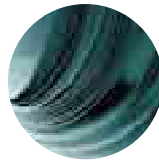


Arjowiggins Graphic shaping the future

in  dimensions



2010 Sustainable Development Report



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Profile

The world leader in the manufacture of technical and creative papers, **Arjowiggins is a 100% subsidiary of Sequana**, a company listed on the Paris Euronext exchange, present in Europe, North America, Latin America and Asia.

Within the GRAPHIC division, dedicated to coated and uncoated recycled papers, **Arjowiggins offers its customers a range of innovative, eco-responsible papers with unrivalled quality and performance.** Produced predominantly from recycled fibres, **the Arjowiggins Graphic collection of papers is the most extensive on the European market and has established its position as the must-have reference for both printing and publishing professionals.** Our papers produce extremely high technical standards in terms of whiteness, printability and are suitable for a wide variety of uses, ranging from; labelling, textile transfers, playing-cards, scratch-cards, as well as tissue paper for personal hygiene and tableware. Choosing a Corporate Social Responsibility (CSR) route is an environmental and economic choice for Arjowiggins Graphic, and a responsible approach which is supported by our customers.

By adopting industrial processes which are environmentally-friendly, Arjowiggins Graphic is not only recycling its paper but is also actively contributing to the development of a new industry which is creating new jobs.

Vital statistics

1,656
employees

6
production sites
of which **4 in France**
and **2 in Denmark**

1
R&D centre which has already
developed more than **12 innovative**
products in the past 2 years

546
million euros
Turnover 2010

Message from the **Director General**



“Arjowiggins Graphic is working towards the creation of a unique and promising offer for each and every one of us”

Agnès Roger, Director General of Arjowiggins Graphic.

“New ways of exchanging and transmitting information are appearing on a daily basis.

We are clearly in the middle of the electronic era. So, where does that leave paper, the universal vehicle for communication and for the transmission of knowledge for thousands of years?

At Arjowiggins Graphic we see the reality of this every day, paper – a renewable and recyclable material “par excellence” – remains an indispensable substrate for our future. So yes, paper does respond to the growing concerns of our clients in terms of eco-responsibility.

Our heritage is the springboard for devising a sustainable future.

As rarely happens in the life of a business, we have the opportunity to be at the forefront of the fundamental transformation of an entire industry, and to support the growing awareness of economic players with regards to key environmental questions.

Our responsibility and commitment is clearly evident today

in relation to our employees, customers, suppliers, and our planet. We are creating our action plan on the following 3 levels:

- **Internally:** our project is driven by the sharing of a common vision and values, adopted and carried out by all functions of the business. These 5 values are; respect, innovation, safety, results orientated and being a responsible team player.
- **Externally:** we place technological innovation at the heart of our development policy and with the highest levels of performance, anticipate and respond to the needs of paper consumers; we are putting into place, along with our partners, a sustainable programme to cut back on the use of paper; we offer tangible solutions to our clients and suppliers to help them adopt new habits.



- **In terms of protecting the environment:** our policy aims to reduce the impact of our business. It mainly involves limiting our use of forest resources through the use of recycled fibres or other eco-responsible sources, reducing our CO₂ emissions and water usage.

This first report marks the very first steps of an ambitious policy that we have launched, which was spurred on by the appointment (2 years ago) of a Sustainable Development director from R&D. Our progress is the result of team-work; the running of our different projects has been driven by the inclusion of all our stakeholders, in comparing their opinions and in particular, by taking on board expert advice from sectors at the forefront of these subjects, and from specialist organisations which hold real expertise. Rather than working in isolation Arjowiggins Graphic has been able to make changes both internally and externally by taking a pragmatic approach to these subjects.

As we approach 2014, Arjowiggins Graphic has set itself two new challenges

to reduce its environmental impact:

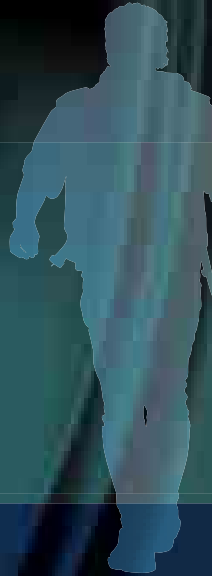
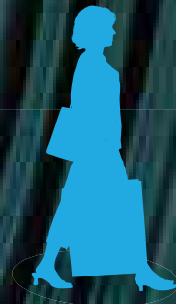
- 1. Reduce its carbon impact by an additional 10%.**
- 2. Quantify the water footprint of its products.**

We have already been able to reduce CO₂ emissions by 27% between 2004 and 2010 and the amount of water used has also been reduced by 11% over the same period. These results motivate us to double our efforts, raise the level of our demands and therefore to offer our partners products which are increasingly respectful of the environment, use less energy and are less reliant on natural resources. Together let's continue taking up this challenge!"

Agnès Roger
Director General of Arjowiggins Graphic

40%

OF ARJOWIGGINS GRAPHIC'S
TURNOVER IS GENERATED
BY ITS RECYCLED RANGES



“Our eco-responsible dynamics create a high expectation amongst our employees: to see the progression of the business as a whole as well as that of each individual.”

Jean-Christophe Mailhan, Director of Arjowiggins Graphic's mill in Bessé-sur-Braye, in the district of Sarthe, France.



ENSURING
the **development**
of the business and our employees

Responsibility to our employees:

we continue to work towards the enrichment and development of each person within the business and we are at the cutting-edge of best practice in the industry in terms of safety and risk management.

Such is our social responsibility.

2007-2010

-44%

The reduction in the number of accidents leading to **absence from work** achieved between 2007 and 2010.

Absence from work

2010

98%

The proportion of employees who participated in **training** during 2010.

Training



Safety is one of the 5 values that defines Arjowiggins Graphic. Our number one priority is to protect the health and safety of every individual on a daily basis.

Safety, a challenge for today and tomorrow



An asset and tangible action

The paper industry utilises complex and heavy production processes which consequently carry risks for the employees who use or maintain them.

Automation is being used more and more frequently, but does not replace the machine operators, particularly during stops and re-starts.

“The safety of its people is clearly a priority for any business. Without forgetting other objectives, it is at the heart of each of our projects. It is not only an asset for all of us but also a gauge which reveals the efficiency of the tangible actions that we put in place”, points out Loïc de Tarade, Industrial Director and Safety Co-ordinator, appointed in 2010 to lead the safety improvement programme.

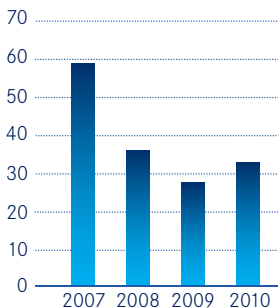
Taking action on many levels

Investment plans spanning several years have been undertaken in order to improve the safety of the most important machines.

This allows us to significantly reduce the risks generated by the equipment.

However, these technical improvements must go hand in hand with awareness and training programmes. Each and every person must make best practice part of their daily routine.

Equally, thanks to the application of an integrated management method at each of our sites, health and safety now form an integral part



There has been a significant reduction in accidents at work since 2007.



of not only our processes, but also our strategic plans and budget reviews.

Safety is taken into consideration across the organisation whilst maintaining the business objectives.

“It is a challenge for all of us, which requires fundamental, long term change as well as discipline, courage and determination.” continues Loïc de Tarade.

We’re all in this together!

In recent years our teams have started and committed to a significant number of projects involving employees and management.

- Our management model has been integrated into the most widely recognised model at present, OHSAS 18001: to which 3 of our mills achieved certification in 2010.

Rewinder - Odense mill (Denmark)



OHSAS 18001

The OHSAS certification makes it obligatory for us to consider:

- Our responsibility to the legal process
- How we handle the recording of incidents and risks
- How we organise the analysis and prevention of these risks
- Our training and communication processes
- The integration of all these elements into our formalised management system ISO 9001

- Through an annual awareness campaign called "Safety Day", each employee is updated on company safety achievements and is able to contribute to the programme. This day is also an opportunity to exchange information on safety rules, to discuss key practice, and to identify and gain a better understanding of the issues and risks of each job. This leads to a reduction of accidents or incidents.

- A formal process for the communication of incidents is monitored on a weekly basis by management via the safety officer for each site and a specific steering committee. This leads to a better understanding of the various situations that the mills experience on a daily basis and the implementation of corrective actions.

- Finally, in our visual communications meetings including both internal and group-level reports, safety must not be overlooked.





The human resource policy at Arjowiggins Graphic supports business strategy, meeting the training needs which result from our continuous innovation process.

Sharing a common ambition with our employees



Skills are always being strengthened

"We pursue the ambition of supporting our employees in the management of their skills and expertise, but also in the development of their professional plans. In addition, our HR policy considers the needs of each employee", points out François Manteau, Director of Human Resources for Arjowiggins Graphic.

Their needs primarily involve training, which strengthens job skills but also coaching, knowledge sharing, and sometimes, returning to their studies

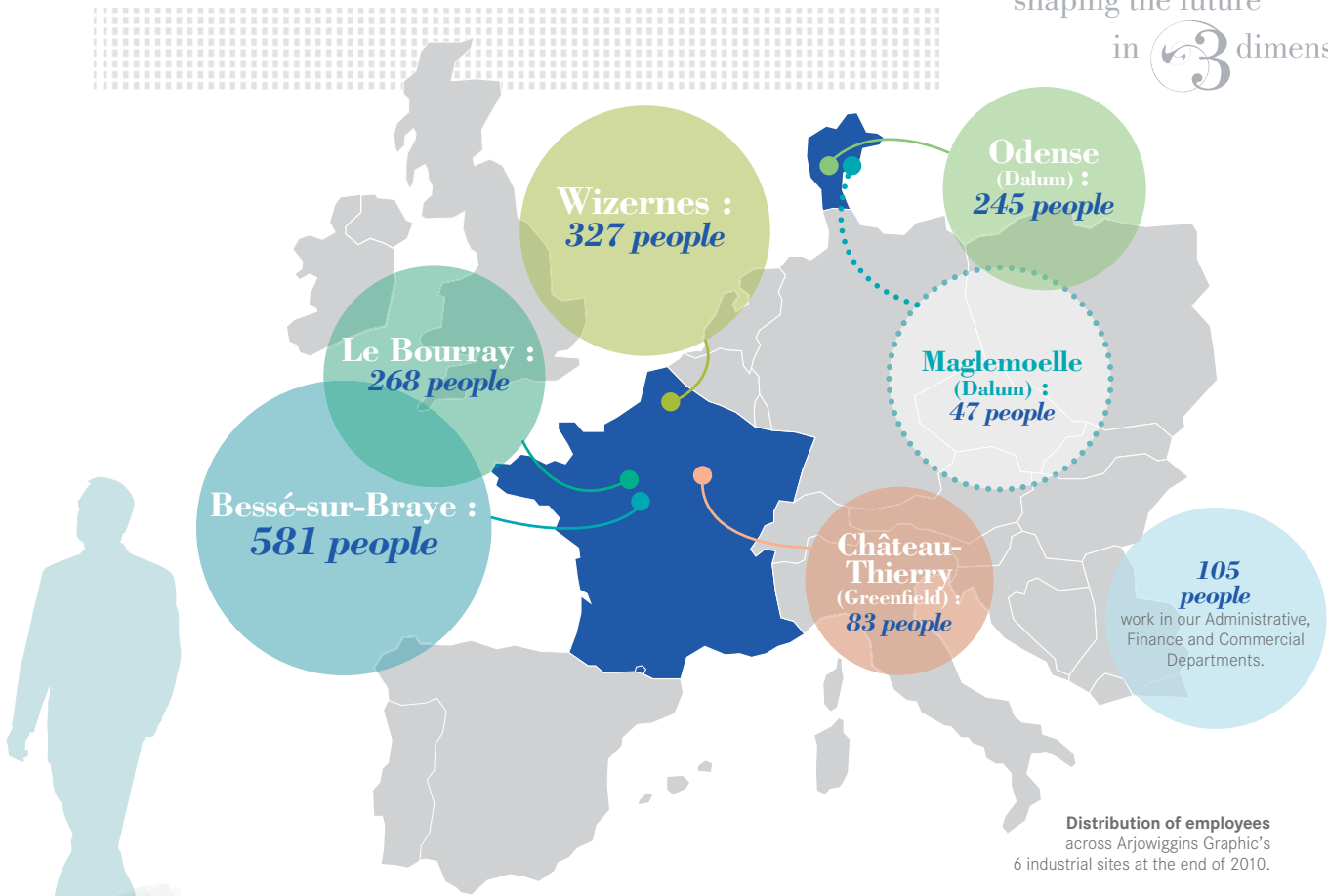
2010 saw a sharp progression in the implementation of these actions. For example, in 2010 1633 employees (out of 1656, of which 1428 non-executive) took part in training. In 2009 this figure was 1168.

That's why we now offer training programmes aimed at harmonising business practices, in particular in the sales and technical domains. The creation of the Arjowiggins Graphic subsidiary in 2009 also allows our teams to work in different ways to effectively support the strategy of the new division.

Prize giving ceremony

Arjowiggins Graphic Green Challenge
The Louvre museum – Paris, France





Distribution of employees
across Arjowiggins Graphic's
6 industrial sites at the end of 2010.

A new dynamic

"We work regularly in project mode as work groups ranging from different roles to diverse skills. Such a transformation creates a strong impetus and progressively establishes a new dynamic of meetings, discussions and new trusted relationships which are on the whole, much appreciated." continues François Manteau. In the spirit of innovation, a large internal competition was launched in 2010: "Green Challenge", aimed at promoting sustainable development invited employees to think about any tangible actions that each site could put in place to better respect the environment. *"More than 45 projects were developed, and participants met at the Louvre museum in Paris at an inaugural ceremony where certificates were awarded and prizes were presented to the winners, symbolising our collective commitment to sustainable development"*, explains Stéphanie Robineau, Human Resource Development manager of the company's headquarters. In short, the partnerships that Arjowiggins Graphic develop provide the opportunity for employees to get involved in different ways. That's why, since 2009, an Arjowiggins Graphic team has taken part in the Pandathlon, a fundraising sporting event in the mountains, organised by WWF.



Arjowiggins Graphic employees
during the 2010 Pandathlon sporting event –
Mont Ventoux (France)





“Being an eco-friendly printer commits us to proving our environmental responsibility, but it does give solid guarantees to our clients: they know that they can continue to communicate on paper whilst contributing to the life of the planet.”

Philippe Debruyne, Director of the Nord' Imprim printer in Steenvoorde, in the district of Nord, France.
The Nord' Imprim company, winner of the “Trophées de la Performance Environnementale 2010.”
(Environmental Performance Awards).

SUPPORTING the eco-responsible actions of our customers and suppliers

—
As leaders in innovative and environmental solutions, we are committed to our customers and suppliers:

Our papers, mainly produced from recycled fibres are manufactured to a high technical standard, in terms of whiteness and printability, which is unique to the market; and our training programmes support their environmental actions. Together, we are developing a sustainable business.

Awards

2010

European Ecolabel prize for **Cocoon communication campaign**, manufacturers/retailers.

Finalist in **Pulp&Paper International Awards 2010**, Cocoon range in the “Innovation” category.

Winner of “**Best Green Direct Response Award**” at the prestigious International Green Awards for the “What One Tree Means To Me” campaign.

Customer support

2011

Arjowiggins Graphic products included in the WWF international database “**Check Your Paper**”, which compares the environmental performance of papers.

2010

Go-live of **eco-calculator** on the Arjowiggins Graphic website and on the websites of 49 of our European customers.



The Arjowiggins Graphic collection of papers produced from recycled fibres is the most extensive on the European market and comparable to virgin fibre papers. This is a result of continued product innovation.

Our papers and unique environmental solutions to the market



Greenfield mill
in Château-Thierry (France)

More than 12 new products in 2 years

The R&D department is at the heart of our development policy. It allows the business to continually redefine its paper and to anticipate and meet the needs of paper users and consumers.



Paper resistance test
- Le Bourray mill (France)

The R&D team consists of 23 employees (engineers and technicians) responsible for creating trends, notably in terms of environmental performance. Thanks to the use of new raw materials; *“We have succeeded in replacing fossil raw materials with bio-sourced materials (e.g. starch). We are also carrying out a study in order to develop new characteristics of cellulose fibres”*, explains Pierre Renaud, Director of our R&D department.

In parallel, the speed of new product development has accelerated; in 2 years, more than 12 products have been developed and launched. *“The creation of a new paper generally requires 12 to 18 months’ work. By optimising each stage, we have reduced the timescale to 6 months”*, outlines Pierre Renaud.

Local, decentralised teams in the mills offer an efficient way of improving the technical capabilities of our paper machines.



Certified sites, **closest to the needs of our partners**

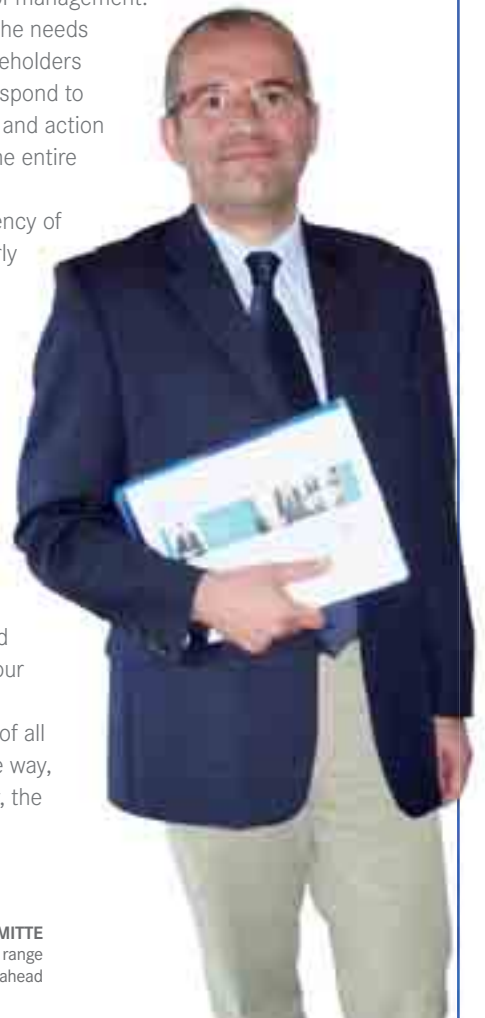
Arjowiggins Graphic is leading a continuous improvement programme based on the principals and recommendations of international standards of management.

These specifically allow the needs and expectations of stakeholders to be identified and to respond to them through objectives and action plans which impact on the entire organisation.

The relevance and efficiency of these actions are regularly evaluated at the highest levels of the business.

All of our sites will be ISO 14001 certified by the end of 2011 and 3 of them achieved OHSAS 18001 certification in 2010.

These results demonstrate our desire to progressively put in place an integrated management system in our production units, which meets the requirements of all stakeholders in the same way, in terms of health, safety, the environment and quality.



Gilles LHERMITTE
The Arjowiggins Graphic range
One step ahead

High quality products

Among these innovative products, is the entire Cocoon and the Green range (Satimat green, Maine gloss green).

In 2009, Cocoon Offset and Preprint were the first extra-white recycled papers to be launched. Top of the range and extra white, they were created using a brand new chlorine-free production process and made from a unique de-inked paper pulp, which is 100% post-consumer. These levels of whiteness were previously only achieved with virgin fibres.

Soon, Green technology will also have the ability to impact on new applications such as cellulose fibre replacing plastic materials. Arjowiggins Graphic has already filed several patents in this area.

Finally, in the domain of transfer printing, studies are underway to substitute paper substrates for plastic-based materials.

The Arjowiggins Graphic offer includes almost 20 brands and 70 different products aimed at **the Graphic Arts, publishing and printed communications sectors. The product range also includes labelling, transfer onto textile, playing cards and tissue paper for personal hygiene and tableware.** Our products have a low impact on the environment specifically Eural, Cyclus and Cocoon.

Arjowiggins

Cyclus

100% RECYCLED FIBRES IN A NATURAL SHADE

Cyclus papers are produced in 100% eco-responsible mills. Several finishes:

- CyclusOffset:** surface sized offset paper without optical brighteners (from 70 to 350 g/m²)
- CyclusPrint:** matt coated without optical brighteners (from 70 to 350 g/m²)
- CyclusSilk:** silk coated (from 80 to 170 g/m²)
- CyclusOffice:** uncoated surface sized office paper (80 g/m²)
- CyclusEnvelope:** suitable for envelope manufacture (80 and 95 g/m²).



Eural

100% RECYCLED FIBRES IN A NATURAL SHADE

Eural papers are certified by the major environmental labels. Several finishes:

- Eural Premium:** matt coated (from 65 to 350 g/m²)
- Eural Supersilk:** silk coated (from 80 to 170 g/m²)
- Eural Ecopro:** matt coated without optical brighteners (from 70 to 170 g/m²)
- Eural Offset:** uncoated (from 60 to 130 g/m²)
- Eural Office:** office paper (80 g/m²)
- Eural Preprint:** preprint paper suitable for laser printing (from 75 to 130 g/m²)
- Eural Envelope:** suitable for envelope manufacture (70,80,90,100 g/m²).



Cocoon

100% RECYCLED CHLORINE FREE EXTRA-WHITE

The first 100% recycled extra-white papers launched in 2009. Certified FSC® Recycled with perfect printability. Several finishes:

- Cocoon Offset:** uncoated, whiteness CIE 150 (from 80 to 350 g/m²)
- Cocoon Preprint:** preprint paper suitable for laser printing, whiteness CIE 150 (from 80 to 160 g/m²)
- Cocoon Office:** office paper, whiteness CIE 150 (80 g/m²)
- Cocoon Silk:** silk coated, whiteness CIE 124 (from 115 to 350 g/m²)
- Cocoon Gloss:** gloss coated, whiteness CIE 124 (from 115 to 350 g/m²)
- Cocoon Ecolight:** silk coated, whiteness CIE 124 (80, 90, 100 g/m²)
- Cocoon Envelope:** suitable for the production of high quality envelopes, whiteness CIE 150 (90, 100, 120 g/m²)
- Cocoon Jet:** digital, high performance for high speed colour inkjet presses, whiteness CIE 150 (90 g/m²)

Satimat green / Maine gloss green

A MIX OF RECYCLED FIBRES AND VIRGIN FIBRES HIGH WHITENESS (CIE 124)

Satimat green and Maine gloss papers are certified FSC® Mix. Perfect printability. 2 finishes:

- Maine gloss green:** gloss coated (from 100 to 350 g/m²)
- Satimat green:** silk coated (from 100 to 350 g/m²)

Reprint Deluxe

MINIMUM 60% RECYCLED FIBRES, NATURAL WHITENESS AND EXCELLENT OPACITY

Reprint Deluxe is a range of 2-side matt coated papers. It is produced in a completely eco-responsible mill, and is certified FSC® Mix (from 70 to 300 g/m²).



COCOON

PLAYPER

kaleido

eural



Sequoia
From technology to the environment

SATIMAT GREEN
MAINE GLOSS GREEN

I D E A L

RePrint Deluxe
- 100% RECYCLED FIBRES -

Graphic range

One step ahead

Maine gloss / Chromomat / Satimat

CERTIFIED FSC® MIX, HIGH WHITENESS (CIE 124)

Perfect printability. Several finishes:

Maine gloss: gloss coated (from 90 to 400 g/m²)

Chromomat: matt coated (from 90 to 400 g/m²)

Satimat: silk coated (from 90 to 450 g/m²)

Chromomat ivoire: matt coated in an ivory shade (from 115 to 350 g/m²)

Satimat naturel: silk coated in a natural shade (from 115 to 350 g/m²)

Idéal FSC® MIX CERTIFIED PAPERS

The extremely high coat quality of these papers produces excellent print results, high dot definition, regular ink flow and a gloss level which brings out the brilliance of colours. Available in gloss, matt and ivory matt (from 140 to 400 g/m²).

Maine 1 Face / Maine 1 Face Green / Maine M1 :

1 SIDE COATED PAPERS, RADIANT WHITE

Maine 1 Face papers are designed for rigid and flexible packaging and for labels. They are available in an FSC® Mix certified version (from 70 to 150 g/m²).

Maine 1 Face Green is 60% recycled and certified FSC® Mix (from 80 to 150 g/m²)

Maine M1 papers include a wide range of substrates (flame retardant, opaque, etc.) aimed at point of sale advertising and other promotional materials (posters, banners, hanging signs (shops, exhibitions, airports, stations, etc.) (from 120 to 770 g/m²).

Tissue paper

TISSUE PAPER MADE FROM CELLULOSE FIBRES, AVAILABLE IN AN FSC® MIX CERTIFIED VERSION AND 100% RECYCLED ON REQUEST

Aimed at printed and unprinted tableware and personal hygiene, with unique specifications. The Kaleïdo range forecasts fashion and trends and updates its palette of more than 200 references every year.



Laminated cards / Playing Cards

LAMINATED PAPERS SUITABLE FOR CARD APPLICATIONS

The range of laminated papers for cards (playing, pre-paid, gift, loyalty, SIM, etc.) offers an environmental alternative to plastic, total opacity and excellent print results.

These papers are available in an FSC® Mix certified version (from 70 to 150 g/m²).



Transfer paper

This paper is aimed at the transfer of designs onto natural or synthetic textiles, suitable for offset, silkscreen and digital printing, as well as for the sublimation process.

MAINE OPAK

MAINE M1

SUBLIMAGE
A SUBLIMATION PAPER

DIGIPEEL

■ ■ ■ MAINE GLOSS
■ ■ ■ CHROMOMAT
■ ■ ■ SATIMAT

Secure Card

T105

MAINE 1 FACE
MAINE 1 FACE GREEN



Sustainability is an important issue. That's why we have launched campaigns aimed at helping our customers go green.

Made-to-measure solutions to support our customers and suppliers

Calculate the “environmental benefits”

Thanks to the environmental calculator, all our customers can find out the energy savings as a result of using recycled papers from Arjowiggins Graphic. The eco-calculator includes 6 savings: reduction in CO₂ emissions, landfill, wood, travel, energy and water consumption. The calculations allow our papers to be compared with papers made from virgin fibres based on figures from the European BREF (reference document on Best Available Techniques); the carbon footprint results are the outcome of a study led by the ECCM (Edinburgh Centre for Carbon Management).

Following the path of our distributor Antalis around forty of our customers in a period of just under a year, have included the eco-calculator on their own websites.



Collecting used papers

Arjowiggins Graphic has also developed the Paper Office Program (POP), a turnkey offer in the eco-responsible and sustainable management of paper, beginning with the purchase of recycled paper and ending with its recycling.

“We organise the collection of office papers and recycle them into top of the range paper pulp so we can therefore ‘close the loop’”, explains Yann Caillaud, manager of the POP project.

The sorting, collection and recycling of office papers offers numerous benefits:

- **Environmental:** recycled papers give a new life to waste that would otherwise be incinerated or end up as landfill, with harmful effects on the environment. Local recycling greatly reduces the impact on transport-related issues. In addition, the production of recycled paper uses 3 times less water and 5 times less energy than that of paper from virgin fibres.
- **Social:** collection and sorting activities are a way of creating jobs in the local community and uniting company employees around a core project.
- **Economic:** A well-managed office paper collection system can act as a trigger to raise awareness among company employees, resulting in a rapid reduction of company paper consumption.

* data calculated based on the production of Cyclus.



Results shown for 6,000 copies of a 30-page, A4 brochure printed on 170 and 350 g/m² Cocoon Silk paper.

The eco calculator
Reduce your environmental impact by using our recycled papers

Internal pages

Paper: Cocoon Silk
 Grammage: 170 g/m²
 Number of pages: 26

Cover

Paper: Cocoon Silk
 Grammage: 350 g/m²
 Number of pages: 4

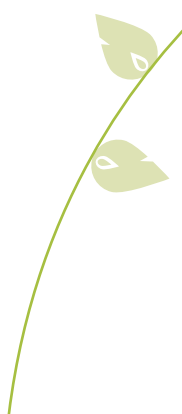
Dimensions: 21 x 29,7 (cm)
 20 A4 A3 A2 A1

Quantity: 6,000

By using Cocoon Silk and Cocoon Silk rather than a non-recycled paper, your environmental impact is reduced by:

- 1,005 kg of landfill
- 254 kg CO₂ eq of greenhouse
- 1,812 km travel in the average airplane cab
- 29,402 litres of water
- 2,716 kWh of energy
- 1,433 kg of steel

Sources: BREF surveyor average (data related to paper produced from virgin fibre) Data for carbon footprint supplied by the Carbon Neutral Company.



Partnerships and commitments which lead us to a sustainable future

- **WWF France:** Arjowiggins Graphic is the only paper manufacturer to be a strategic partner to WWF France since 2008. It aims to improve the environmental quality of our papers, to promote the use of recycled papers and to reduce the environmental impact of our production sites.
- **The Switch:** In order to focus on the environmental benefits of recycled paper and to eliminate any possible prejudice, an informative campaign called “The Switch” was launched in Northern Europe (excluding the UK). The unique angle is that it starts with Arjowiggins Graphic’s own switch to producing recycled papers. The campaign included speaking opportunities at CSR fairs (eg. CSR Forum Germany) in collaboration with FSC, several collaborations with environmental magazines (e.g. P+ magazine in the Netherlands and ecoTips in Belgium) and communication tools with testimonials from renowned companies that had already made The Switch to recycled paper. For more information go to: www.maketheswitch.eu
- **Green Futures:** a partnership between Arjowiggins Graphic UK and Green Futures magazine based on sustainable development. The magazine is printed on Cocoon Silk in exchange for free subscriptions for our customers, an opportunity to write articles for the magazine including participation in their Forums and links to other companies which are involved with the magazine such as Unilever, Sainsbury’s, Triodos Bank, Royal Mail, AkzoNobel and Pureprint.
- **Les Ateliers d’Ascalon:** Since 2010 Arjowiggins Graphic has been purchasing office papers collected sorted by a company for employees with special needs. This commitment by our Château-Thierry site to a social economic business has enabled the creation and longevity of jobs in the local community for both parties situated in the district of l’Aisne, France.

Natixis Intertitres and the Paper Office Program in 2010

By choosing to print its restaurant vouchers (Chèques de Table®) on Cyclus Offset instead of paper produced from virgin fibres, Natixis has reduced its environmental impact by:

ALMOST 84,000 kg of CO₂kWh equivalent to a journey of almost 600,000 km in an average European car.

More than
6 million
litres of **water**

More than
1 million
kWh of **energy**

More than
400,000 kg
of **wood**

More than
250,000 kg
of waste sent
to **landfill**

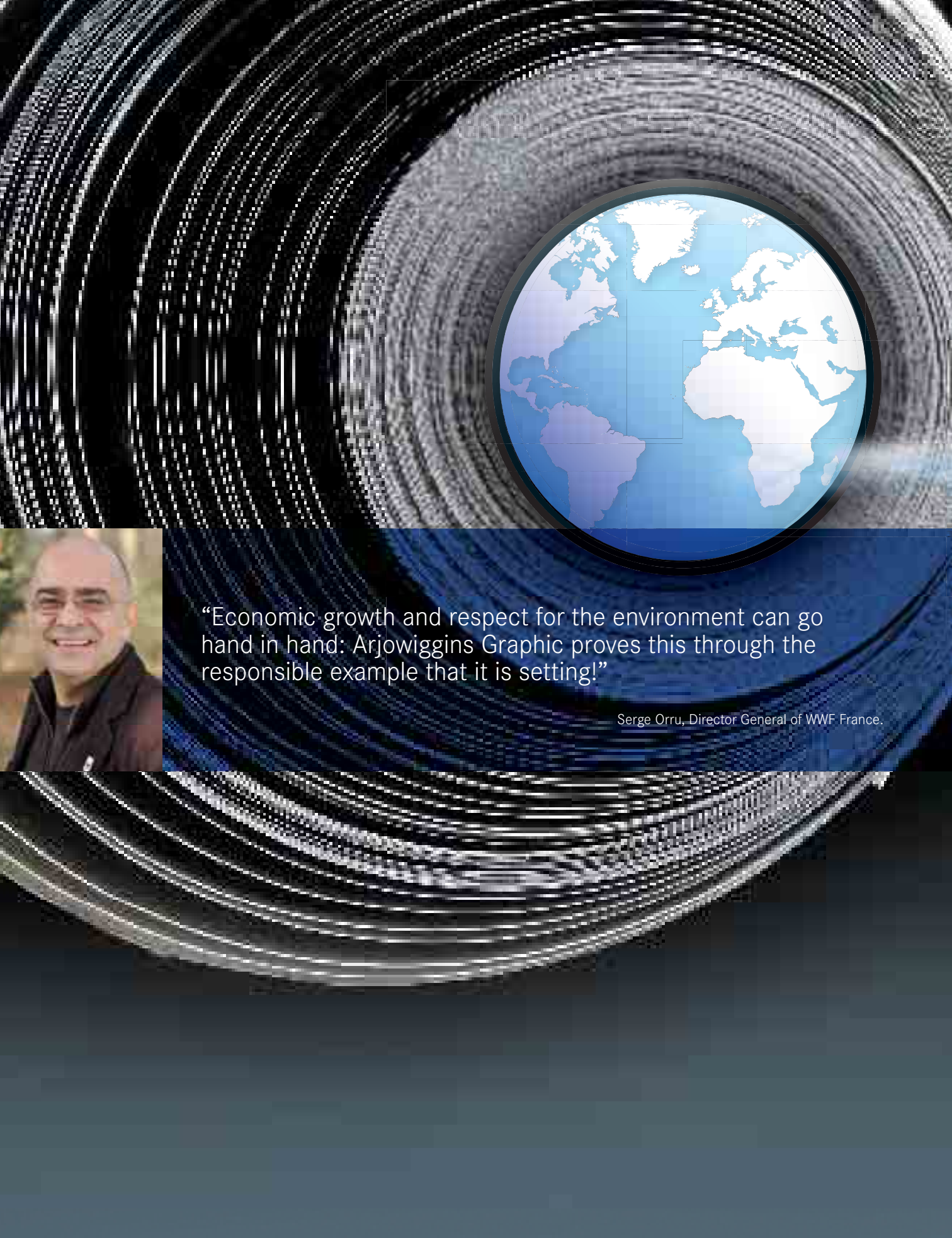
Natixis Intertitres plans to “close the loop” by recycling its unused cheques into 100% recycled paper pulp at our Greenfield mill, and also to donate part of the value of the paper collected by Arjowiggins Graphic to *Secours Populaire*, a French charity which aims to fight poverty in France and around the world.

Closest to our suppliers

Our purchasing policy considers both social and economic issues and results in tangible actions such as choosing to use FSC certified pulp. Arjowiggins Graphic also carry out regular supplier audits, which include all aspects of conformity and perform an in-depth annual evaluation of suppliers from both a social and environmental point of view.

We run projects with specific suppliers aimed at improving our respective environmental footprints. We also select the best performing businesses in terms of efficiency and equipment.





“Economic growth and respect for the environment can go hand in hand: Arjowiggins Graphic proves this through the responsible example that it is setting!”

Serge Orru, Director General of WWF France.

PROTECTING the planet

Paper is a natural resource provided by forests.

However, forests are not an infinite resource and ensuring that they are well-managed is not enough! It is therefore important to make recycling standard practice by re-using fibre up to 6 times. Through the manufacturing process we consider all the resources available to us: forests, air, water, energy... and we are doing what we can to protect them.

Raw materials

2010
67%

of pulps used are FSC® certified (compared with 14% in 2007 when the Arjowiggins Graphic division was created)

2009

Development of a pulp purchasing charter:

100%

100% of the fibre supply used is either FSC® certified, from a verified source or is derived from recycling.

2007

All mills are FSC® “Chain of custody” certified

Production

2011

OHSAS18001 Certification planned for all Arjowiggins Graphic mills

2009

European Ecolabel certification achieved for our Green ranges

Partnerships

2008

Signing of **strategic partnership with WWF France**

Business

2011

Publication of our CSR policy

2010

40% of our turnover generated by our **recycled ranges**



The original concept of “Green Technology” put in place by Arjowiggins Graphic communicates our desire to integrate an environmental dimension at every stage of the paper production process. So what’s the best way to achieve this? Through Innovation. As a result of our ‘Green Technology’, new processes have been developed spanning 3 aspects of the business: the organisation, industrial processes and product composition.

“Green Technology”, a question of innovation

A results-orientated organisation

The responsible use of natural resources and reduction of the impact on the environment are at the heart of the focus of our production teams and the entire workforce is united in achieving this.

“We are systematically identifying the opportunities and risks of every decision we make and we are deploying the most efficient environmental management tools”, explains Loïc de Tarade, Industrial Director and Safety Co-ordinator for Arjowiggins Graphic.

The aim of Arjowiggins Graphic is to implement procedures which improve internal performance. They have an impact not only on safety but also on quality and the environment. *“All our sites will be ISO 14001 and OHSAS18001 certified by the end of 2011”* says Gilles Lhermitte, Director of Sustainable Development for Arjowiggins Graphic.

Industrial Sustainability

Wherever possible, Arjowiggins Graphic includes the principles of industrial sustainability in the choices it makes. For example, the Danish Dalum Papir site in Odense is highly focussed on the reduction of energy and water usage. *“Since 2007, we have been generating bio-mass steam and electricity. This move away from fossil fuel towards biomass has*

led to a 90% reduction on our carbon emissions. Other than for paper production, the surplus ‘green’ energy that we generate allows around 7000 neighbouring homes to be heated”, explains Jesper Olsen, the Odense mill director.

Recycled fibres for every type of paper

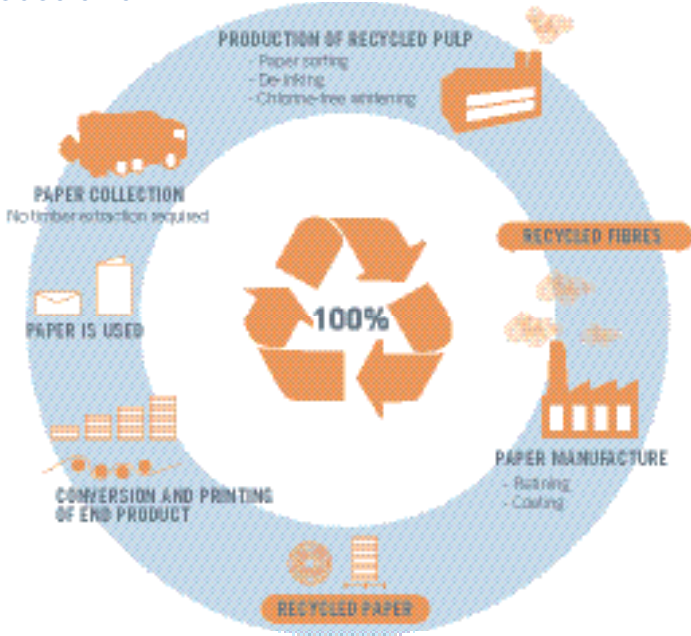
The Greenfield pulp de-inking production unit acquired in 2008, has led to the development of a unique 100% recycled coated paper, with extremely high standards in terms of whiteness, cleanliness and printability.

Compared with their equivalent in virgin fibres, these products result in a 40% reduction in energy consumption and a 60% reduction in water consumption.

In addition, Arjowiggins Graphic has brought into general use the inclusion of recycled fibres in all of its products and has selected raw materials and production processes with the lowest levels of impact on the environment.

The business now offers the most extensive range of eco-responsible papers on the market. The achievement of the most stringent product certifications has further cemented this approach (since 2007): FSC®, European Ecolabel, Blue Angel (see box on opposite page for further information).

**THE VIRTUOUS CIRCLE
OF RECY**



3 labels of certification



FSC® guarantees the origin of virgin or recycled fibres and promotes responsible forest management.



The European Ecolabel
Is awarded to products with the lowest impact on the environment. It considers the whole product lifecycle.



Blue Angel guarantees the exclusive use of recycled fibres, without the inclusion of optical brighteners.

“IN ODENSE, WITH A BOILER WHICH USES WOOD SHAVINGS AS ITS FUEL, OUR CONSUMPTION OF FOSSIL FUEL HAS BEEN REDUCED BY

85%

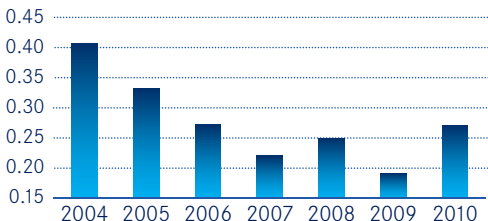
AND WE ALSO HEAT

7,000

NEIGHBOURING HOUSEHOLDS”.

Water emissions

Suspended Solid Material (kg per tonne sold)



Sewage treatment water plant - Château-Thierry



Respect is one of the core Arjowiggins Graphic values. Protecting natural resources, reducing emissions at our sites and contributing to putting into practice the principal of a sustainable economy.

Paper, in harmony with nature

MORE THAN
90%
OF THE VOLUME
OF WATER TAKEN
UPSTREAM IS “GIVEN
BACK” DOWNSTREAM
WITH THE EQUIVALENT
PHYSICO-CHEMICAL
CHARACTERISTICS.

Forests and water: protected natural resources

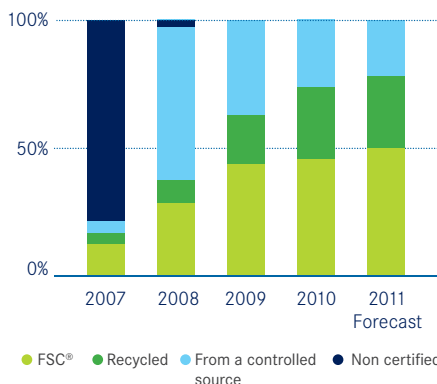
“For us, recycling is a top priority, if we wish to reduce the pressure we are putting on our forests. Amongst other things, it allows fibre to be used to the maximum of its mechanical ability. However virgin fibre remains a necessity. That’s why, since 2007, we have been heavily involved in promoting standards for responsible forestry management”, explains Gilles Lhermitte.

As an example, the business actively supports FSC® France; all of our mills are now certified according to the “chain of custody” reference point; 100% of the fibre supplies used by the Graphic division come from responsibly managed forests and the proportion of certified pulp we use increases on a regular basis.

In 2010 Arjowiggins Graphic also joined the WWF Forest and Trade network whose aim is to identify new environmentally responsible sources and develop credibly certified forest management.

Water is, of course, indispensable to the paper industry. Its availability and quality are daily necessities for Arjowiggins Graphic mills. However, the water taken from the natural environment is limited to the most demanding needs of the manufacturing process. *“More than 90% of the volume of water taken upstream is ‘given back’ downstream with the equivalent physico-chemical characteristics”,* explains Gilles Lhermitte. Wherever possible, water is recycled and re-used up to 12 times. In order to achieve this our 6 mills have a water treatment system which purifies it before returning it to the natural environment.

ORIGIN OF FIBRE SUPPLIES FOR THE GRAPHIC DIVISION



Reduced CO₂ emissions

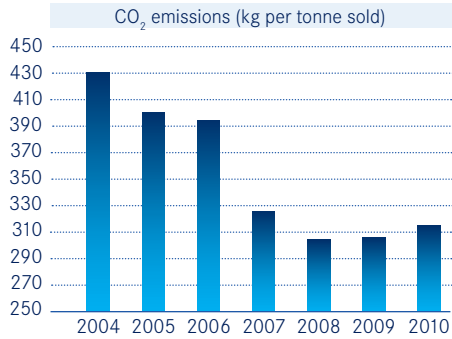
Arjowiggins was one of the first players in the sector to measure the carbon footprint of its sites and products.

The first evaluation, carried out in 2008 (2007 results), demonstrates the benefits of recycled paper. The second evaluation, during 2011, aims to quantify the progress achieved and identify new ways of making improvements. It also includes a preliminary to the definition of objectives for the coming three years.

* Study carried out by the Edinburgh Centre for Carbon Management (ECCM), in partnership with The Carbon Neutral Company.

Carbon footprint

Perimeter 1 and 2 of GHG (Greenhouse Gas) Protocol



Used paper stocks - Le Bourray mill (France)

Energy efficiency on the increase

The issues are two-fold for Arjowiggins Graphic: firstly, energy constitutes a major and growing proportion of costs and secondly the use of fuel, whatever type it is, causes greenhouse gas emissions and contributes to global warming. Ambitious plans to reduce the amount of energy used, deployed in our mills, have led to a reduction of more than 25% in greenhouse gas emissions in recent years. At the same time major investments have been undertaken to reduce our dependence on fossil fuels. An example of this is the biomass system developed at our Odense site in Denmark.

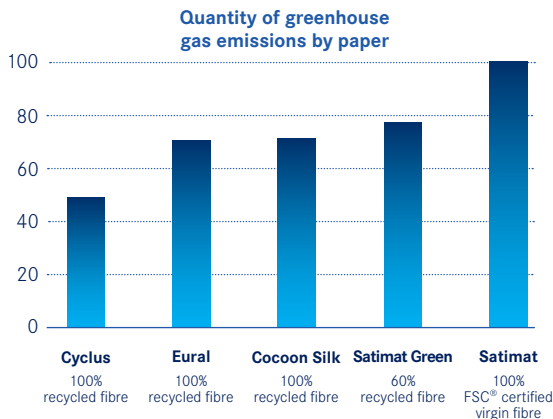
A sustainable economic approach

Arjowiggins Graphic has joined forces with all those involved to develop the principals of a sustainable economy. In order to ensure a long lasting supply of used papers, we acquired the Greenfield business in Château-Thierry in France and the Dalum Papir business in Denmark and have also developed local partnerships.

GREENHOUSE GAS
EMISSIONS HAVE BEEN
REDUCED BY MORE THAN

25%
IN RECENT YEARS.

SWITCHING TO RECYCLED PAPER REDUCES GREENHOUSE GAS EMISSIONS



The calculation of Arjowiggins Graphic's carbon footprint

demonstrated that the production of recycled paper generated less CO₂ emissions than paper from virgin fibres. The diagram opposite shows the variation in the carbon footprint between Satimat FSC®, Satimat green, Cocoon, Eural and Cyclus.

Printing 20,000 (A4 4-page) brochures on Satimat green leads to a saving of 718 kg of CO₂. This corresponds to a journey of 5125 km in a category A European car (consumption of 140g of CO₂/km).

Key indicators in the Management of our Sustainable development

SOCIAL OVERVIEW

HR (Human Resources)	2010 Value
Total number of employees	1,656
Number of women	219
Number of men	1,437
Number of executive level staff	229
Number of non-executive level staff	1,428
Number of permanent employees	1,595
Number of short term contracts and temporary staff	104
Number of apprenticeships	53
Number of interns	43
Average number of years' service	13
Average age	39
Absenteeism	
Rate of absenteeism	2%
Training	
Total number of employees trained	1,633
Number of women trained	164
Number of men trained	1,477
Health and Safety	
Number of accidents resulting in time off work	33
Number of accidents without time of work	30
Number of incidents recorded	1,373

ENVIRONMENTAL OVERVIEW

Resources	2010 Value
Water usage (in m3/t)	11.1
Electricity consumption (in kWh/t)	663
Gas consumption (kWh/t)	664
Steam purchased	1,011
Bio-energy consumption (kWh/t)	2,879
% FSC® certified supplies	66.6
Water emissions	
SSM Emissions (in Kg/t)	1.3
COD Emissions (in Kg/t)	1.3
Air emissions	
CO ₂ Emissions - Perimeter 1 (in Kg/t)	149
CO ₂ Emissions - Perimeter 2 (in Kg/t)	312
SO ₂ Emissions (in Kg/t)	0.001
NOx Emissions (in Kg/t)	0.270



The eco calculator

Reduce your environmental impact by using our recycled papers

Calculate! 

By printing 6000 brochures on **Cocoon Silk 170 and 350 gsm** recycled papers, compared to a non recycled paper, the environmental impact was reduced by:

	
1,005 kg of landfill	29,402 litres of water
	
254 kg CO ₂ of greenhouse	2,716 kWh of energy
	
1,812 km travel in the average european car	1,633 kg of wood

*Source: BREF european average (data related to paper produced from virgin fibre)
Data for carbon footprint audited by the Carbon Neutral Company.*

Produced by:



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On our website you will find an eco-calculator which lets you work out the savings in natural resources, as a result of printing your document on a recycled paper instead of on a paper produced from virgin fibres.

www.arjowigginsgraphic.com - www.recycled-papers.co.uk