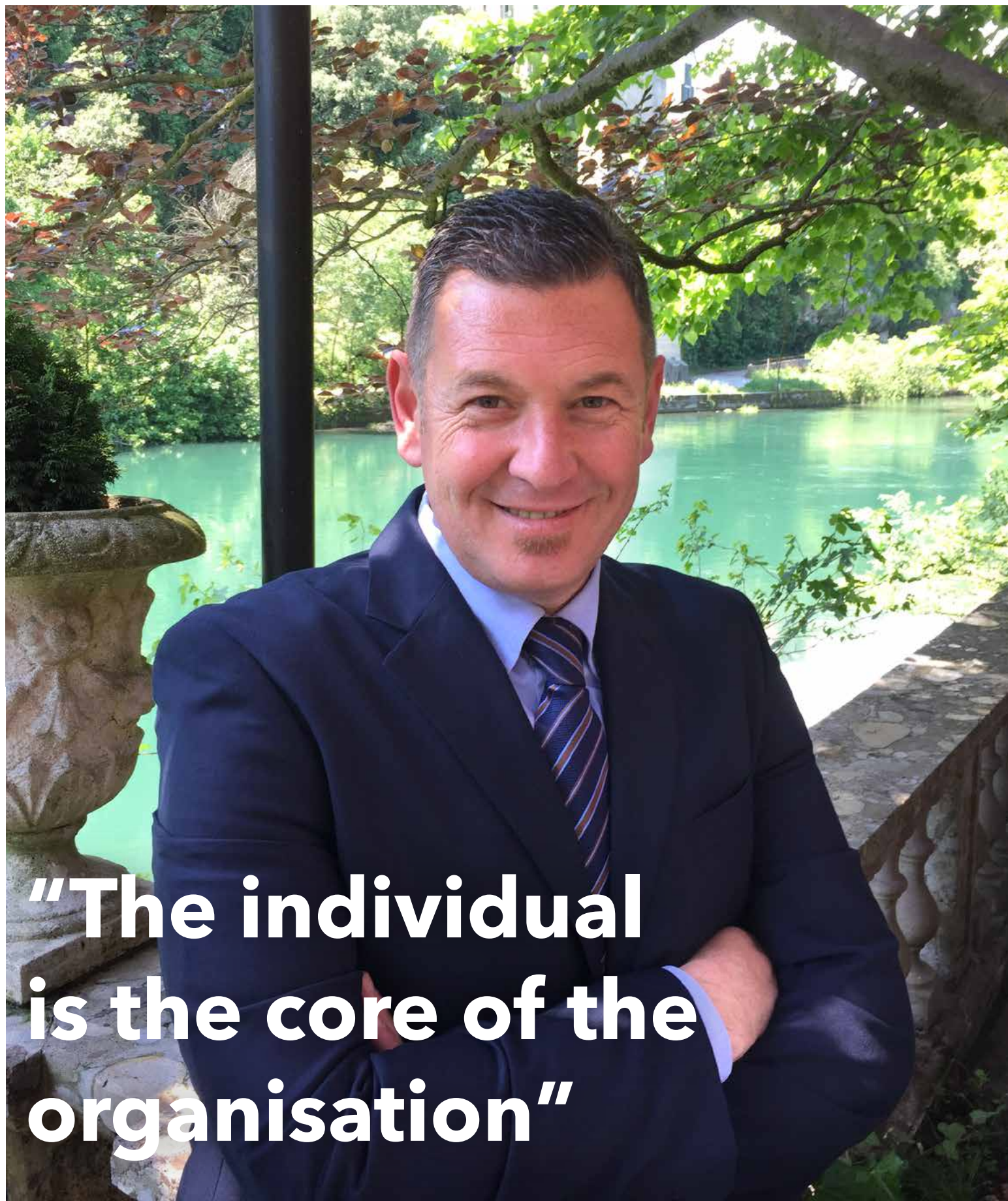
The first project involves implementing selective waste sorting at ATB headquarters in Roncadelle. The aim is to improve the sorting already being used in the facilities, and to adopt a similar system in the offices. To do so, the latter are now furnished with baskets for paper, plastic and unsorted waste, including bins for used batteries/toner cartridges. In order to understand how important recycling is, we estimated how much plastic we produce at the workstation in one year, how much carbon dioxide we emitted, and how many trees would be needed to absorb that volume. We also calculated that if a person drank 1 litre of water every 8 hours, 5 days a week, during 240 days a year, that would mean two 0.5L bottles a day by 250 workers. The result was 3,000 kg of plastic and 18,000kg of CO₂. We would need more than 1,200 trees to absorb that, practically a 4,800 m² forest!

Another core asset of ATB Green is to reduce the consumption of plastic, paper, power, and heating. Ad hoc information material is being written; it will be later distributed to all workers in order to raise awareness on consumption optimization at both offices and plants. In addition, tests are conducted to monitor and quantify how much electricity and methane gas- used for welding and plating- is wasted. In the meantime, thorough surveys are conducted to determine a new, advanced and smart approach to use the natural resources. «Such data will be the pillars onto which we will base our accurate guidelines of action», states the manager. As regards the lighting system, we have already shifted from neon to LEDs, which implies several advantages in terms of energy saving and maintenance».

«The road to a sustainable future is built step by step», adds Redaelli. «We have decided to start from small initiatives within a clear strategic framework, that of ATB Manufacturing System. The objective of the ATB Green project is to improve constantly as well as to reinforce the group outlook. A group of people sharing a common goal can achieve the impossible».

ATB GREEN
2020 

Mirko Manaresi is the new HR Director of the Group. Twenty years' experience in the field of HR and three pillars: dialogue, discussion and participation.



**"The individual
is the core of the
organisation"**

M

irko Manaresi is the new HR Director of the ATB Group since January 2020. Mr. Manaresi is forty-eight years old, married, and the father of a 13-years old daughter. Born in Rimini but living in Lombardy for a long time now,

Mr. Manaresi boasts extensive experience in the field of human resources having a diploma in Archaeology from the University of Bologna and a diploma as a sommelier, which has helped him to fine tune his sense and spirit of observation. He started from the bottom up to the ranks, from the payroll up to becoming personnel manager. All this journey has taught him a lesson: man is the key protagonist of every social, economic, and cultural process. «Each individual has special characteristics, features that are enhanced and adjusted to a specific context. Just like each wine has traits of its own, and is thoughtfully paired to a meal with flavors it can best express all its qualities», explains Manaresi. «My job is like being a tailor and having to dress up a person. It implies trying to find what suits him; that way he can do what he really loves, that is, what he is cut out for».

Mr. Manaresi's professional career began back in 1999 when he left the family's wine house- a well-known shop in Bellaria- to engage in personnel management for the first time. In 2004 he started working at the Cosmi Group in Ravenna, an industrial company specialised in installing and servicing Oil&Gas plants, and soon after he became their personnel manager. Two years later he moved to Lombardy to run a labour consultancy firm; he was in charge of processes to reorganise the client-companies until 2011. That year he accepted a position at OMRT, a family company specialised in hot forming and punching ferrous materials for the car manufacturing industry; he followed into his predecessors' steps. Later on, in 2016, he started working for the DMG Mori Group as the personnel manager of Brembate plant.

Mr. Manaresi started working for ATB Group this year and has accepted the challenge to run a structure more complex and heterogeneous than any other one before. From the very beginning, Mirko started to work to create teams in the group: «There are four divisions that work in different sectors, but we need to find uniformity in order to keep the ATB Group in perspective», he explains. What we must do now is invest in new synergies to use the company's structure in a practical manner, to be more efficient, and to reach satisfactory results».

Another front the new manager has to pay attention to is the relations with trade unions. «Dialogue and debates, in my opinion at least, are the grounds for good relations with trade unions. A principle should be first and foremost:

human resources are the core of the organisation. There may be excellent managers and leaders, but it is people, all together, who make it possible for a company to grow», highlights Mr. Manaresi. «Respect, therefore, is a key concept. At present, the workers' requirements have changed a lot when compared to those some years ago because the society has changed as well; we are constantly evolving. It is essential that we listen and pay attention to what others have to say, and we must be clever to understand the needs of our employees».

Sensitivity is paramount when talking about work. Constant care is mainly required for those unavoidable aspects linked to protecting people. «Safety is a right, and as such it should be exercised by everyone. It is a crucial point in the development of work organisations in the third millennium», points out Manaresi. «A lot of companies aim at reaching the "zero accidents" target. A dream? We will work together to try to make it a reality».

In order to work as a Group, ATB has to strengthen its corporate culture, and to know how to lure new professionals. «A key strategy here will be participation, as this is crucial to make the company grow in terms of structure and values», adds Manaresi. «I believe in dialogue and discussion, a true one, the one that brings to the same table even diametrically opposed positions and points of view, that in the end all together can help make the impossible possible. The job of all those that form part of the organisation chart is to make the company grow. The idea of the organisation should dominate across the entire company».

The next three years come filled with important news in the field of human resources for the ATB Group. A first step was taken towards introducing smart working, a tool that was widely used to meet the needs of workers as well as safety practices during the weeks of the Coronavirus crisis. «To contain personal contacts in the office and minimise commuting, we started to adopt smart working where possible, and for all the tasks that may be developed from home without any specific difficulty or limitation/», states Manaresi. The impact that COVID-19 has had on our daily lives has led us to project ATB Group towards a new way of working». Such change needs to be addressed quickly using versatile answers that ensure performance and can enhance the value of the core, fundamental particle: the individual. A change to be tackled and overcome together.



ITU A

03
HME

NEW USD 85 MILLION ORDER

N G O



ATB Group to build the penstocks of the largest hydroelectric plant in Colombia.

Ituango is a geographical area 170 km North-east of Medellin, Colombia's second largest city. Here, on the banks of the Cauca River, one of the largest hydroelectric plants of South America is under construction. Once fully operational, the plant will have a total capacity of 2,400 MW and will be able to meet almost 18% of the country's energy demand. There is no other plant like this one in Colombia.

Last January, ATB Group won a USD 85 million contract to build Ø 6.2-meter penstocks for the lining of the vertical steel shafts, over a period of four years.

«ATB has been operating in Colombia since the '60s, but the bond with the country was further strengthened in 2010 when we opened our Medellin Branch. The first orders for Ituango, commissioned by EPM (Empresas Publicas de Medellin), date back to 2014», explain Enrico Camparada, Managing Director of the HME Division of the ATB Group, and Gianluca Raseni, Operations Manager. «We have already built the entire range of hydro-mechanical equipment for the project. The new order arrived after a series of geological problems that plagued the area close to the Cauca river. Some tunnels collapsed, which forced the client to modify the project so that it now includes steel lining of the underground penstocks».

The managers are very satisfied with this result. «We have proved that we possess the technical and technological capacity to handle major supplies in the shortest time», highlight Camparada and Raseni.

The hydro-mechanical components were designed in Brescia, Italy, while the manufacturing of the equipment will

be shared between Medellin and the temporary site that is being set up not far from the power plant. The construction of the structure began over the last few weeks. It will cover an area of 20 thousand m², 3000 of which are roofed, and will employ about 200 people.

The Colombian contract - that will entail hiring new personnel in the HME offices in Roncadelle - confirms once again the effectiveness of the new organisational model launched by Sergio Trombini at the end of 2018. Besides enhancing the ATB brand, this model has created the four divisions of the Group: Heavy Equipment, Hydro-Mechanical Equipment, Renewables and Civil Construction & Industrial Services.



Pages 12 and 13
Aerial view of the plant in
Ituango, Colombia

↑ Area where the temporary ATB Group workshop
is being built as seen from above.



- ↑ Building the foundations of the temporary workshop being set up within the Ituango site.
- ↗ The structure will cover an area of 20 thousand m², 3000 of which are roofed, and will employ about 200 people.

- ↓ The new order arrived after a series of geological problems that plagued the area close to the Cauca river. Some tunnels carved in the rock collapsed, which forced the client to modify the project so that it now includes steel cladding the underground penstocks. The picture shows aerial panoramic view of the Ituango site.



We have proved that we possess the technical and technological capacity to handle major supplies in the shortest time

04
HME

ATB KEEPS GROWING IN THE HYDROELECTRIC MARKET





New customers. Projects underway. The bottom outlet is being installed in Laos. Gates are shipped to Uganda.

This is a particularly promising time for the ATB Group's Hydro-Mechanical Equipment Division. In 2019 our order book was over EUR 130 million. 2020 began with the new Ituango project and so, heralds almost the same satisfactory figures. One thing for sure is that, as Sergio Trombini, President of the ATB Group has stressed, the business in the hydro-power sector «is giving a sense of perspective to our entire industrial reality». This growth will soon require some adjustments in the company's structure and a hiring scheme to reinforce the HME technical workshops that are currently being involved in different fronts: Canada, Chile, France, Cameroon, Ethiopia, and Uganda. And in Laos, at the site of Nam Theun 1, the hydroelectric plant being built in the Province of Bolikhamxay, over the Nam Kading river.

ATB has been chosen as the main supplier of the hydro-mechanical equipment required to operate the plant, and crucial to produce the electricity to be channelled to domestic consumption and exported to Thailand.

The sections of the penstock are manufactured directly in site, with the support of a temporary workshop set up at the construction area. Thanks to this organization, the pipes were built and finished ahead of schedule. ATB is currently assembling the bottom outlet and the internal branches of the tunnels. In the meantime, the flats gates and the radial gate that are part of the bottom outlet have been shipped from Italy. At present 40% of the project has been completed. «Our objective for 2021 is to end all the remaining orders of this contract», explains Alberto Cavaliere, Project Manager of the Hydro-Mechanical Equipment Division. Even if the pipes are already built and finished, the temporary on-site workshop will remain operational to pre-assemble the two bifurcations and for secondary activities. Such as disassembling the equipment to be sent to other parts of the world where the Group is working. «In the last few weeks, in fact,» stresses Cavaliere, «we have dismantled the equipment we used to make the sections, and we are preparing the shipment to Cameroon. The equipment will be used in the Nachtigal project».

Africa is one of the zones in which ATB has been always present in the hydro-power sector. Interesting news from Achwa: The Group, subcontractor of PAC S.p.A, is in charge of designing, building, transporting, and installing hydro-mechanical equipment such as gates, trashracks, stoplogs and accessories for the HPP2 hydroelectric installation in North Uganda. The power of the plant is 42 MW with an annual production capacity of 281 GWh. It is the first of five plants that will be built by Arpe LTD over the Achwa river.

«In 2019 ATB was awarded a new order to supply the whole hydro-mechanical package for the HPP1 project», announces Giuliano Garavelli, Project Manager for ATB.

«This project is progressing at a good pace: the first cargo of gates made at the ATB facilities in Colombia arrived at the site by mid-March, and other shipments are expected in the next two months».

➤ The trashracks that protect the penstocks that carry water into the Power House.

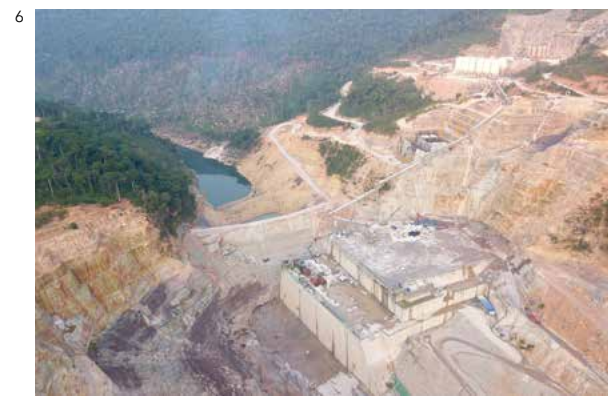
➤ The picture shows the three flap gates at the end of the intake canal (FOREBAY)

➤➤ The initial stage of the channel being filled and controlled by the three fixed-wheel gates at the INTAKE

LAOS

Picture gallery

Snapshots: Gerardo Ruotolo





1. Sections of the penstocks ready to be assembled.
2. The bottom outlet being assembled.
3. The dam while the bottom outlet is being assembled, seen from above.
4. The bellmouth of the bottom outlet being assembled.
5. Bottom outlet: bellmouth, upstream transition, maintenance gate.
6. Panoramic front view of the dam.
7. Power house.
8. View of power house and draft tubes.
9. Detail view of the penstock in a section of a branch, installed inside a tunnel.
10. Handling one of the last pipes of the penstock inside the workshop of the site once the construction is completed.
11. Workshop of the site, top view.

NAM THEUN 1





05
HE

MARGHERA

**The Cepsa and Thai Oil
reactors about to break
the Dangote record**



The Venice-based workshop reaffirms its strategic role as maker of large equipment.

After the Dangote project, that set a record thanks to its 1500-ton reactors, ATB is getting ready to break that 2018 record whose peak was a spectacular shipment from the pier of Porto Marghera. Some equipment impressively heavier than those built for the Nigerian refinery are being finished at the Venetian facilities of the company. At the bays of the workshop, we are currently giving the final touches to the process of assembling the reactors to be sent to the Cepsa and Thai Oil projects. The Marghera production site has played a key role in these two projects and so reaffirms its significance in the production processes of the Heavy Equipment Division as a hub specialised in the final assembling of devices for weighty processes, and its strategic dockside position.

← One of the units at the ATB Group's Marghera facilities, a hub fully devoted to the final assembling of components, strategically located and with easy access to the dispatch bay.

↑ The members of the ATB team of Marghera.



CEPSA

Very soon the five pieces of equipment (3 reactors and 2 separators) commissioned by Cepsa will leave the waters of the lagoon to head for the San Roque Refinery on the north shore of the Bay of Gibraltar. San Roque is the main refining plant of the Iberian Peninsula, with a processing capacity of 240,000 barrels per day for a total capacity of 12 million tons of crude oil per year. Two reactors that form part of this first shipment are about to break the record held by Dangote: a pair of LC Fining reactors, 1500-ton and over fifty-metre long each. «This type of equipment requires very specific and accurate assembly stages», stresses Riccardo Rossi, Project Manager of this contract. «Installing the internal sections required a prior ad hoc analysis and specific mechanical machining». The other three pieces of equipment about to be shipped are smaller and less complex. From the total material of the supply, three separators are still being built at Roncadelle. They will be soon sent to Marghera in order to be finished and then shipped to Spain next summer.

THAI OIL

The reactors ordered by the Samsung, Petrofac & Saipem consortium will be shipped by the end of June to expand the Sriracha refinery owned by Thailand's national oil company. At present, Sriracha is the largest Oil&Gas plant of the country. It is located in the Province of Chonburi, along the east coast of the Gulf of Thailand. This transformation is part of the Clean Fuel project and will require an overall USD 4 billion investment. After the plant is enlarged, Thai Oil will produce higher quality transportation fuels and the refinery's production capacity will be increased from 275,000 barrels per day to 400,000 barrels per day. ATB shall supply three pieces of equipment in all- stage reactors made of vanadium-modified CrMo steel. The largest will be shipped in the next few weeks. «These are extraordinary equipment at all: their diameters range from 5.4 to 5.7 meters, and they weigh between 880 and 1700 tons», explains Eugenio Carrara, PM of the Heavy Equipment Division. «Once the building process is completed and the localised heat treatments and the hydraulic tests finished, the equipment will be transported to the bays and loaded onto the ship by July».



The special features of these two contracts clearly show the change the Oil&Gas sector is facing. «The market, for this kind of product, is showing a trend towards larger and heavier equipment», explains Francesco Squaratti, Heavy Equipment Sales Manager. «Given this panorama, ATB reaffirms its reputation as a qualified partner showing excellent engineering and production expertise, also for equipment weighing well over a thousand tons». Due to the production standards that the company has reached and consolidated «we can offer ourselves as trustworthy partners for the large petrochemical projects that will begin in different corners of the world over the next few years», adds Squaratti. An additional aspect in which ATB can be regarded as a leader, as a result of the strategic investments made in the last few years, has been recently added: the capacity to make several large and heavy pieces of equipment at the same time and meet any delivery times that customers need».

At this stage, the Marghera facilities are practically full up. Large reactor for Cepsa (Spain) and Thai Oil (Thailand) are currently being built. The picture shows how some pressure vessels ordered by Thai Oil are being built.

The reactor being made for Thai Oil are no ordinary equipment at all: their diameters range from 5.4 to 5.7 meters, and they weigh between 880 and 1700 tons. Once the building process is completed and the localised heat treatments and the hydraulic tests finished, the equipment will be loaded onto the ship and sent to their final destination.

TARANTO

ArcelorMittal selects ATB Group for the secondary yard coverings



The Civil Construction & Industrial Services Division has been awarded the project. Activities at the Sinter South yard already underway.

The collaborative work between ATB Group and ArcelorMittal Italia is strengthened. The Civil Construction & Industrial Services Division, specialised in industrial buildings and present in the former Ilva plants in Taranto for more than twenty years now, has been selected by the new owner of the Puglia-based steelworks to make the coverings of the three secondary yards of that plant. A turnkey order that is worth over EUR 40 millions, and it is a token of trust and validation for the Group headed by Sergio Trombini. This is, in fact, the second step of projects in which ATB Group took part in 2019 too. The company, on behalf of Cimolai, was in

charge of foundations of the two coverings of the mineral and fossil yards; these structures are unique in the world since they are 77 meters high, 700 m long, and 250 m wide. These two works are part of the major investments in environmental infrastructure aiming to reduce the dust raised at the plant as well as the impact on the region and the city. For the secondary yards, the CCIS Division has been entrusted with the works to build the covering of the OMO, Sinter North and Sinter South yards. The largest roof will cover 42 thousand square meters for a total length of 385 meters; it will be 110 m wide and 42 m high. About 150 persons will be working at the site.

We are slightly ahead with the works of the 6,400 m² roof of the Sinter South yard. The reinforced concrete and structural steel works have been completed, and now we are working on the pediments of the tops and the water draining systems. The scope of work includes assembling the plates and laying the electrical installations for lights and spray nozzles.

Danilo Serioli, Managing Director of the CCIS Division proudly says that «the new owners were able to see that we are highly reliable as well as the high professional level of our team, two features that we put at the service of the entire plant. And, based on the results obtained so far, they have decided to select us and trust us».

«ArcelorMittal Italia recognises that we are a strategic partner and is entrusting us with important works», explains Giandomenico Cuscela, General Manager Taranto Site. «Besides, they are keeping their maintenance commitments and the current agreements for industrial services are being extended for several years».

↪ Works are progressing for 6,400 m² covering of the Sinter South yard. This is one of the three coverings awarded by ArcelorMittal at the former Ilva steel plant in Taranto. These works are part of the major investments in environmental infrastructure aiming to reduce both the dust raised at the plant as well as the impact on the region and the city.



CCIS: THE YEAR BEGINS WITH NEW CONTRACTS AND PROFITABLE SYNERGIES



**INBERG and INBRE:
new projects in Lombardy.
SEMAT and SID together for
Sider Potenza and Franzoni.**

↑ The works that started at Darfo Boario Terme
to set up the Le Rive small hydro-power
→ plant. The sheet piles are currently being
driven at the site.

↗ Civil engineering works for the Morlana
small hydro-power plant, in Nembro,
Province of Bergamo.

The Civil Construction & Industrial Services Division of the ATB Group starts the year with the right pace. The results of the reorganisation of the company are now tangible, mainly as regards the synergies and the joint work among the companies that form the industrial group led by Sergio Trombini. During the first months of 2020, the Italian market was particularly fruitful and stimulating: many projects in the fields of industrial buildings and demolitions kicked off when the year started.

INBERG and INBRE

In northern Italy, Semat, a company belonging to the ATB Group, has been recently awarded two «twin» projects, quite similar in terms of design and execution: Inberg and Inbre.

By the end of last December, the contract with Inberg (Iniziativa Bergamasche Srl) was signed to provide the civil engineering works needed to set up the Morlana small hydro-power plant, in Nembro, Province of Bergamo. More specifically, Semat is in charge of the site clearing works, and building the concrete slurry walls and the silt excluder. A second stage of the project will involve building the plant and all its ancillary works, and completing the external finishings, fencing and final planting. «We will have to recondition the bed of the river and create a new cofferdam to raise the level of the watercourse», explains Venturino Magnolini from Semat. «This will facilitate digging under the water-bearing stratum». If all deadlines scheduled are met, the site will be closed by next summer.

The works that started at Darfo Boario Terme to set up the Le Rive small hydro-power plant are quite similar. «The



project is practically identical, except for a slight difference», explains Cosimo Ippolito from Semat. «In this case, instead of building slurry walls, we have to do something different because of the sand and gravel in the soil: we have to use steel sheet piles to delimit the perimeter of the area where we have to excavate». The works at Darfo will be completed in September. «We are currently driving the sheet piles», adds Ippolito.





SIDER POTENZA

In record time, between Boxing Day and the Epiphany, Semat and Sid finished a complex project at the Sider Potenza site owned by the Pittini Group. Taking advantage of the winter break, these two companies, that are part of the ATB Group, showed excellent capacity to work together seamlessly as one team to demolish and rebuild the water treatment system of the steel plant in Potenza. «First of all, we had to dismantle the old reinforced concrete tanks, and then build the foundations and the new systems», explains Anastasio Intini, building surveyor from Semat. «In this project, everything was about time and planning. In order to meet the deadlines specified by the client, we concentrated all the activities in two weeks, worked non-stop, and organised regular work shifts plus night shifts».

Thanks to total synergy between Semat and Sid (the latter was in charge of the demolitions), all works were finished at the expected times. «We worked within a very limited area- about 600 square meters- 48 hours in a row, with 5 machines and as many technicians and operators», underlines Luca Zambarbieri, Technical Director from Sid. «It was a true challenge, but we were able to show our client that we are a trustworthy, highly efficient partner. There were no delays and all our men at the site worked in total safety thanks to the seamless understanding we had with Semat».





Former FRANZONI facilities

Another important demolition project that started in the first months of 2020 was pulling down the Franzoni facilities, a former cotton mill in Esine, Valle Camonica. It took us three weeks to completely clear the warehouse and to strip it out (that is, removing any non-structural components and equipment). The true demolition works started a month ago, and it is progressing in controlled sessions by areas of 3000 m² at a time, for a total of 24,000 m². «Since we used special machinery and techniques, no staff had to work at a height, and so we did away with any risk of accidents», adds Zambarbieri. «Like in any project we execute, this one was also carefully planned in order to minimise the environmental impact. We disposed the waste in a sound manner by sorting scrap materials by quality, and limited the dust raised so that adjacent roads and neighbours were not affected».



↑ Men working at the SiderPotenza steel plant belonging to the Pittini Group. In record time, ATB completed the demolition and rebuilding project for the water treatment system of the steel plant in Potenza.

← The picture shows the dismantling of the old reinforced concrete tanks. This work was completed in just 48 hours by Sid, a company specialised in demolition that is part of ATB Group.

↙ Criticalities of the project: time and planning. All works were concentrated in the two weeks the plant was closed. Personnel worked non-stop, and regular work hours plus night shifts were organised.

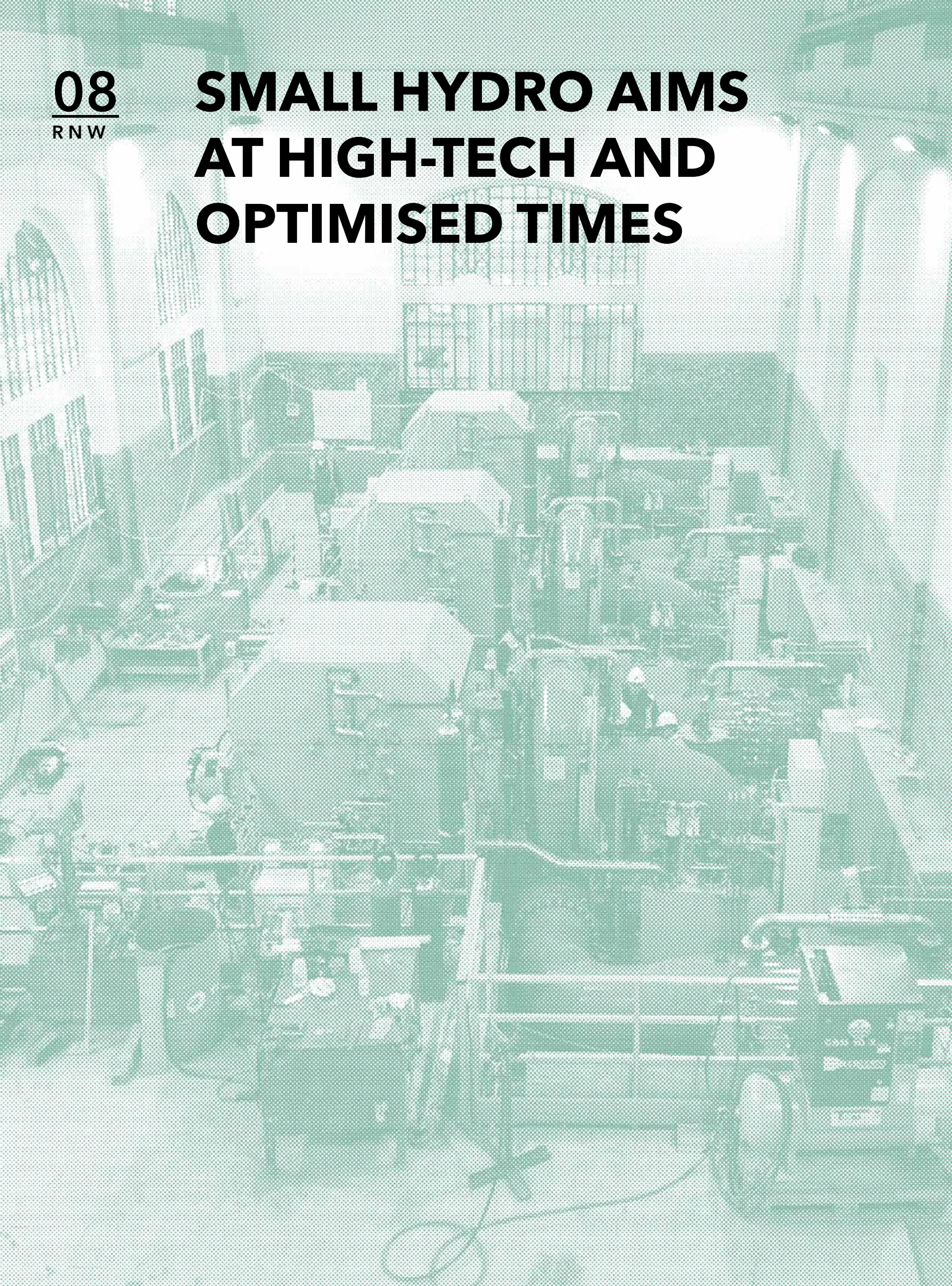
We carefully plan any project we execute in order to minimise the environmental impact

In this page:

Demolition of the Franzoni facilities, a former cotton mill in Esine, Valle Camonica. The pictures show the different demolition stages, implemented in controlled sessions by areas of 3000 m² at a time, for a total of 24,000 m². This is a low environmental impact project thanks to the sound disposal of waste and sorting scrap materials by quality.



SMALL HYDRO AIMS AT HIGH-TECH AND OPTIMISED TIMES



2019 was a highly positive year of the Renewables Division.

Three projects worth highlighting.

The development of new technological solutions to improve how to control and manage installations activities. The optimisation of lead times. The capacity of being competitive in both domestic and international markets. These are the drivers that have guided the growth of the Renewables Division throughout a year as encouraging as exacting as 2019. Last year the technical workshops of Verbania and the Artogne plant- head and arm of the division- worked in perfect agreement, and were the protagonists of a series of important events in the small hydro sector. There were three special projects: Arsti, Orsolina and Gandellino.

ARSTI

It is named after the town where it is located: Arsti, a small village in northern Albania, not far from Pukë, in the triangle where the borders of Albania, Kosovo and Montenegro meet. The 6 MW plant consists of 3 horizontal-axis Pelton hydroelectric units that were designed, built and installed by ATB, all in exactly one year. ATB was chosen by HEC Arsti for a water-to-wire supply: turbines, generators, auxiliary systems, low and medium voltage switchboard, and the entire automation system. The special feature of this project is the approach implemented to finish the work and meet the client's special requirements. «We deployed all the possible technical solutions to facilitate and speed the way the plant is managed and maintained», explains Federico Tartaro, Small Hydro Operations General Manager of the Renewables Division. «More specifically, in order to connect the units and the switchboards to the automation system, we implemented an architecture that prevents any kind of wiring problem and helps to save a lot of time as a part of the intelligence of the automation system is on board the functional units of the plant. In this way installing electric circuits becomes a simple and quick task, and tests can be directly conducted at workshop». To understand how this works, we have to picture our nervous systems and its gan-



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Runner of one of the three Pelton turbines installed in the Arsti power plant, in Albania, not far from Pukë. The picture shows a close view of the injector.

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One of the machines at Arsti; a view of the greasing and sensor systems.

↑
The three horizontal-axis Pelton hydroelectric units designed, built and installed, all in exactly one year, by ATB on behalf of HEC Arsti.

glia. The final result is a smart plant, with cutting edge technology and customised to the client's needs, that is commissioned exactly twelve months after the works start.

«Our ten years of experience in the Albanian market», adds Tartaro, «has helped us to correctly identify and understand what a client wants, and to share with him a sole objective: finish the plant as soon as possible and to have a plant in perfect operation condition».

ORSOLINA

A factor that should be never overlooked when working in the mountains is weather. In February 2019 the Renewables Division was involved in a particularly complex project due to its logistic implications. For EN&EN, ATB was in charge of making a horizontal-axis Pelton hydroelectric unit and installing the interception components of the intake structures for the Orsolina plant in Borca di Cadore, Province of Belluno, in the heart of the Dolomites. The 1900 kW plant with a nominal head of 386 meters is now included in the registries for Government tax incentives to promote renewable energy. «Very tight contractual schedules were set so that the client could be eligible for these feed-in tariffs», explains Project Manager Massimiliano Bernardi. «On the first week of last November we started the electromechanical assembly works at the plant and the intake structures, and we finished them one and a half month later». This is surely a record time: the site is not easy to reach due to its location and the heavy snowfalls typical of the season, therefore, many logistic issues had to be overcome to transport the components to the site. The first synchronisation with the grid was made in February.

GANDELLINO

The Gandellino project, in Bergamo, was concluded in nine months, about eight weeks before its regular expected time. Enel Green Power entrusted ATB with the task of building three run-on-river units for the plant being built in the municipality located in Val Seriana, upon the Serio river: a plant with a total power of 5 MW that sends the energy produced to an HV line at 110 kV. For each unit, the supply includes a horizontal-axis Francis turbine, a direct-coupled synchronous generator, a stop valve coupled to the penstock (already present), water supply pipes to the turbine, a synchronous discharge valve to relief penstock overpressure, ancillary systems of the units for hydraulic control, lubrication and cooling.



↑ Pelton turbine built for the Orsolina plant in Borca di Cadore. The 1900 kW plant has a nominal head of 386 meters.

↑ For EN&EN, ATB was in charge of supplying a horizontal-axis Pelton hydroelectric unit for the plant in the Province of Belluno, in the heart of the Dolomites. Landscape view from the plant.

The agreement was signed in January 2019 and the site was closed in November so that there was enough time for commissioning and putting into operation the plant. «Time played a key role in the progress of the works; in this case, deadlines were very tight so that the project can benefit from the incentives for renewable energy, and the supply at the workshop had to be completed in 8 months», explains Maurizio Domenichini; PM of the Renewables Division. «Our big achievement was to finish our part in only nine months, when this kind of works generally takes between twelve and fourteen months. Observing such exacting terms was only possible thanks to the joint work of the ATB facilities of Artogne and Roncadelle».



➤ One of the turbines built in the workshop of Artogne for the Gandellino plant, in Bergamo, Val Seriana.

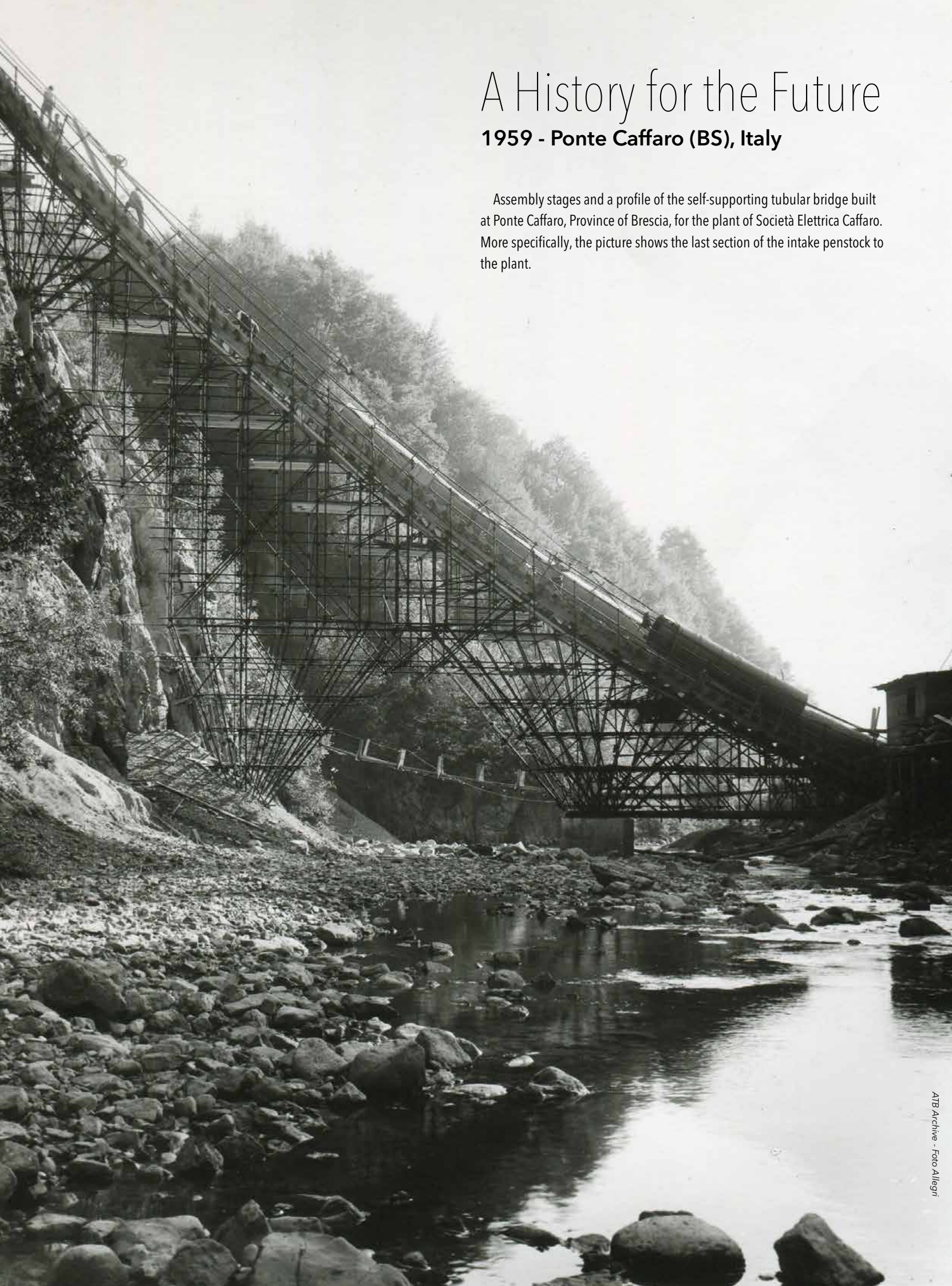


➤ Inside the Gandellino plant; the three units installed during the setting up.

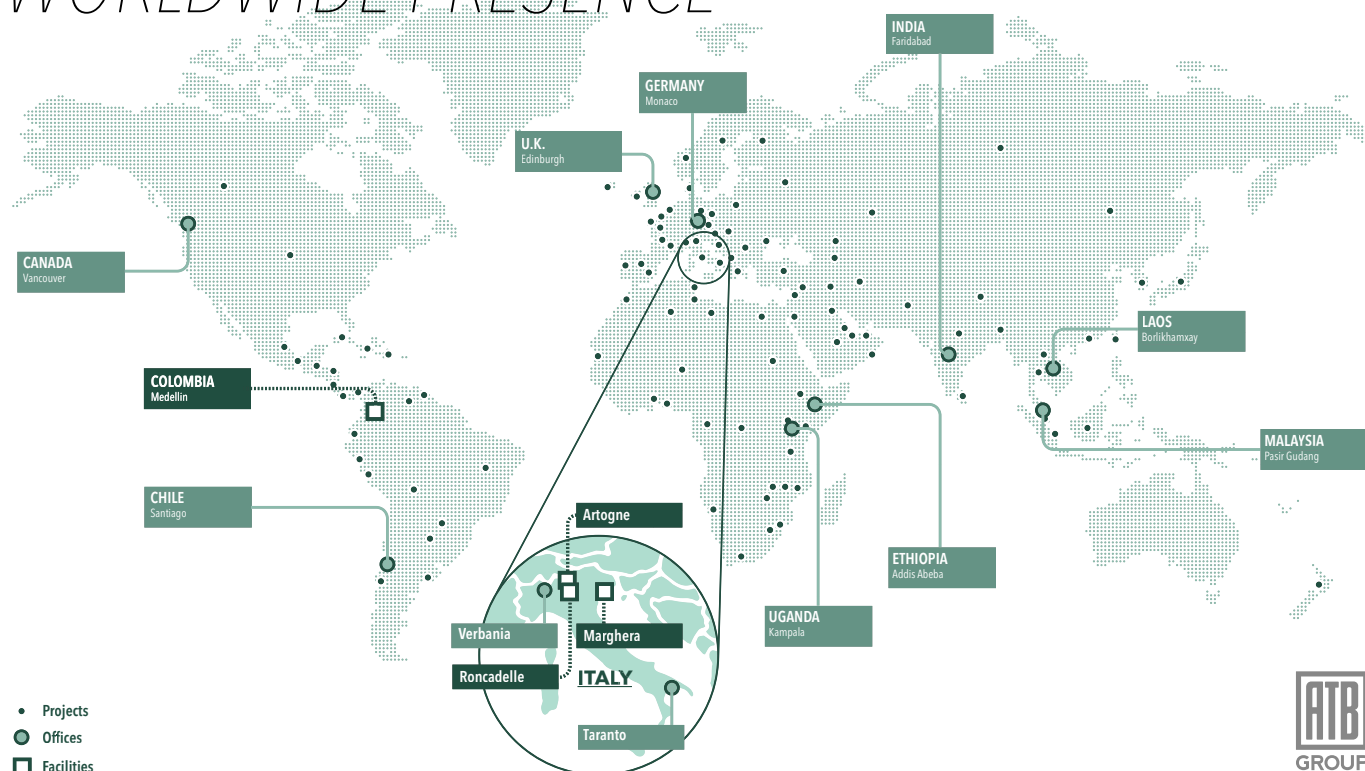
A History for the Future

1959 - Ponte Caffaro (BS), Italy

Assembly stages and a profile of the self-supporting tubular bridge built at Ponte Caffaro, Province of Brescia, for the plant of Società Elettrica Caffaro. More specifically, the picture shows the last section of the intake penstock to the plant.



WORLDWIDE PRESENCE



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