SUSTAINABLE DEVELOPMENT REPORT

2016

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arjowiggins graphic papers
A MESSAGE FROM MANAGEMENT

Agnès ROGER
General Manager of Arjowiggins Graphic
In 2016 we certainly delivered on our Corporate Social Responsibility principles.

For Arjowiggins Graphic, the process of formalising its CSR policy provided an opportunity to place its vision and commitments in the medium-term.

In the interests of expanding the scope of our everyday practice over the last few years and laying the foundations for the future, we wanted to share the priorities and goals that are not only our own, but also form part of the strategy of our parent company, Sequana.

These priorities are based on three key principles:

**PARTICIPATION**

Arjowiggins Graphic is an active participant in the circular economy, working alongside its social economy partners to implement a virtuous cycle for recycled paper: waste reduction, waste paper recycling and job creation in the waste collection sector.

Recognising that we require a strong and motivated team if we are to face up to these challenges, we are maintaining our efforts on continuing education, on-the-job training and gender equality in our teams.

**INNOVATION**

We are continuing our research and development efforts in order to better anticipate and respond to our customers’ needs and adapt our products to technological developments.

We are improving communication channels with our major suppliers to help us to share our values and work jointly to identify the most environmentally responsible solutions.

**IMPROVEMENT**

In each of our businesses, in everything we do, we are constantly seeking opportunities for progress and to implement best practices.

One way in which we have demonstrated this commitment was in late 2016, when we renewed the certification of our energy management system (ISO 50001), which in 2013 was the first of its kind to be issued to a multi-site organisation.

These are all projects and initiatives that fulfill our CSR commitments and set out a roadmap for Arjowiggins Graphic to meet the expectations of our stakeholders as we move towards 2020.
PROFILE

N°1 on the recycled paper market in Europe, Arjowiggins Graphic is also the 6th biggest european manufacturer for coated papers in terms of volumes and the leading european manufacturer for recycled graphic paper.

The Arjowiggins Graphic papers, coated and uncoated suit offset printing and digital printing technology. Based on virgin or recycled fibres, with white or natural color with a brilliant finish, semi-matt or matt, these papers are designed for publishing, advertising and print communication.

Arjowiggins Graphic has the widest eco-friendly product offering on the market, with FSC® and European ecolabel certifications. The company is the leading European manufacturer of high quality FSC® Recycled certified extra-white pulp for graphic applications. Finally, Arjowiggins Graphic is a major player in a number of niche markets related to specific applications such as playing cards, transfer paper, posters, point-of-sale (POS) advertising, tissue, fire resistant paper, flexible packaging and labels. And with the Teknocard range, the company has immediately entered the graphic board market.

A division of Arjowiggins, a wholly-owned subsidiary of the Sequana Group, the leading global manufacturer of technical and creative papers, Arjowiggins Graphic contributes to the development of an exemplary circular economy model sustainable and creating jobs.

A EUROPEAN LEADER

Recycled papers N°1 in Europe

Extra-white recycled pulp N°1 in Europe

Speciality papers* Worldwide player

Graphic board: the widest range on the market, pure cellulose and recycled.

* Tissue, playing card, fire resistant papers...

OUR PARTNERSHIP WITH WWF FRANCE:
MOVING TOWARDS A LOW-CARBON CIRCULAR ECONOMY

The Arjowiggins Graphic partnership with WWF France, initiated in 2009, aims at promoting recycled paper as the most effective environmentally speaking and to foster the development of a circular economy in France.

This partnership relies on cooperation fields:

• the valorization and the promotion of the environmental qualities of recycled paper through the very large range of recycled graphic papers manufactured by Arjowiggins Graphic and the educational tools set up: the environmental calculator designed jointly and “Check your paper” created by WWF which evaluates papers sold throughout the world, the paper company environmental created by WWF, the PAP 50 survey assessing every year the environmental performance of private companies and french institutions in terms of paper.

• the reinforcement and valorization of Arjowiggins environmental commitment in the set up of ambitious measures to fight against the climate change: Arjowiggins Graphic has been the first company in France to obtain the energy management ISO 50001 multi-site certification.

Arjowiggins Graphic supports the WWF France conservation efforts in the frame of its environmental footprint reduction program: “sustainable production and consumption”.

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Arjowiggins Graphic is firmly committed to the development of a paper recycling sector. The company is a key player on the circular economy by implementing the following key principles: sustainable natural resources management, re-use of materials, waste minimization.

The company aims at building a profitable sustainable and responsible circular economy model based on 3 principles: **participation, innovation, continuous improvement.**

The 2020 goals abide by these 3 levers and match Sequana CSR roadmap, available on www.sequana.com.

## 2020 GOALS

| To generate 250 jobs thanks to contractual relation with our social and solidarity partners | To support apprenticeship for 15 people each year. |
| Share of certified fibres in virgin pulp supply: 100% | Share of recycled fibres in fibrous materials supply: 55% |
| To improve the energy efficiency per tonne produced by 5.5% compared to 2015 | To recover 95% of waste generated by the plants |
| To reach a 15% share of employed women in a historically male-dominated sector. |
WORKING TOGETHER TO PROMOTE THE PAPER CIRCULAR ECONOMY
When deciding to commit to a responsible environmental philosophy, the constant challenge is to keep looking for better solutions to deliver a more efficient, sustainable model.

For Arjowiggins Graphic, the aim of the recycled paper circular economy is to reduce environmental impact using a sustainable economic model implemented through partnerships with other social economy players. It’s an equation which comprises a large number of mutually beneficial components.

The circular economy involves careful conservation of all practices: product innovation and process, responsible purchasing, resources, minimising the impact of production sites and developing by-products and valorization of products represent as many transformation opportunities for the company.

The manufacture of recycled paper starts with the valorization of raw material that are waste papers. Arjowiggins Graphic works with its partners at each process stage – collection, sorting, de-inking and reuse – to find the best possible options.
Paper consumption stands at around 75kg per person per year, and just 55% of that paper is currently recycled*.

This figure has not escaped the attention of Arjowiggins Graphic; the company sees it as an opportunity to create a more meaningful approach. In order to improve the collection of waste paper, the company is setting up partnerships with various social and solidarity economy players, favoring those which are geographically close to its production sites.

A case in point is ESATs (work integration social enterprises), which provide opportunities for disabled people to find professional employment with medical, social and educational support. “It’s a win-win situation” says Jérôme Loret, Purchasing Manager at Le Bourray plant. These structures, modified to handle small volumes, are the only ones to collect paper from universities, schools and SMEs.

**This type of flexibility is a perfect fit for the circular economy: socially conscious jobs and reduced environmental impacts achieved through local collection.** “Working in this way cuts out the middleman. You don’t need to ship the material out of the country to have it converted into something different” points out Hervé Rémy, Director of La Gibaudière ESAT in Saint-Barthélemy-d’Anjou.

It’s an important consideration for an organisation aiming to reduce its footprint still further by investing in a baling press which will increase container capacity from 6 to 25 tonnes. The paper tonnage supplied by La Gibaudière ESAT’s Bourray plant may account for a mere 3% of annual requirements (1,700 tonnes per year), but that illustrates the fact that Arjowiggins Graphic’s ambitions are based more on quality than on quantity. “The work is very precise; it’s a much more selective process than what a recycler does with a gripper. Here, we’re doing sheet-by-sheet work, which suits our needs perfectly” explains Jérôme Loret.

“The ESAT has been able to deliver the specifications required by Arjowiggins Graphic. For example, Post-It notes – which glue is a real problem in the paper process – are systematically rejected. Mr Loret came to ESAT to observe our methods and improve them to match its needs more closely. In the beginning we were worried we might end up changing habits and making life difficult for the people we’re working with, but without reckoning their desire to do a good job, and they adapted quickly and efficiently.” says Hervé Rémy.

*ADEME, Ecofolio
Reinforcing In-Plant Teams

At Bessé-sur-Braye, the recent acquisition of an A3-format cutting machine required the creation of a custom packaging line. After having studied a number of options, a decision was made to contact the Saint Calais ESAT, which was able to provide the necessary logistics and manpower within a short timescale.

Now we have 8 operatives who come to the factory every time a production campaign is launched.

This solution has given us the flexibility to meet variable demand while at the same time supporting a socially responsible approach.

“Deciding to work with an ESAT means giving a person with disability the opportunity to integrate both professionally and socially” says Jérome Loret. It’s a vital initiative for men and women who set great store by the way others perceive them. Ludovic Gélin, one of the eight ESAT operatives working at Bessé-sur-Braye, is energised by this challenge: “Arjowiggins Graphic is like a breath of fresh air. Everyone’s very welcoming, they come and say hello to us. At the end of the day, I’m proud of what I do, and how I organise my work station to make it more efficient. It boosts my confidence to be working with precision equipment.”

The employees of the factory are also very happy at the arrival of their part-time colleagues, and everything is being done to ensure they can work effectively, for example: workstations have been modified at their request and a conveyor belt has been installed to ensure they aren’t required to carry excessive weights. Franck De-rouard, an educator at the Saint Calais ESAT, has this to say about these modifications:

“**My role is to adapt the work to the worker and in this case, the goal is achieved.**”
The 2016 year clearly demonstrated that the use of social and solidarity economy was not only possible, but more importantly – mutually beneficial. It provides an efficient way of reconciling the company’s CSR goals: Participation, Innovation and Improvement. This type of partnership will ultimately be rolled out not only by Arjowiggins Graphic, but also by the partnering ESAT organisations, which are constantly devising new services.

To enable a deeper integration, a visit has been arranged to Le Bourray plant. Staff from La Gibaudière ESAT have been able to see themselves the importance of their work: recycled paper reels for printing from waste paper to the fruits of their work are being incorporated fully into the Arjowiggins Graphic production line.

SOCIAL AND SOLIDARITY ECONOMY PARTNERSHIPS

Arjowiggins Graphic has been leading for several years and particularly since 2010 partnerships with the social and solidarity economy to collect waste papers. Today, the company is working with almost 80 associations, in most cases through a contract-based collaboration.

Arjowiggins Graphic truly supports these associations in the following areas: business development, commercialization and education of teams.
The sheer diversity of workers operating everyday on its sites is what gives the company its richness. Together, they represent a resource without which it would be unable to achieve its goals. That’s why, every year, it invests more and more into local social and solidarity economy partnership contracts, education and professional training program.

Aware that the well-being of its workers and their need for recognition in their work are the engine driving its success, Arjowiggins Graphic is constantly seeking to develop solutions to put people at the centre of its work. The goals are clearly defined: to help young people develop an interest in the paper industry by offering them on-the-job training contracts, to motivate them to develop their skills by offering diploma-based training at every career stage, and to encourage women to submit applications in an environment which has traditionally been a male-dominated one, but is firmly committed to seeing that change.

ON-THE-JOB TRAINING: HAND-IN-HAND WORK

As part of its social strategy, Arjowiggins Graphic is working hard at improving employability, particularly through the use of on-the-job training contracts. It’s a model which is universally winning admirers; both in industry, which is able to train its team members in the company’s practices and identify its future staff, and among students, who can combine practice with theory to ensure they are competitive in the labour market.

And the partnership has been a successful one, says Alexandre Dorléans, an Environmental Safety Manager at Le Bourray site:

"After my professional qualification in Corporate Risk Management, I was given a six-month fixed contract in the rail buildings and industry. But even with that, it was impossible to find work. After a few small jobs, I took a good look at myself and decided that, at 25 years old, I’d go back to school. I started at Arjowiggins Graphic as an Environmental Safety Executive with on-the-job training in combination with a postgraduate project unit management qualification.

To make sure I found a permanent job when I came out of school, I followed that up with a higher qualification in Industrial Safety and Risks and became an Assistant Safety and Environmental Manager, still at Arjowiggins Graphic. I’m very pleased with my decision. My on-the-job training gave me lots of motivation. I was lucky enough to find my feet very quickly in my new role. I wanted to prove that the company’s faith in me was well-placed."

And the hard work paid off since Alexandre Dorléans went on to land himself a permanent position, and is now in charge of production line safety and working conditions. Such on-the-job training initiatives are set to continue, with a goal of supporting 15 people per year in this way by 2020.
As it strives for constant improvements in the employability of its staff, Arjowiggins Graphic now offers them the opportunity to formalise their progress via the PQC (Professional Qualification Certificate).

The purpose of this initiative is to acknowledge staff experience and skills via a qualification recognised across the whole paper industry, and more generally by a number of professions. Work towards the certificate is based on observing and assessing knowledge and skills in a work situation; then, at the end of the course, on the presentation of a project to a panel.

In 2016, 70 people received their qualifications, including Patrick Paté, a paper machine operator and company employee for nearly 30 years:

“After so many years with the same company, you ask yourself questions like: where exactly am I in my career? What’s the extent of my knowledge and skills? I needed to answer these questions and have something to show for my experience. Also, for a number of years I’ve had ideas for improvements I wanted to share, and the theory project gave me a way of setting these down formally.

The session facilitators gave us the confidence to do it, and really helped us to push ourselves. The training is useful both for staff and the company. I recommend the PQC to others around me, and I tell them: you need to keep pushing doors, not resting on your laurels, and setting yourself challenges so you can climb higher. In any case, the first thing you learn on the course is that we’re more competent than we think!”

Patrick Paté’s project concerned waste reduction, which is a key issue for the factory. He was awarded a ”Very Good” ranking for his oral presentation and has been cleared to develop his project further; it has been approved by plant management and should generate substantial savings when implemented. It’s a perfect opportunity to make use of all those years of on-site learning.
THE PAPER INDUSTRY: NOT JUST FOR MEN

For too long, the paper industry was a closed shop “for men only”. Production sites were often seen as an environment in which work would be unsuitable for women. Arjowiggins Graphic is now seeking to disperse this sentiment, with all posts open equally to men and women. The WRAP 4 packaging machine at the Bessé-sur-Braye factory is staffed in turns by four female operators: Aubierge Pilon, Océane Bioré, Mélanie Cheron and Kelly Dolbeau.

“it’s a great atmosphere, and the men are happy to help us, we’re never on our own. But we try not to ask for their help, even when it comes to physical jobs. We were hairdressers, hair colourists and waitresses before we joined Arjowiggins Graphic, but none of us regrets having come here: the days are all so varied and the diversity is good for everyone.”

Océane Bioré

“We see more and more women coming in, and things are starting to change. There still aren’t many of us, and that forms a bond between us. Even so, none of us has felt that being a woman has been a problem.”

Aubierge Pilon

“To integrate a male-dominated team, you have to stand out and show some character, but I think that’s probably the same everywhere and my integration in the team came easy.”

Kelly Dolbeau

“We’re operators, same as the men.”

Mélanie Cheron
"I came to the paper industry without really thinking about it. Admittedly, at engineering school, just 3 out of 30 of us chose this route. I suppose the “gentler” industries tend to attract more women. Here at Arjowiggins Graphic, I’ve never had an issue, but in my old job, because I was a woman – and a young one at that – people told me they expected me to prove myself. It’s true that some jobs in our industry are more demanding than others, but it’s all a question of temperament and drive, not gender."

And Agnès Roger believes it would be to the detriment of the whole company if these skills were lost. Arjowiggins Graphic is therefore seeking to encourage female appointments so that, by 2020, they make up 15% of all staff.

CYCLUS TAKES ACTION TO EDUCATE WOMEN IN INDIA

In 2016, Arjowiggins Graphic teamed up with the ChildFund International association to support education in rural areas of India. The principle was a simple one: users of 100% recycled Cyclus paper were invited to watch a video showing the difficulties children faced in attending school, which was often beyond the reach of a daily return journey. For every 50 videos watched, a bicycle was shipped to India. The operation lasted for two months, with 100 Indian girls receiving bikes as a result.

www.cycluspaper.com
ADAPTING OUR OFFERS TO EMERGING NEEDS
Arjowiggins Graphic is focused on proactivity and innovation to keep meeting its customers’ needs. It places an emphasis on constant research and development to find solutions which match developing technologies and the expectations of its customers. Constant market awareness and joint work with various players in the graphical industry, has made it possible to create and constantly update a range of recycled and speciality paper for all purposes.

NEW DEVELOPMENTS IN DIGITAL PRINTING

From the 1970s onwards, digital printing started making inroads into the offset printing business. Although initially costly and not very widespread, this technology has increasingly gained market share as equipment improves constantly. In 2012, it accounted for just 2% by volume. It now accounts for around 16% of overall production, and this figure is expected to grow to 38% by 2022.

This is a development of great potential interest to the paper industry, and also to ink and machine manufacturers. That’s why Arjowiggins Graphic has developed a digital offering, even to the point of offering a 100% recycled paper which satisfies the specific requirements of these applications and has now been approved by the major machine manufacturers. The service and products were exhibited in 2016 at DRUPA, the international trade fair for the print and paper industries.

A BOLD STRATEGY

At a time in history when the consumption of paper for print is in decline (down 5% in 2016 against 2015), it’s interesting to note the steady growth of digital printing in this same print market, which follows the recent development of new equipments. As a dynamic player in the print industry, Arjowiggins Graphic was very quick off the mark in anticipating its customers’ future needs. Aware that its strength lay in a strategy of differentiation and flexibility, the company decided from the outset to position itself in the segment of recycled paper for digital printing. It’s an eco-friendly solution with no compromise on quality, providing the perfect response to companies’ demands.

TEAMWORK

It took a full year to develop a type of paper which met the requirements of digital technology and satisfied the exacting standards of a number of major brands such as Hewlett Packard, Ricoh, Konica Minolta, Landa, Xerox Impika and Xeikon. Considerable effort was expended to ensure greater efficiency via in-depth partnerships with these manufacturers.

“\nWe meet regularly to share opinions and information about our respective developments. This joint work means we can remain highly innovative and anticipate the technologies of tomorrow.\n\nJean-Charles Monange, Sales and Marketing Director at Arjowiggins Graphic\n\nTo this end, tests are carried out at each stage of the project to identify possible issues and adjust the paper’s characteristics accordingly. A product development accelerator, in a nutshell. The initiative is enabling Arjowiggins Graphic – a European leader in recycled paper – to become a reference in terms of eco-responsability. Sales for Arjowiggins Graphic have grown by 26% between 2015 and 2016, compared to a market growth rate across all paper types of 12%.\n\n- 20 -
A GOOD IMPRESSION

Seeking to share its expertise and its most recently developed products, Arjowiggins Graphic chose to participate in the DRUPA international print industry trade show, which was held in Düsseldorf in 2016. Rather than presenting its paper ranges itself, the company decided to supply machine manufacturers with the recycled paper they would use for their demonstrations throughout the fair. For example, the Landa brand, which spearheads the nanographic printing process combining the performance of offset with the productivity of digital, used 32 tonnes of 100% recycled Cocoon Gloss for its cutting-edge machines throughout the three weeks of the show.

This was done with several goals in mind: to show that recycled paper is of equivalent or even superior quality to virgin fibre paper; to demonstrate that these products are entirely compatible with the very latest technologies; and lastly, to promote these partnerships, which are beneficial to all parties.

Arjowiggins Graphic was pleased to be presented by major machine manufacturers, confirming their commitment to documents printed on recycled paper.

The future looks promising for Arjowiggins Graphic, the sole producer of recycled paper for digital presses.

Supporting the production of recycled paper is one of the key strands of our environmental policy. By using 100% recycled Cocoon Gloss paper on our Landa S10 Nanographic Printing® Press, we considerably reduce the footprint of our printing, saving 30 tonnes of waste, 48 tonnes of wood and 4 tonnes of CO₂.

Gilad Tzori, Vice-President, Product Strategy, Landa
The Pro C7100 and C9100 colour presses and Pro8120 black and white press enable companies to maximise their return on investment and expand or introduce new digital printing services as they produce new applications of all kinds. And now more than ever, it’s vital to have the ability for today’s printing jobs to be produced on high-performance recycled paper and digital presses, and we demonstrated that ability with the paper from Arjowiggins Graphic at Drupa.

Graham Moore, Director of Business Development, Ricoh

Our engineers were assigned the task of testing the paper with our machines, and they were impressed with the quality of the Cocoon and Cyclus papers and Teknocard graphic board.

Hans Verberckmoes, Technologies Manager, Xeikon

SPECIALITY PAPERS REINVENT THEMSELVES

To have a long-term future, you have to adapt – and to adapt, you have to innovate. That’s the thinking that motivates Arjowiggins Graphic to keep on developing new eco-friendly products for all purposes. Accordingly, a complete range of printing and speciality paper has been developed in recent years. These include C1S Silk Pack 100 and DigiPeel HD. They are high-quality paper products which facilitate ever-more creative uses, as demonstrated by a special project at the Galeries Lafayette department store in December 2016.

C1S SILK PACK 100: 100% NEW

The already extensive range of shopping bags developed by Arjowiggins Graphic was extended yet further in 2016 by a new arrival: the C1S Silk Pack 100. The code name designates the product as being 100% recycled paper, extra-white, and perfect for manufacturing bags.

The development of the paper was a challenge in itself, as it needed to satisfy a threefold customer expectation: recycled paper, high white, and compliant with the required strength criteria. This requirement demonstrated a desire by major brands to benefit from eco-designed solutions which enable them to keep pace with evolving legislation.

Since 1st January 2017, the distribution of plastic bags has been prohibited in France, prompting distributors to seek alternative solutions. Arjowiggins Graphic has thus made use of its expertise in the recycled sector to develop an innovative product which meets all requirements. The results are conclusive – and also very elegant, with a highly tactile coated outer surface and a natural-look non-coated inner surface.

Hans Verberckmoes, Technologies Manager, Xeikon

Graham Moore, Director of Business Development, Ricoh

Our engineers were assigned the task of testing the paper with our machines, and they were impressed with the quality of the Cocoon and Cyclus papers and Teknocard graphic board.
DIGIPEEL HD: CUTTING-EDGE PAPER

In 2016, Arjowiggins Graphic cemented its position of leadership in the paper industry’s transfer paper market with a print paper product which, under the combined effect of pressure and heat, enables the transfer of graphics to all types of fabrics. The company remains at the cutting edge of development in this sector, constantly updating its ranges and modifying them for a market experiencing constant change. And thus the digital transfer paper project – DigiPeel HD – was born. It’s a first for this type of application.

Faced with constant new developments in print and transformation technologies and the frequency with which fashion collections change, printers and paper producers have had to adapt.

“DigiPeel HD at last brings photographic quality with perfect colour to short-run production. Until now, this sort of quality was offered only by offset, which was only effective for very large-volume printing, thus closing off the market to more modest requirements. So the market had been moving towards screen printing, which offers significantly lower quality than digital” explains Speciality Papers Marketing Manager, Fabienne Cocheteau.

The advantages go even further as this new transfer paper combines offset quality with the peerless flexibility of digital on top of saving time. In addition, several complex graphics can be printed simultaneously, retouched and modified without restrictions.

The possibilities are now endless for coloured and white textiles – and even fragile fabrics. It’s a T-shirt revolution!

To mark the publication of his best seller “Le premier miracle”, author Gilles Legardinier wanted to thank his fans by making them a part of his book. To do so, he personally loaded the pulpers at Le Bourray with the many letters they had sent him, so that they could be recycled. In this way, the paper produced by the recycling process could be used to print his new book.

It was Gilles’ way of acknowledging his readers and emphasising the theme of his book, which deals with the magic of alchemy and the creation of matter.

DID YOU KNOW?

THE FIRST BOOK MADE FROM FAN MAIL

To mark the publication of his best seller “Le premier miracle”, author Gilles Legardinier wanted to thank his fans by making them a part of his book. To do so, he personally loaded the pulpers at Le Bourray with the many letters they had sent him, so that they could be recycled. In this way, the paper produced by the recycling process could be used to print his new book.

It was Gilles’ way of acknowledging his readers and emphasising the theme of his book, which deals with the magic of alchemy and the creation of matter.
In 2016, the Galeries Lafayette department store invited Arjowiggins Graphic to play a part in producing its famous Christmas decorations.

The paper-based showcases told a tale of polar bears discovering new icy regions made of snow and ice blocks. A pretty story which depicted the magic of Christmas.

The task of producing these animated displays fell to French artist Lorenzo Papace, who came up with a moving Ferris wheel and the much-anticipated Christmas tree.

For Galeries Lafayette, the project was a sizeable challenge, mainly because of the fragile nature of the materials and legislation regarding flammable products in public places. So it was decided to select Arjowiggins Graphic, the European leader in flame-retardant paper (M1-rated), which supplied Maine M1 380gsm paper, a product offering the perfect rigidity for the intended requirement.

It was quite a task as the Christmas tree was 16 metres high and 8 metres in diameter. Arjowiggins Graphic supplied 300 m² (120 kg) of fully recycled paper. After the event, papers have been collected to be recycled at Greenfield mill, less than 100 km away from Paris.

The Bessé-sur-Braye plant played its part in this operation, manufacturing large-format rollers for the purpose. “This project was made possible by the flexibility of the factory, which provided a great level of service, but also peerless execution and delivery times” says Fabienne Cocheteau. Seeing what was possible to achieve through the work put in over the entire year was a major motivation to the teams, who would love to do it all over again.

And from Galeries Lafayette’s perspective, the results are just as positive. “We share the same values as Arjowiggins Graphic - a taste for excellence and innovation, a strong focus on skill and a passion for the human touch” says Philippe Rossetti, Visual Identity Director at Galeries Lafayette. It’s a partnership that makes total sense, and provides a fantastic showcase for the company, since 200,000 visitors came to admire the piece of art every day.
INTEGRATE CONTINUOUS IMPROVEMENT TO THE COMPANY STRATEGY
Continuous improvement in health and safety, environmental and energy performance is a critically important issue for Arjowiggins Graphic. Drawing upon its certified management systems, the company has set itself clear targets in the run-up to 2020. These include improving energy performance by 5.5% against 2015 and valorizing 95% of the waste produced by the production sites. Every effort is being made to meet these challenges.

**PEOPLE AND IDEAS**

In 2016, Arjowiggins Graphic has continued to pursue its improvement strategy by canvassing all of its workers, each with their own specific expertise. The idea is a simple one: by bringing a range of skills to bear on a single subject, industrial performance is maximised.

The initiative has been christened PEP’s, for ‘Permanent Evolution Programmes’. “The ‘s’ is for dynamism. It gives our staff permission to be creative within their own industry” explains Jean-Christophe Mailhan, the Bessé-sur-Braye Plant Director. The various projects within this strategy include improvements to the water treatment plant, which were made throughout 2016: the extremely positive results showed that the operation was a success.

**THE PEP’S METHODOLOGY**

The idea was born in 2009, when no fewer than 70 pilot projects saw the light of day. The scheme took the form of a collection of small initiatives intended to make everyone’s working life easier. Later, with restructuring and a need to adapt to new products and practices, priorities began to appear. It was then that 11 flagship projects were selected. “At that point, we identified specific individuals within the factory, developed a methodology and trained teams to run the projects: how it work? How to identify areas for improvement? What methods to use to analyse issues?” explains Lean Manager Jean-Luc Belliard. The purpose of the training is to structure the approach to make it as efficient as possible and provide each of the departments that form the company with recommendations for communicating with one another.

To this end, members of the R&D team, operators, quality and process engineers met every two weeks to work on different areas of improvement. Some of the issues raised included safety-related behaviour, work station ergonomics studies to identify postures and task sequences which cause chronic pain, and key environmental questions such as the improvement of the quality of waste entering the river.
THE WATER TREATMENT PROJECT

Improving the reliability of the Bessé-sur-Braye water treatment plant was one of the key issues tackled by these PEP’s. The challenge: to ensure that water leaving the factory was of a sustainably high quality. “Increasing the plant’s reliability, decreasing the volumes of water drawn from the river and implementing a predictive maintenance system were all items on our meeting agenda” explains Environmental Safety Engineer Amandine Balthazard.

The task was an ambitious one, since work in parallel was needed on the paper processes themselves to optimise water consumption, and on the management of the plant; for example, to create a grid for measuring the filamentous bacteria responsible for impairing the plant’s performance. The work enabled better anticipation and management of the random factors associated with significant changes in temperature, raw materials used, etc.

The results were presented in early 2017 to the management committee, which provided the resources necessary to implement new procedures, and this has been a success: over the last ten years, the quantity of material in suspension in the water has been reduced by 85%.

However, no project is ever really finished since constant attention is needed to monitor the ongoing efficiency of the processes introduced through the 2016 project, and even re-examine the processes themselves where applicable.

A new project of the same type, targeted at reducing energy consumption, is now under way. Brainstorming sessions are being held to determine the new areas for improvement: 182 new ideas have emerged from these “think-tanks”, demonstrating that 2017 will bring its own rich variety of new projects.

To encourage operators to take the initiative and get involved, even if they aren’t part of a formal work group, the Bessé plant is handing out a form to all workers to collect all ideas, both large and small. An anti-slip device, the formal designation of floor safety areas and the relocation of video cameras on machines are all success stories from this initiative, which offers another forum for presenting ideas, helping everyone to improve their everyday performance and take ownership of their working environment.
In 2013, the three Arjowiggins Graphic plants received ISO 50001 certification, which aims to recognise companies who manage energy efficiently. It’s a much-coveted in line with international standards: ISO 9001 for quality management, ISO 14001 for the environment and OHSAS 18001 for health and safety at work.

The certificate is valid for three years, and was renewed in 2016, confirming the importance of the continuous improvement process.

GREENFIELD ENERGY: POWERING ISO 50001 PERFORMANCE

To comply with the recommendations of the ISO 50001 standard, the company needed to identify all of its energy uses and assess its consumption relying of internal resources.

This information has enabled to create a detailed action plan which allows to reduce specific consumption:

“ISO 50001 has enabled us to position ourselves as part of an overall strategy aimed at improving our energy performance still further. We now apply the Deming Wheel principle and its PDCA (Plan, Do, Check, Act) method, an approach which applies to all aspects of factory policy” explains Hervé Capitaine, Health & Safety & Environmental Manager at the Greenfield plant.

PLAN

The best practices applied for the energy project include group work. This forms the glue that binds all subsequent actions taken, as Hervé Capitaine explains: “When management informed us that it intended to obtain certification, we had to get into project mode, put teams together and form a steering committee. Each factory had its own specific goal, which was consolidated to provide an overall view of the company’s performance.”

ISO 50001 requires internal audits to be conducted; to do this, Arjowiggins Graphic decided to train up internal teams, enabling issues to be isolated more precisely and areas for improvement to be identified. “We found the exercise to be a very productive one” continues Hervé Capitaine, “so we decided to conduct ‘crossover’ internal audits this year: trained staff carry out audits at sites other than their own. This enables us to communicate better with one another, share best practices and take more effective action. It’s one of our levers for continuous improvement.”

A steering committee meets every two months to co-ordinate action, share best practice and identify any areas requiring modification. This tracking method is now being used by the company in the health and safety domain to ensure that all provisions made are compliant and efficient. This approach goes significantly further than regulatory obligations require, reinforcing Arjowiggins Graphic’s CSR strategy and enabling greater efficiency.

DO

As part of the ISO 50001 action programme, the company identified functions and equipment where reductions in energy consumption (gas, electricity, steam, etc.) were possible: metering devices were installed where necessary. In the case of gas, we went from monitoring the factory’s overall consumption to a specific per-boiler metering system, making it easier to spot discrepancies.
CHECK

At the Greenfield site, three 1500kW motors drive the pulper, which separates the fibres and places them in suspension in the water as part of the recycling process. Because throttling their power was not an option, as it was likely to affect the quality of the paper, the alternative was to ensure that operators used the equipment and process with maximum efficiency to avoid overconsumption. The factory supplied them with sheets summarising the key criteria for a successful production campaign and the creation of recycled paper of the best possible quality. If electricity consumption is abnormally high, this therefore indicates an incorrect set-up. Savings are substantial.

ACT

In 2016, the company also improved its practices regarding management installations. A variety of indicators are now recorded every day, making it possible to assess the quality of factors such as the dryness of the resulting pulp. By providing instructions regarding this parameter, it has been possible to limit the use of steam to the bare minimum needed, thus avoiding excessive drying out.

ISO 50001 certification fulfills a commitment made several years ago regarding the need to think deeply about the now-critical question of energy. It’s a strategy that appears to be bearing fruit: since 2012, the Greenfield plant has improved its performance by 7.1% and is looking to achieve an overall reduction of 10% in consumption by 2020.
PERFORMANCE DASHBOARD

FINANCIAL DATA

- € 368.5 Millions total turnover
- 48.3 % / total turnover turnover from recycled ranges
- € 5.9 Millions total environmental expenditure

NON - QUALITY

- 2.1 / 1000 tonnes sold customer complaints
- 0.39 % / turnover cost of complaints

CERTIFICATIONS

- 100 % certified sites
  - ISO 9001 Quality management standard
  - ISO 14001 Environmental management standard
  - OHSAS 18001 Health and safety management standard
  - ISO 50001 Energy management standard

SOCIAL DATA

- 980 total number of employees
- 130 women (13%)
- 850 men (87%)
- 101 executives
- 879 non-executives
- 943 permanent contracts
- 120 short-term and temporary contracts
- 14 professional training contracts
- 35 interns

- 17.3 years average seniority
- 44.3 years average age
- 31 workplace accidents
- 3.6 % rate of absenteeism
**TRAINING AND INTERNAL MOVES**

806 employees trained  
708 men trained  
98 women trained

24,445 training hours  
22,552 men training hours  
1,893 women training hours

53 job promotions  
8 resignations  
25 retirements

**ENVIRONMENTAL DATA**

**Ressources**
- Water intake (in m³/t).......................................................... 12.5
- Electricity consumption in kWh/t........................................... 709
- Gas consumption kWh/t..................................................... 1,335
- Steam purchases kWh/t..................................................... 329
- % supply of certified or recycled fibre.................................. 98.3

**Emissions into water**
- Suspended matter emissions Kg/t......................................... 0.2
- COD emissions Kg/t............................................................ 1.35

**Emissions into air**
- CO₂ emissions - Scope 1 Kg/t............................................. 274
- CO₂ emissions - Scope 2 Kg/t............................................. 135
- SO₂ emissions Kg/t........................................................... 0.003
- NOX emissions Kg/t.......................................................... 0.31

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THE ARJOWIGGINS GRAPHIC RANGE

PRINT COMMUNICATION & ADVERTISING
Cocoon, Cyclus, Eural, RePrint, Teknocard, MCS.

Graphic board and paper, recycled or virgin fibres, white or natural white, eco-friendly.
Perfect for annual reports, direct marketing, CSR reports, commercial brochures, postcards...

LABELS & PACKAGING
Maine 1 Face, Cocoon Pack, Cyclus Pack, Teknocard.

High quality single-side coated bright white paper.
Designed for rigid or flexible packaging and for labels. Cocoon Pack and Cyclus Pack are the new 100% recycled papers designed to be used in the production of high-end bags and containers. Teknocard is the new range of high-end graphic board, whether single-side coated, double-side coated, or uncoated, whether pure cellulose or 100% recycled.

PUBLISHING
Cocoon, Cyclus, Eural, RePrint, Teknocard, MCS.

Graphic board and paper, 100% or partially recycled, white or natural white and eco-friendly.
Created for attractive books, catalogues, brochures, and all kinds of eco-friendly magazines and publications...

OFFICE COMMUNICATION
Cocoon, Cyclus, Eural (Office & Envelope).

100% recycled white or natural white paper.
Suitable for business publications and stationery (letterheads, invoices, mailshots, etc.), making envelopes, office printers and copiers.

LABELS & PACKAGING
High quality single-side coated bright white paper.
Designed for rigid or flexible packaging and for labels. Cocoon Pack and Cyclus Pack are the new 100% recycled papers designed to be used in the production of high-end bags and containers. Teknocard is the new range of high-end graphic board, whether single-side coated, double-side coated, or uncoated, whether pure cellulose or 100% recycled.

PUBLISHING
Graphic board and paper, 100% or partially recycled, white or natural white and eco-friendly.
Created for attractive books, catalogues, brochures, and all kinds of eco-friendly magazines and publications...

OFFICE COMMUNICATION
100% recycled white or natural white paper.
Suitable for business publications and stationery (letterheads, invoices, mailshots, etc.), making envelopes, office printers and copiers.
The Arjowiggins Graphic product range comprises of nearly 20 brands and 70 different products intended for use in the graphic arts, publishing and print communication (including office communication) sectors. The range also includes products intended for labelling, textile transfers, playing cards and tissue for tableware and hygiene products. All these papers have a reduced environmental impact, in particular the Eural, Cyclus and Cocoon ranges.

**POSTERS & POS ADVERTISING**

Maine M1, Maine Opak.

Wide range of formats (fire resistant, opaque...). For your point-of-sale (POS) advertisements and other promotional prints such as posters, banners and hanging displays in public areas (shops, trade shows, airports, railway stations, etc.).

**LAMINATED CARDS PLAYING CARDS**

Playper, SecureCard, Sequoia.

Laminated paper range suited to card applications. Playing cards, prepaid cards, gift cards and casino cards... all offer an eco-friendly alternative to plastic, total opacity, and excellent print results.

**TISSUE**

Kaleïdo, tissue for printing and speciality tissue.

Tissue paper for printed or unprinted tableware and hygiene products, with unique specifications. Every year, the Kaleïdo range anticipates trends, expanding its range of over 200 colours every year.

**TRANSFER PAPER**

T105, T75, X90, HS90, DigiPeel HD.

Papers for transferring designs onto natural or synthetic textiles. A wide and innovative range of products suited to offset printing, screen printing and digital printing.
By printing these reports on Teknocard 2 100% recycled 350 gsm and Cocoon Silk 170 gsm instead of a non-recycled media, the environmental impact has been reduced by:

- 517 kg of landfill
- 661 km equivalent travel in the average European car
- 18,860 litres of water
- 1,093 kWh of energy
- 66 kg of CO₂
- 800 kg of wood

Sources: Labelia Conseil for carbon footprint and European BREF for the virgin fibre paper.

You can share your environmental commitment to recycled paper by using our calculator, available online at:

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www.recycled-papers.co.uk