



Implenia

IMPACT

THE IMPLENIA MAGAZINE



FIT FOR GROWTH

How and where Implenias aims to grow profitably following the transformation / Page 6

WELCOME WINCASA!

How the Swiss real estate service provider has enriched our portfolio
Page 12

THROUGH THE ALPS AT 1.4 METRES A DAY

How we've set up and started running the huge construction site in France sustainably
Page 16

PROJECT COMPLETION AT ALTO PONT-ROUGE

How the project team completed a marathon at a sprint
Page 20

URGENTLY WANTED: TALENTS FOR IMPLENIA

All the things we're doing to find and keep skilled employees
Page 23

ISSUE
SUMMER
1/2023

CONTENTS



↑ Milestone at the Gotthard / page 5



↑ The new Sustainability Report / page 11



↑ On-site inspection at TELT / page 16

04 NEWS

05 PROJECT MILESTONES

06 FIT FOR GROWTH

08 WHAT WE CAN DO TO GROW PROFITABLY

10 TRANSFORMATION ON THE PODIUM

11 ALL-ROUND SUSTAINABILITY

12 WELCOME WINCASA!

14 WINCASA AND IMPLANIA IN CONVERSATION

15 DID YOU KNOW?

16 THROUGH THE ALPS AT 1.4 METRES A DAY

20 A MARATHON AT A SPRINT

23 TALENTS FOR IMPLANIA

26 PEOPLE



WELCOME WINCASA!

Property management, shopping centres, mixed-use sites – new skills being brought to Implenia by 1,350 new colleagues (FTE)/page 12

Impressum

IMPACT
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IMPACT ONLINE

You will find lots more reports, videos and pictures of projects, topics and people at Implenia in the digital version of IMPACT.



**“Welcome Wincasa!
We’re looking forward
to a successful
future together”**



It's an achievement we can all be proud of: in just under two years, we have taken Implenia out of crisis and made it the “stock market high-flyer of the hour”. Together, we have completed our comprehensive transformation not only brilliantly, but also in record time. Thank you for all your hard work! Today, Implenia is “Fit for Growth”, i. e. ideally positioned for an expansive future.

A major step in this direction was the acquisition in May of leading Swiss real estate service provider Wincasa – as a legally independent entity within Division Buildings. Our 1,350 new colleagues are not only enriching our team with their diverse personalities; they have also instantly expanded our portfolio with some exciting new skills. A warm welcome to the Wincasa team – we look forward to writing many success stories together.

Behind all our services stand talented and dedicated people. In times when skilled workers are in short supply, it's becoming increasingly difficult to attract enough good people for our projects. We all need to do our bit here. How can we attract talent to Implenia? How must our working environment change so that we are and remain an attractive employer for them. It is vital that we answer these questions well and quickly. Our transformation has proved that we can successfully tackle new challenges. I am counting on your support!

André



NEWS



METRO TUNNEL FOR OSLO

Implenia has won the contract for the K2D Skøyen – Vækerø metro tunnel project. This forms part of the Fornebu Line in Oslo, the largest underground tunnel project in Norway since the 1970s. K2D includes the Skøyen metro station, around 1.2 km of tunnel running beneath a densely populated urban area, and an escape tunnel (Bestum). Implenia is currently building

K2A Fornebu – Lysaker, the first part of this complex tunnel project, which is due to be completed by the end of this year. The team in Norway will begin work on the new project in 2023. Completion is planned for 2025. The order is worth around CHF 115 million (NOK 1.3 billion) to Implenia.

NEW DEVELOPMENT SITE IN NYON

Division Real Estate has acquired an attractive development site in a prime residential location right by Nyon railway station, with excellent public transport links to Geneva and Lausanne. A design plan for the northern station area is now being developed in collaboration with officers at Nyon's municipal authority. The focus is on a residential development that meets the highest sustainability standards. Division Real Estate Division has successfully completed several transactions over the past two years, and has expanded its project pipeline in Western Switzerland through joint development projects with Ina Invest.

IMPLENIA TO BUILD THE E03 BOKNAFJORD TUNNEL

The Norwegian Public Roads Administration has awarded the E03 Boknafjord Tunnel project to a joint venture between Implenia (80%) and Stangeland Maskin (20%). The project involves building a 8.6 km tunnel with two tubes and a 125 m long overground stretch of road. It is closely linked to the E39 Rogfast project, one of Norway's largest infrastructure projects, which is creating one of the longest and deepest underwater tunnels in the world. The E03 Boknafjord Tunnel project has started, and is scheduled to finish in 2030. Implenia is responsible for the excavation and tunnelling work as well as for subsequently fitting out the tunnel's interior.

FOLLOW-UP JOB AT THE GREEN METRO CAMPUS

Metro Campus Zurich is being built for leading data centre provider Green in the Zurich suburb of Dielsdorf. The 46,000 m² project will be completed in several stages. It includes three modern, energy-efficient data centres and a business park. After completing the first data centre, Implenia has now been asked to build the South office building: 3,000 m² of modern office space using high-quality Minergie-standard materials. The building has a climate-neutral heating system based on waste heat from Data Centre M. Construction work on the Metro Campus began at the start of 2023. The South office building and underground car park are now being built in the next phase.



COMPETITION

HOW DOES IMPLENIA BECOME “FIT FOR GROWTH”?

Carefully apply Value Assurance, focus on margins, invoice on time: we can all help to position Implenia even better in future. More ideas? On page 8, we ask six key questions that you can answer on your own or as a team. Send us your concrete suggestions by 31 August 2023. We will send the

winner on a short trip for two to one of our locations – you can choose which one. **Submit your idea now and win!**



NEW METRO TOULOUSE

A joint venture between Implenia (50%) and Demathieu Bard Construction (50%) has won the contract to build Lot 3 of Toulouse Metro line C, which will run from Colomiers to Labège from the end of 2028. Lot 3 includes drilling 3,814 m of tunnel beneath a densely populated urban area, as well as civil engineering work for the construction of four underground stations at a depth of 24 to 39 m, plus three ancillary structures. The consortium has proposed using the “Variable Density Conveyor” method, an innovative tunnelling solution that will help cope with the challenges presented by different soil conditions. The project will last 57 months and has a total budget of EUR 331.4 million.

PROJECT MILESTONES



RECORD-BREAKING ALPINE TUNNEL

The Brenner Base Tunnel is the world's longest underground railway connection for passenger and freight transport. It's not just the scale of this construction project that makes it complex. It's also the short construction time, the tight space, the demanding logistics and ventilation

requirements, as well as the numerous jobs that are being planned and realised in parallel. There are no compromises on sustainability: 8,500 tubbing sections for the tunnel are being made on site, which saves 26,500 truck trips.

GREEN CERAMIC FACADE FOR BERLIN

The spectacular green facades of the new "Berlin Decks" business campus are in a class of their own: In section 1 alone, a surface area of around 3,500 m² will be covered by more than 6,000 ceramic panels of various shapes and sizes. The largest modules are around 1.8 m high, 0.5 m wide and weigh 60 kg. Made from natural raw materials, the ceramic panels meet the building's high sustainability standards, and create an atmosphere that will give future tenants plenty of fuel for fresh ideas.

BREAKTHROUGH AT THE GOTTHARD

A total of four tunnel boring machines are being used to construct the second tube of the Gotthard road tunnel. Since August 2022, "Carla", with a cutting wheel seven metres in diameter, has been drilling the access tunnel to the north fault zone in the Gotthard Massif. On 23 April, she reached her destination 3,950 metres into the mountain – on schedule and without any significant accidents. The access tunnel breakthrough has provided some important pointers for the next stages of the project.

CO₂-NEUTRAL INNOVATION HUB

The EUREF Innovation Campus in Düsseldorf combines different renewable energy sources within an innovative energy concept. For instance, highly efficient heat pumps connected to a neighbouring quarry pond provide heat in the winter and air conditioning in the summer. Digital methods such as BIM and Lean Construction make planning, calculation and execution more secure. And Implenia is working closely with the client and the exclusive partners for technical building equipment to find innovative and pragmatic solutions for the ambitious timetable.

CREATIVE URBAN DEVELOPMENT

The new Bredella neighbourhood, which Implenia is developing over the next couple of decades in Pratteln near Basel on behalf of Ina Invest, will be colourful, lively and above all green: sustainability is a top priority for the transformation of this former industrial park. A wide range of attractive outdoor spaces will contribute to a high quality of life. We will be building the site's future even as it is being used, which makes it very important to maintain a continuous dialogue with all stakeholders.

TOP-CLASS PORTFOLIO

Implenia designs, plans and builds projects that break new ground.

Tallest residential high-rise building made of wood:

Rocket, Lokstadt Winterthur, Switzerland

Europe's longest railway tunnel:

Brenner Base Tunnel, Austria/Italy

Norway's longest railway bridge:

Tangenvika, Stange, Norway

Largest hospital building in Switzerland:

Aarau Cantonal Hospital, Switzerland

One of the deepest metro stations in the world:

Sofia, Stockholm, Sweden

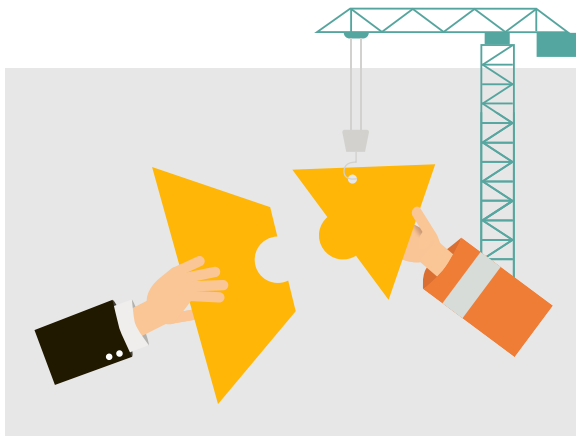
Descriptions of all these projects can be found on implenia.com, and we have shared numerous videos about them on social media, especially LinkedIn, TikTok and YouTube.



The transformation is complete. Our aim now is to grow profitably as a group – for the long-term success of our business and for our customers' great projects. All of our employees have a decisive role to play here. We explore the ways that Implenlia intends to implement this strategic “Fit for Growth” phase.

By working together intensively on all levels we, as Team Implenlia, managed to complete our transformation earlier than planned last year. Thanks to a tighter portfolio of services and our focus on large, complex projects, as well as our application of Value Assurance to all our projects, we are well positioned for the next phase of our strategy: “Fit for Growth”. Our priority is to continue improving profitability rather than focusing on revenue growth. To ensure we achieve this, we are strictly aligning our four strategic priorities to this aim.

PORTFOLIO



- **Securing high-margin business areas through organic and inorganic growth**
- **Sector-oriented specialisation**
- **Integration along the value chain**

We continuously optimise our business portfolio by developing promising, high-margin business areas – through both self-generated growth and inorganic expansion along the value chain, such as the acquisition of Wincasa.

We will continue doing the things we already do successfully: our proven expertise has led us to certain specialisations, including sustainable, standardised real estate products, building construction projects in the healthcare, R&D and data centre sectors, and complex transport and energy infrastructure projects. Increasingly, we are getting involved in early project phases with our consulting and planning services.

With our integrated offering across all four divisions, we are sharpening our market presence in Switzerland and in Germany. In other markets, we continue to focus on tunnel construction and related infrastructure.



IMPLENIA'S INTEGRATED MODEL

Integrated services offer clients decisive added value in large and complex projects. Implenlia is one of the few construction and real estate service providers to provide all services from a single source through its four divisions. A close network of the best internal and external experts for each project work together from the start, involving customers from an early stage in partnership-based cooperation models. This video shows how this works.



WHAT CAN WE DO TO GROW PROFITABLY

We can only be “Fit for Growth” together. The way we work together as a Group has as much influence on our goals as the quality of our processes or the way we develop personally. But what does that mean in concrete terms? What can we do to support profitable growth? We ask six key questions that you can consider individually or as a team. We don’t want your ideas to stay hidden, so we’re holding a competition – and we’re excited to hear your answers!

1 CUSTOMER BENEFITS

How do we create real added value for our customers?

What services do we provide for our internal and external customers? Where do we create genuine added value rather than a service anyone could deliver? Where is the market heading? And what will customers be willing to pay for in the future?

2 COOPERATION

How do we strengthen teamwork beyond our own team?

How do we grow together across divisions and function to become an even tighter Team Implenía? Where is cooperation across Divisions and functions working well in your area? Where isn’t it working? And why is that?

3 PROCESSES

How do we work even more efficiently together?

Which processes, systems and methods help me/us as a team to work efficiently and carry out our projects profitably? Where can we find further room for improvement?

4 INNOVATION

How do we find innovative new solutions and products?

Well established or stuck in the mud? A fresh wind is good and enriches the organisation. What specific innovation could make our work easier or make our customers’ hearts beat faster? The Innovation Hub provides some good tips on how to be innovative in a targeted manner.

5 PERSONAL DEVELOPMENT

How do we keep ourselves “Fit for Growth” personally?

The organisation should be constantly improving and reinventing itself, and so should each and every one of us. How do you personally want to grow at and with Implenía? And what do you need to ensure this happens?

6 RECRUITMENT

How do we get committed new employees on board?

We need the right talented people for our projects. How can you help them find their way to Implenía? Do you talk enthusiastically about your job? Have a think about who you could win over to our team!

6 KEY QUESTIONS

**COMPETITION
HOW DOES
IMPLENIA BE-
COME “FIT FOR
GROWTH”?**

Get involved: Answer one or more of these questions and send us your ideas! We are giving away a trip for two to the person with the best answers.

See page 4 for more details.



PROFITABLE GROWTH



- Value Assurance
- Operational excellence
- Process optimisation

Our goal is to grow profitably in all our divisions, so we automatically exclude projects that do not add up for us, and we monitor profitability throughout the entire project period. We do this by means of Value Assurance, project controlling, contract management and operational excellence – which means focusing our processes on benefiting the customer along the entire value chain. We also focus on liquidity, which we maintain by invoicing promptly during the project.

Learn more about Value Assurance on page 15 and online.

INNOVATION



- Industrialisation
- Digitalisation
- BIM
- Sustainability

We develop and implement innovative solutions that bring sustainable added value to our clients' projects. We set new standards in industrialisation, digitalisation, BIM, and sustainability.

Implenia gets its innovative strength from various sources: from the open innovation generated by its connections to start-ups, universities and technology companies; from its investments in and acquisitions of SMEs, start-ups and scale-ups that promise new, scalable business models; and from the intrapreneurship of its employees.

Often – and this is the ideal scenario – innovations are driven by the operational business. Examples include the development of an HS-EPS compression element for tunnel construction, or a calculator that calculates the break-even threshold for energy-related modernisation measures in building construction.

TALENT & ORGANISATION



- Cooperation and Employee Engagement
- Talent Management
- Recruitment Excellence

We rely on our teams' skills. At Implenia, the best employees work for interesting customers and on exciting projects. We keep this up by creating an environment in which our employees feel good and can develop further. Modern working models and a culture that promotes diversity are just two examples of our commitment. We also support our talented people with specific training and career paths, and we offer our managers targeted leadership programmes.

We aim to fill new and open positions with the best candidates and do this through excellent recruitment, which also requires your help.

Based on our organization, we promote collaboration across divisions and functions. Implenia is one of the few construction and real estate service providers that covers all services from a single source. Together, we want to use this strength to create added value for our customers.



TRANSFORMATION ON THE PODIUM



Speaking at the Global OPEX Conference, Mark Lauzon explained how Implenia's transformation has helped us regain the trust of our employees and investors. The international jury was so impressed that they awarded us 1st prize in the "Best Cultural Transformation" category.

Mark, you didn't have long to talk about our transformation at the Global OPEX and Business Transformation Conference. What did you say?

I told the audience how we managed in just under two years to lead our company out of crisis and simultaneously have a positive effect on the share price. A short summary of our transformation goes like this: we implemented a new strategy and used change measures and good communication to win the confidence of our employees and help investors believe in Implenia again. This success was reflected in media reports: Headlines such as "Implenia shares in free fall" in 2020 were replaced in 2022 with things like "Implenia is the stock market high-flyer of the hour".

What prompted the jury to award Implenia 1st prize in the best cultural transformation category?

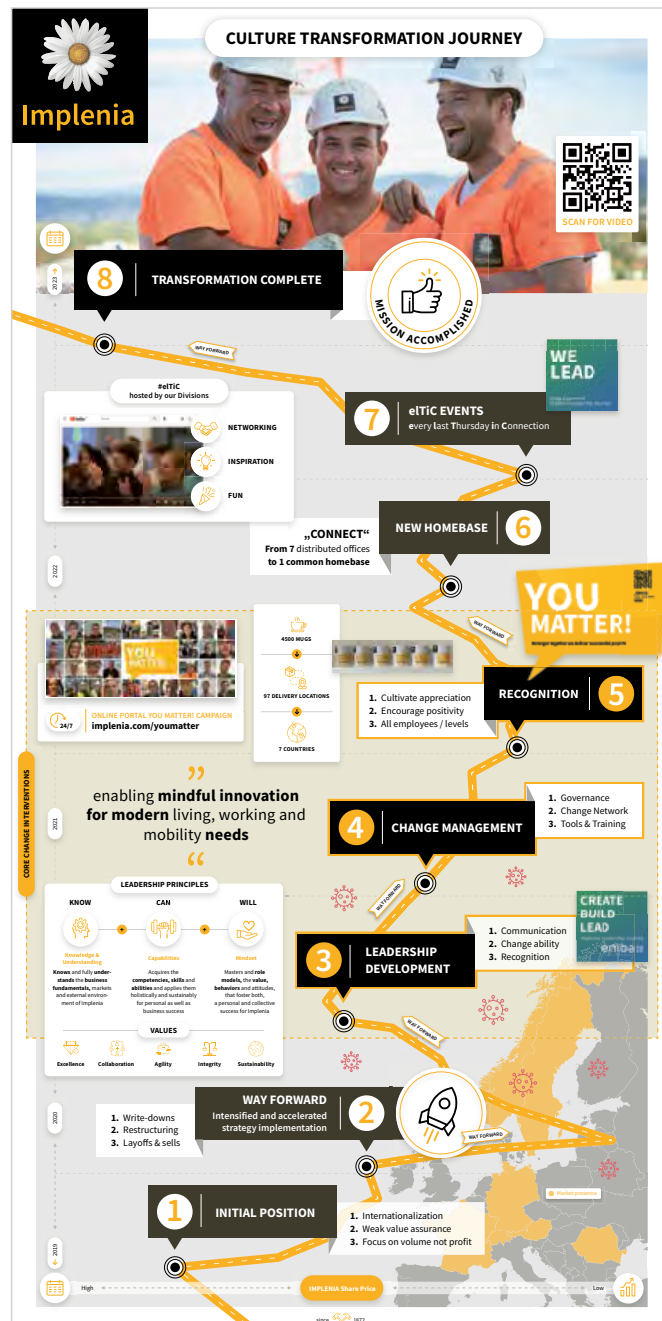
Our transformation was not simply about making our processes a bit better. We had to take a lot of difficult decisions, let go of people and adjust our portfolio. There weren't many who believed in the transformation at the start; but ultimately we managed to write a success story.

Which measure contributed most to this success?

The transformation was a leadership responsibility. Management had to work out how to take the employees with them and convince them that the chosen path would be successful. And it managed to do this.



↑ Mark Lauzon, Change Manager, Civil Engineering



How has the culture changed?

We completely redefined our culture and in doing so came closer together. There is now a greater mutual understanding – including across our divisions.

How did you feel accepting the award?

It made me very proud. The prize is a vindication and a reward for all the hard work we put into the transformation.

ALL-ROUND SUSTAINABILITY

Our new Sustainability Report, published on 27 April, includes numerous key metrics, as well as practical use cases and a status update on our sustainability goals. What else has been going on in the world of sustainability?



ESG REPORTING

“ESG” stands for environmental, social & governance. ESG regulations in our markets have steadily expanded over the years, placing ever greater demands on the company, so we set up a working group to help us meet these requirements. The team’s task is to prioritise and address the various new regulations in our markets, define processes, make sure the necessary data is collected and, if necessary, adjust our reporting accordingly.

An overview of the relevant regulations for Implenia, what lies behind them

and when they come into force can be found on our Intranet. There is also a short presentation there explaining the distinction between sustainability and ESG.

SUSTAINABILITY ACADEMY

In 2022, we launched the Sustainability Academy, an e-learning series designed to teach employees the key fundamentals of sustainability. The Sustainability Academy consists of e-learning sessions lasting 45 to 60 minutes. It is accessible via eCampus to all employees with an Implenia e-mail address. Four different modules are currently available, each covering one of our twelve Group-wide sustainability goals: environmental protection, CO₂ reduction, circular economy, and sustainable development and implementation. More information on the Intranet.

WHAT NEXT?

The sustainability community at Implenia will continue to address many important issues over the months to come. The focus is on our decarbonisation strat-

SUSTAINABILITY REPORT

- How well are we achieving our sustainability goals?
- What is the detailed composition of our CO₂ footprint?
- How many compliance cases were reported last year?
- What is the proportion of women working at Implenia?
- Where have we installed solar power systems at our sites, and how much electricity do they produce?

All this information and much more besides can be found in our latest Sustainability Report.



egy and on capturing and reporting our Scope-3 emissions. We’ll also be looking soon at how to integrate more and more elements of the circular economy into our work, and how to implement increasingly stringent regulations. Please send questions and comments to sustainability@implenia.com.

WELCOME



wincasa

Wincasa has been part of Implenia since the acquisition deal was closed in May. We're really looking forward to pooling our expertise to create a unique, integrated offering for our customers. Wincasa will be managed as a legally and operationally independent unit – Wincasa AG – within Division Buildings. The strong and well established Wincasa brand will remain in place. Wincasa's subsidiary streamnow AG is also being kept as a legally independent company with its own streamnow brand. The existing management team and CEO Oliver Hofmann will seamlessly continue to run Wincasa's successful business.



WHAT DOES WINCASA DO?

Wincasa is Switzerland's leading integrated property service provider. It accompanies properties through their entire life-cycle, from planning, construction and management to revitalisation and repositioning. Other core competencies: shopping centres, sustainability issues, facility management and the design of digital solutions and apps via Wincasa's PropTech subsidiary streamnow.



REAL ESTATE MANAGEMENT

Wincasa is responsible for operating 250,420 properties, about 30% of them apartments. The team does various jobs for its clients, including managing owner and tenant portals, and handling property accounts.

STRATEGY & SUSTAINABILITY

Long-term value retention and optimised operating costs are key to a property's profitability. Wincasa aims to boost and optimise the profitability of real estate and operational facility management over the long term.

ASSETS UNDER MANAGEMENT: CHF 81 BILLION

**CUSTOM REAL ESTATE
CONSULTING**

Wincasa will find the right offer for every site. Its team of specialists will come up with exciting ideas to reposition vacant properties and sites with changing requirements. Evolving patterns of consumption, living and working are a challenge for the real estate industry. Wincasa takes on individual challenges, develops new marketing and property management solutions and implements them with its clients – within an existing mandate or as an individual solution.

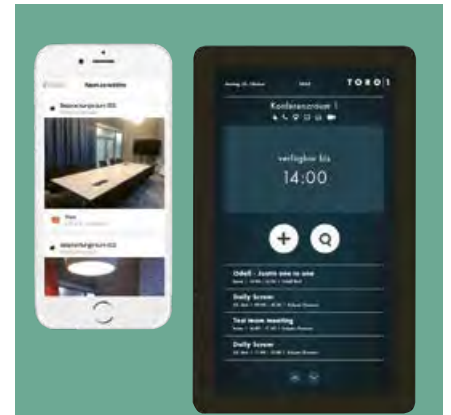
PROPERTIES UNDER MANAGEMENT: 250,420

CONSTRUCTION MANAGEMENT

Wincasa's specialists in construction/contractor services coordinate and support client construction projects from A to Z. They represent customers' interests in project management contracts and contractor service mandates – across all phases of a property's life cycle. They work on behalf of clients to generate maximum customer benefits and create added value. Services include: contractor services, project and construction management, analyses, due diligence, project controlling, warranty management and strategic consulting.

**CENTRE & MIXED USE SITE
MANAGEMENT**

Wincasa operates around 85 shopping centres and some 35 mixed-use sites throughout Switzerland. It helps customers with everything from planning a centre to site selection and construction right up to opening; it also ensures proper operation, and takes care of tenants and their customers by providing a variety of services, such as multi-owner association management and community management.

**STREAMNOW**

streamnow is Wincasa's in-house PropTech subsidiary. streamnow digitalises real estate, as well as planning, designing, realising and operating digital solutions for the real estate industry. It combines web and app technologies as well as digital signage solutions – hardware included. This applies to existing properties as well as to new construction projects in all sectors: from residential to commercial to mixed-use buildings and sites.

1,350 EMPLOYEES (FTE)

WINCASA AND IMPLENIA IN CONVERSATION



It's been official since May 2023: leading Swiss real estate service provider Wincasa is being integrated into Implenias Division Buildings as a legally and operationally independent unit. This brings 1,350 Wincasa employees to the Implenias Group, and opens a new chapter in the history of the two companies. So what made Implenias go looking for a partner? And how did this partner find its way to Implenias? And what opportunities are there for employees on both sides?

Oliver Hofmann, CEO of Wincasa, and Jens Vollmar, Head Division Buildings and new Chairman of the Board of Directors of Wincasa, tell us how the connection came about, what the companies value in each other and what the teams on both sides can expect. You can listen to – or read – the podcast online.



Give your eyes a break and find out what's going on through your headphones – on the way to work, at work or while you're taking a stroll. In our new podcast format we are highlighting the issues and developments that shape our working environment, as well as giving our employees an opportunity to speak.

Are there any topics that you would like us to cover, or any guests you'd like to hear?

Write to us at:
redaktion@implenia.com

We look forward to a lively exchange.

DID YOU KNOW?



AUTOMATED BOLT INSTALLATION IN THE TUNNEL

Lying 100 metres below the surface of the earth, Stockholm's Sofia underground station is the second deepest train station in the world. Once the rock has been blasted out of the mountain, the tunnel walls have to be made permanently safe. This is done by installing rock bolts. In collaboration with the client and machine supplier Epiroc, Implenla is currently testing a new mechanised drilling rig that has been developed especially for this task.

It brings impressive advantages: The rig automates every step of the rock anchoring process: it drills the hole precisely, injects the cement and then places the bolt – a steel rod – into the borehole. The entire work is carried out by a single operator, thus greatly reducing the required

personnel and machinery compared to manual bolting. The system also facilitates accurate documentation of the bolts that have been installed.

"It's like a revolution. I need four minutes for each anchor – a huge difference from before," explains Kalle Pellinen, who operates the drilling rig. "Manual bolt installation is difficult: three to four workers drill the holes, mix the cement mortar, fill the hole, and manually insert the bolt. This often leads to back and shoulder problems, but also to accidents. I have had cement splash in my eyes several times. Since we introduced mechanical rock bolting, there have been no incidents and not a single accident," says Kalle Pellinen. "This automated bolting system makes

the working environment much safer and better."

Between October 2022 and March 2023, the bolting machine, operated by just one person, drilled and installed more than 2,000 bolts. Everyone involved is happy with the results so far. The pilot project will be evaluated at the end of the year. The idea is to use these automated drilling rigs throughout the whole construction industry.



VALUE ASSURANCE FOR GUARANTEED PROJECT SUCCESS

During the bidding phase, Value Assurance helps us choose and pursue which of the many possible projects are strategically and financially attractive for us. When a project is implemented, the Value Assurance process helps us classify risks and opportunities throughout the project and to manage things accordingly. The method makes a central contribution to our profitable growth. On IMPACT online, Axel Metzger, Head Value Assurance, explains how the process works, how it meets the divisions' different needs and how it can permanently improve customer relationships through proactive, data-based risk management.

BBV-MULTIBOND® TRIPLES ANCHOR FORCES

The BBV-multibond® strand anchor developed by BBV Systems transfers loads via two or three staggered sections into the surrounding ground. This provides up to three times greater anchor load-bearing capacity than conventional strand anchors. There's no need for complex grouting – the anchor can be clamped and tested with conventional grouting, which makes handling easier. Fewer anchors are needed to secure the excavation pit, meaning there can be greater distances between anchors or fewer anchor layers. This leads in turn to savings in materials, construction time and work processes – good for the environment and good for the wallet.

MORE ENVIRONMENTALLY FRIENDLY THANKS TO SLUDGE RECYCLING

Sludge is a mixture of water and solids produced as a by-product of wastewater treatment. The team at Implenla Norway is currently testing two processes aimed at recycling sludge and thus reducing waste significantly. Working like a coffee filter, the treatment process removes water from the sludge, leaving only dry matter. The sludge, which was previously treated as waste, can then be recycled by extracting it and transporting it to the disposal site. The dry matter left behind after the sludge has been filtered is used as side filling. Results so far show that this has significant sustainable value.



THROUGH THE ALPS AT 1.4 METRES A DAY

Implenia is building Lot 3 of the Mont-Cenis Base Tunnel for Tunnel Euralpin Lyon Turin (TELT). The base tunnel, which will be 57.5 kilometres long overall, forms part of the Lyon-Turin railway line. We find out why the site has no tunnel boring machine, but does have, for example, the concrete spraying robots used in conventional tunnelling; and we see just what an important role sustainability plays here.

The Mont Cenis Base Tunnel will bring France and Italy closer together faster: The tunnel lies at the heart of the new high-speed rail link between Lyon and Turin – a line that forms part of the 3,000-kilometre

Mediterranean corridor between Spain and Hungary. This is in turn part of the TEN-T trans-European transport network being promoted by the EU. Journey times will be cut considerably thanks to the two 57.5-kilometre-long tubes of the Mont-Cenis Base Tunnel between Saint-Julien-Mont-Denis in Savoy and Susa in Piedmont. With a planned maximum speed of 220 to 240 km/h, passenger trains will take only 1.5 hours rather than the current 3.5 to complete the journey. Freight trains will travel at between 100 and 120 km/h.



↑ Overview of TELT construction site C008



IMPLENIA HELPS TO BUILD EUROPE'S FUTURE RAIL NETWORK

“We are proud that we can help plan and build such an important part of the future European rail network,” says Erwin Scherer, Global Head Tunnelling at Implenia. Implenia was commissioned by TELT (Tunnel Euralpin Lyon Turin) in 2021 to build Lot 3 together with joint venture partners NGE, Rizzani De Eccher and Itinera SpA. “This type of construction project allows us to demonstrate our many years of experience and extensive skills in all areas of major infrastructure projects.” The project aligns with Implenia’s strategy of planning and implementing complex large-scale tunnel construction projects and associated infrastructure in various markets.



↑ Concrete is sprayed following installation of a centring frame

PROJECT C008 TELT – SAINT-JULIEN-MONT-DENIS

5.6 KM	of tunnel to excavate
1,018 M	of umbrella vaults
1,078	centring frames to install
11	safety plants
600,000 M ³	groundworks
2,700 M ²	acoustic hangars
OVER 127,000 M ²	construction site facilities
5 YEARS	construction time
EUR 228 MILLION	size of contract
MORE THAN 300 PEOPLE	on site at peak times

PREPARATORY WORK COMPLETE

In order to build the tunnel entrance at Saint Julien Mont Denis, the Implenia-led joint venture set up camp in a sustainable wooden construction office. The project involves building two 2,839 m long tubes in the direction of Italy, along with 11 safety crossings and 140 m of cut-and-cover tunnel. Preparatory work, which began in November 2021 and lasted about a year, is already complete. A concrete mixing plant and water treatment plant have been installed, as well as 794 jet grouting columns to improve the mechanical properties of the ground in the alluvial zone. A “Parisian wall” was built to enable excavation through the soft ground. 90,000 tonnes of material were dug out for the pre-cut and the portal zone – a total of 600,000 m³ for the entire project.

CONVENTIONAL TUNNELLING INSTEAD OF A TUNNEL BORING MACHINE

Things really got going after the ground-breaking ceremony in December 2022. A loose ground tunnelling technique with a pipe screen is being used for the first section of about 500 m. This involves drilling a “screen” of metal pipes and driving them into the ground to support the ground before excavation begins, plus the installation of temporary support in the form of steel arches made of HEB profiles and fibre shotcrete. Anchors and drainage boreholes are used to stabilise the face, i.e. the foremost part of the tunnel where the rock is removed and the cavity is made. This procedure temporarily secures the freshly made tunnel before the in-situ concrete inner shell is installed.





↑ Maintenance on the concrete spraying robot that applies the concrete made in the cement mixers.



Machine engineer Philippe Liotard explains what equipment is needed for this initial section: “Conventional tunnelling uses various types of equipment. Excavation is typically done by tunnel diggers or conventional diggers fitted with demolition hammers or hydraulic cutters, wheel loaders with side tipping buckets, and dump trucks to transport the excavated material. Drilling rigs, anchors, shotcrete pumps and teleloaders are used underground.”

By 30 April 2023, the joint venture had excavated more than 300 m on both routes, equivalent to an average of 1.40 m per day. Once the 509 m loose ground section has been excavated, the tunnel will be made by blasting, which will make for faster progress.

A SUSTAINABLE CONSTRUCTION SITE

Sustainability is an important aspect of the project. As part of the trans-European network, this new Alpine rail transversal will help shift a lot of freight from road onto rail, which will have a significant positive impact on the environment. What is more, the construction site itself is focused on sustainability. Various options were proposed to the client to reduce the CO₂ footprint. These related to the design and construction of our equipment, the consistent use of Lean in project management to ensure the speed of progress, as well as the control and monitoring of our consumption. Water and electricity consumption is measured in real time, for example, and 80% of the water used is recycled. The electricity on site is 100% from renewable sources, while light and ventilation are remotely controlled

↓ Philippe Liotard, materials manager at TELT's CO08 construction site



through a centralised technical management (CTM) system to reduce consumption by more than 30%.

SHARING INFORMATION

Digitalisation is also helping the project keep to the planned rate of progress. The joint venture uses an innovative, participatory approach, allowing it to work more fluently, react more quickly, increase productivity and improve quality. This is done by centralising, analysing and sharing information, and making it available to all the different stakeholders anywhere, any time.

TAKE A TOUR ON TIKTOK

TELT in focus: If you go on TikTok, colleagues will show you the concrete laboratory, explain the noise protection measures, take you to the sustainably built construction offices and guide you into the new tunnel. The six parts of this mini-series are labelled “TELTC008”, which is the name of our construction site. You can also find the videos on the Intranet.



↓ Preparatory work involved building a water treatment system.





A MARATHON AT SPRINT PACE

The Alto Pont-Rouge project in Geneva will be handed over to the client in mid-2023. The team has had to put in a huge performance to make sure everything is done in time. Fortunately, the ambitious group loves this kind of challenge.



Labour-intensive surfaces: there is a lot of manual work to be done at Alto Pont-Rouge.

It's a huge construction site: 35,000 m² across 15 floors. Alto Pont-Rouge is being built right next to the Lancy-Pont-Rouge train station, less than two kilometres from Geneva city centre, in the immediate vicinity of three other large buildings that Imperia has built in the new neighbourhood as a total contractor.

During our visit, the final work is in full swing. Imperia colleagues can be seen all round the building, setting paving stones and fixing joints. On their knees. "Hard work," one groans.

This is symbolic of a project that has not always made it easy for the team. "We started behind schedule. It's been a race against time right from the beginning," explains project manager Jonathan Blin, a keen athlete who goes for a run during every lunch break. An ambitious choice of materials for the building also made things more difficult. "The facade was developed specifically for this project. Unfortunately, we had to make improvements on the side facing the station for safety reasons: if a freight train explodes, the glass has to hold. This detail was not envisaged in the planning and has led to further delays."

Flexibility is required in such circumstances. It's never been a case of doing

Project Manager Jonathan Blin (left) is completing this construction marathon in record time



everything in a nice, neat order here. Many processes have had to run in parallel, in a very tight space without an on-site storage area and with only one driveway. “If the concrete machine was standing there all day long, there’d be no way of delivering the facade elements on time,” explains Davy Koudougou, who came to Alto Pont-Rouge from another Implenla project two months ago.

It takes a lot of energy, ambition and modern technology to master this level of complexity. “I’ve been using Lean construction methods for years,” explains project manager Jonathan Blin. “We’ve also worked very closely with our BIM specialists and we’ve developed, among other things, a perfect digital model for all the technical building services. This will significantly simplify management over the life cycle of the building – all the technical installations can be accessed via tablet. This innovation sets a new standard.”

The building’s ambitious sustainability requirements have also spurred the team on to achieve great things. “The contract requires SNBS Gold certification, but at the moment it looks like we could even reach the next level, Platinum,” says Jonathan.

His approach is clear: challenges are there to be met. “I love complex projects,



↑ A new, standard-setting digital model for building services was developed in collaboration with the BIM team

↓ Close to the train station, which means special requirements for the facade





↑ Opportunity for career starters: young talent can quickly take on a lot of responsibility (top); Thomas Davignon was recently promoted to site manager (bottom)

short construction times, high execution standards,” he tells us. “The hardest thing is finding experienced workers who can get fully stuck in.”

At Alto Pont-Rouge, Jonathan’s core team has systematically developed talented young workers – such as Thomas Davignon, who was recently promoted to site manager. “This project is extremely demanding. I’ve learned a lot in this team and taken on a lot of responsibility early

on. Perfect for someone who quickly gets bored and constantly wants to develop,” enthuses Thomas. His most positive experience? “I knew that the project managers were always on hand to help me in an emergency. It’s a fantastic opportunity – I love this construction site!”

Thomas’s days at Alto Pont-Rouge are numbered. We visited at the point when the team was finishing things off ready for the handover to the client in mid-2023. Project Manager Jonathan Blin is proud of what they have achieved: “As a strong team, we have managed to make the seemingly impossible possible – despite all the challenges. They have only been able to do this thanks to the dedicated efforts of the entire team. Thanks to everyone!”

THE ALTO PONT-ROUGE PROJECT

A new urban centre with offices and commercial premises, restaurants, leisure facilities and public areas is being built around the Lancy-Pont-Rouge station in Geneva. The Alto Pont-Rouge project is part of this development: with a usable area of 35,000 m², spread over 15 floors and three underground parking levels, this office building will also include smaller units for grocery stores and restaurants. Located on the B3 site, it completes the Pont-Rouge office/business complex in Le Grand-Lancy.





TALENTS FOR IMPLENIA:

Lots of exciting projects, but not enough employees to implement them? The shortage of qualified employees in Europe has reached record levels. We look at what Implenía is doing to attract skilled people and retain them for the long term.



JOIN AN INTEREST GROUP

Implenia wants to have a diverse corporate culture. One of the initiatives detailed in its new “Policy for the Promotion of Diversity, Equality and Inclusion” envisages the establishment of a vibrant community of Employee Resource Groups (ERGs). These offer their members the opportunity to network and exchange experiences, and ideally also to advise management, with the aim of developing strategies and programmes to improve diversity and inclusion within the company.

Two ERGs have been created so far: Women@Implenia and Young Generation.

Want to get involved with one of these or with a new one? Heather Steele, Global Business Partner Civil Engineering, explains how this works on IMPACT online. Get inspired and actively help create the environment in which you would like to work!



The shortage of skilled workers is getting worse, and in the medium term it is becoming a big challenge for the success of our projects. The situation is set to deteriorate further over the next few years in many parts of the Group, as older employees reach retirement age. When they go, we'll lose not only their labour but also their know-how. The issue couldn't be clearer: attracting and retaining “Talents for Implenia” is a top priority. How are we tackling this challenge?

FOCUS ON RECRUITMENT

The answer is: on multiple fronts! One of these fronts is recruitment. We do whatever we can to be visible in the labour market, and we use a variety of tools to reach potential new colleagues. Social media plays an increasingly important role here. “LinkedIn is the most important channel for recruitment,” explains Silvan Merki, Head Marketing/Communications. “Meanwhile, TikTok is being used more and more widely. We're getting a lot of positive reactions to videos of employees and our fantastic projects. What is more, once the videos have been published, we often receive good applications.” Social media thrives on networking. Help us find new employees by sharing Implenia posts on your social networks and forwarding them to people you think might be interested.

One channel that Implenia wants to use much more intensively is word-of-mouth. Good people often know other

good people. Now's the time to bring these friends and acquaintances to Implenia. “The ‘Employees recruit employees’ programme has been running for years,” explains Chief Human Resources Officer Claudia Bidwell. “Now we all need to step up: Take a regular look at our situations vacant and actively get in touch with people you know if you think they could be a good fit. In most cases, there are rewards for anyone who manages to find new employees for Implenia. So it could be worth your while financially as well.”

AN ATTRACTIVE ENVIRONMENT

But Implenia doesn't just need new employees. It's just as important to hold on to existing colleagues for the long term. In many cases, we can do this by continually winning attractive projects and offering exciting jobs and responsibilities. In fact, many – especially young – colleagues say that their main motivation for working at

Implenia is the opportunity to learn on exciting projects.

In addition to the actual job, people's decision to join or stay with Implenia is also influenced by the working environment. Our ambition here is to be a diverse, fair and inclusive company and to offer all employees a modern working environment in which they feel they belong and where they can do their best every day. To this end, Implenia published its first Diversity, Equity and Inclusion Policy (DEI Policy) in May. This should help ensure equal opportunities for each individual, reduce discrimination and prejudice, and make the working environment more attractive for all employees.

Issues such as achieving a good balance between work and family life, for example, affect both mothers and fathers, and are gaining in importance. Flexible working hours and opportunities to work from home make life easier in many places.

KICKBOX CAMPAIGN “TALENTS FOR IMPLENIA”

As part of our internal innovation programme, we asked you in the first half of 2023 to suggest how we could tackle the shortage of skilled workers. We wanted ideas about recruitment and Implenia's positioning in the labour market, but also about how to shape our working environment so that Implenia remains attractive as an employer in the long term. We re-

ceived a large number of suggestions, which were presented to the expert jury in June.



However, this is not always easy to do in the hectic project business or on construction sites. Our challenge here is to work on finding solutions.

The working environment at Implenía is very strongly dominated by men. Female employees are massively under-represented on construction sites generally, but also – and especially – at management levels. Christian Späth, Head Civil Engineering, believes that Implenía lets a lot of promising talent slip through the net. “We need to attract talent from the broadest possible spectrum. If women write us off as a male domain, it’s our loss,” he says. In addition to ambitious goals for increasing the proportion of women in his division, therefore, he is also backing “Women@Implenía”.

THE YOUNG AND THE EXPERIENCED

Another important target group, whose needs are often overlooked, is young people. Only 16% of our team are under 30 years of age. “We have many promising young talents in our teams who want to work on more than just one project,” says Claudia Bidwell. “We are always organising transfers to other markets in an attempt to satisfy their desire for knowledge and new experiences. The goal has to be that they stay at Implenía.”

As well as young employees, it is becoming increasingly important to hold on to experienced workers for longer – sometimes even beyond retirement age. This works very well in some cases. Initiatives such as the “Senior Expert Pool” aim to institutionalise this model.

These are just a few of the ways in which Implenía is seeking to ensure that we have enough employees in future to keep implementing our exciting projects. Do you have any suggestions or ideas how we could make our work environment even more attractive? Then get involved in an interest group or contact us via the Kickbox platform.



WE ARE IMPLENIA

With Wincasa becoming part of the Implenia Group in May, more than 9,000 people from an incredible 92 nations in a wide variety of roles are now helping us successfully design, plan and build the world of tomorrow. Meet some of our colleagues.



“I WAS LUCKY ENOUGH TO BE ENCOURAGED AND PROMOTED REPEATEDLY”

Gabriella Gassmann has worked in the real estate sector since completing her commercial apprenticeship. She discovered how varied the industry could be as she progressed through the career that took her to Wincasa eight years ago. As Head Operations Services and Projects in the Property Management unit, Gabriella Gassmann now leads and supports two teams. It's a job where she can get a lot done and make a real difference.



“I LOVE THE WORK ON THIS HUGE AND CHALLENGING CONSTRUCTION SITE”

Davy Koudougou, site manager at Implenia's Alto Pont-Rouge construction site in Geneva, is an architect by training. He loves demanding large-scale projects and can well imagine working for Implenia in another region and gaining more new experience.



“WE ALL BENEFIT IF UNDER-REPRESENTED GROUPS DO BETTER”

Implenia wants to have a diverse corporate culture. Heather Steele, Global HR Business Partner Civil Engineering, explains why it's worth investing in the well-being of under-represented groups and getting involved in an Employee Resource Group (ERG) committed to their interests.



“CONSTRUCTION EXPERTISE FROM ISTANBUL”

As the skills shortage worsens, it is increasingly important for Implenia to attract talent from all over the world. Abuzer “Kerem” Aksu, a structural engineer for Implenia in Munich, came from Turkey to join us. He applies his expertise in subway construction to infrastructure projects throughout Europe.



“I WANT TO KEEP DEVELOPING”

Aurélien Dotte, a geologist at the major Alpine tunnel project TELT, and a passionate problem solver, explains why he likes to get out of his comfort zone, why he believes excellence is crucial and how a cross-disciplinary approach to the profession makes the whole team more efficient.



ON A 3D MODELLING MISSION

André Wesch's enthusiasm for Building Information Modelling (BIM) goes back to his time as a student intern: he started work at Implenia in Germany five years ago during his masters studies. Since then, he has invested a lot of time and energy helping on-site teams complete infrastructure projects with the aid of 3D modelling and the associated data management systems.



WORKING FAR FROM HOME

Born in Denmark, Louise Lund has studied and worked in Sweden, Australia and England. Since starting work there in March 2019, she's been the only Implenia employee in the civil engineering team – and feels very comfortable: “Nobody in this group cares who comes from which company. We are a team,” she explains.



A LAST PROJECT BEFORE RETIREMENT

Hermann Hirsch has been building underground train lines in inner-city locations for decades. As a geotechnical site manager at the Marienhof construction site in Munich, he is building an underground station in the middle of Munich at a depth of 40 metres. He's enjoying having bakers and book stores right next to his workplace.



“IT MAKES ME PROUD THAT THIS BRIDGE WILL SURVIVE ME”

Dominik Sieber, site manager at the Pont Neuf project in Aarau, arrived at his current job via quite a detour. After graduating from high school and studying civil engineering at the ETH,

he worked for five years in a planning office. He then switched to work on construction sites. “I like the more roll-your-sleeves-up culture you get on site,” Sieber says. “You meet everyone on a construction site, from contract workers to clients.”

THE PEOPLE BEHIND OUR PROJECTS



“I LOVE BRINGING TALENT ON BOARD”

Thomas Hinderling heads the Centre and Mixed-Use Site Management department at Wincasa and he loves the opportunity to develop new services such as “Community Management”, which was launched in 2023. He also enjoys attracting talent to the company. Which is great, because Wincasa's rapid growth means that it is constantly trying to find suitable and motivated colleagues.



pratar du svenska?

a flet shqip?

¿hablas español?



snakker du norsk?

дали говориш српски ?

sen Türkçe konuşmayı biliyor musun?

falas português?

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