White Paper
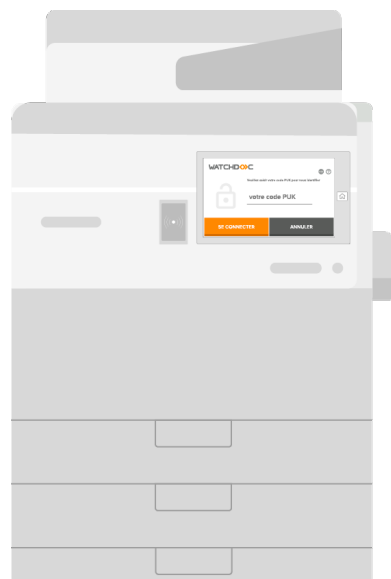**CSR: reducing your environmental impact through a rational printing policy.**

DOXENSE

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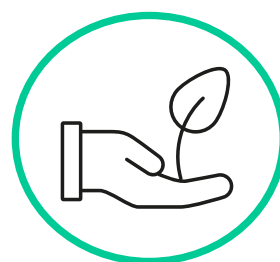We've been publishing independent **print and scan management software** for over 20 years.

They enable you to anticipate and **make savings** in energy, money, and time, while reducing your environmental impact.

Simplicity   **Security**   **Environment**

Print, breathe !

Summary

> If you have any information to add to or improve this white paper, please send it to www.doxense.com.

1. Introduction

Now that we are convinced of the ecological emergency, companies are facing a major challenge: reducing their impact on the environment while maintaining operational efficiency.

? Did you know that the paper and cardboard production industry generates 1.1% of global greenhouse gas emissions?

But it's time to take an **optimistic view**: this industry is already making a great effort and has already considerably reduced its emissions. **And by implementing a rational printing policy, companies have a real opportunity to reduce waste and therefore their environmental footprint**.

This white paper focuses on the **importance of implementing a rational printing policy in companies**, aimed at minimising negative environmental impact while optimising resources. We will explore the different aspects of this policy, focusing on concrete actions that companies can take to reduce their consumption of paper, energy, and other resources, while promoting greater awareness among employees.

When you realise that **millions of tonnes of paper are wasted** in businesses every year, it becomes clear that changes need to be made. By adopting a proactive approach, businesses can significantly reduce their paper consumption.

But the benefits don't stop there.

A rational printing policy also helps reduce costs associated with purchasing supplies, maintaining equipment, and managing waste. By raising employees' awareness about the environmental impact of printing, a genuine culture of change can emerge within the company. **Small actions, such as selective printing, document scanning, and putting printers in sleep mode, can have a significant impact when adopted on a large scale**.

! According to a survey carried out by the French Circular Economy Institute, in 2018 only 13% of French companies had implemented policies to reduce their paper consumption.

In the end, this white paper aims to demonstrate that implementing a rational printing policy is a concrete and positive act. **Every company has the power to reduce its environmental footprint and contribute to the preservation of our**

planet. By adopting a responsible approach, companies can not only reduce their ecological impact, but also improve their operational efficiency and brand image.

a. Some figures on the environmental impact of paper production

Like all industrial activities, paper production has a direct impact on the environment.

Trees: a large amount of wood is needed to produce paper pulp. On average, it takes **2.2 tonne of wood** to produce one tonne of paper, which means that global paper production will have cut down around **922 million cubic metres of wood in 2019[1]**.

Energy consumption: Paper and board production is one of the most energy-intensive sectors of the manufacturing industry, accounting for around **5% of global energy consumption** [2].

Co2 emissions: this point is directly linked to the previous one. Production requires a significant amount of energy, which is often obtained by burning fossil fuels such as coal and oil, resulting in greenhouse gas emissions. Paper and cardboard production generates around **1.1% of global greenhouse gas emissions.** In 2017, the sector emitted around 198 million tonnes of CO2 equivalent[3].

Water consumption: large quantities of water are needed for production [4].
- ◇ The production of wood pulp-based paper requires approximately 15 to 30 cubic meters of water per ton of paper pulp produced.
- ◇ The production of recycled paper pulp requires approximately 5 to 10 cubic meters of water per ton of paper pulp produced.
- ◇ The production of paper from paper pulp then requires approximately 10 to 100 cubic meters of water per ton of paper produced, depending on the type of paper and production practices.

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[1] FAO

[2] *Agence internationale de l'énergie (AIE), Energy Technology Perspectives 2020*

[3] *AIE, Energy Technology Perspectives 2020*

[4] *Programme des Nations unies pour l'environnement (PNUE), Guide de production propre et de recyclage du papier*

Water pollution: Chemicals are also used, which can pollute water. According to a 2018 study, the paper industry is the **second biggest source of water pollution in Europe**, after agriculture[5].

The paper production industry has a major impact on the environment. But it should not be demonised. Some manufacturers are doing a great deal to reduce their environmental impact during production or to offer paper made from recycled materials. And the industry as a whole has already succeeded in considerably reducing its emissions.

These figures show us the importance of not wasting paper!

b. Paper use in the workplace: the big waste!

The use of paper in business is often characterised by considerable waste. In fact, it accounts for 75% of corporate waste.

Despite technological advances and the transition to an increasingly digital society, paper is still omnipresent in many offices. Piles of printed documents accumulate unnecessary printing increases and single-use sheets of paper are thrown away after only minimal use.

In France, **up to 20% of the paper used in companies is wasted[6]**. The main causes of this waste are:
- ◇ **unnecessary printing** (58 %)
- ◇ **use of out-of-date documents** (23 %)
- ◇ **documents left in printers or photocopiers** (19 %)

In the United States, businesses waste an average of 17% of the paper they use. That's around **6 million tonnes of paper wasted every year** [7].

This alarming trend highlights the urgent need to rethink our practices and adopt a more responsible approach to the use of paper in the workplace.

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[5] *European Environment Agency, Waterbase - Industrial emissions*

[6] *ADEME, Guide de la gestion durable du papier en entreprise*

[7] *Environmental Protection Agency (EPA), Paper and Paperboard Products*

And this waste can be costly for businesses. Some studies show that printing costs can represent up to 3% of a company's annual turnover.

c. Why is so much wasted?

Often due to bad habits or simply printing errors, such as printing a file twice or printing a whole presentation when only a few slides were needed.

- ◇ **Unnecessary printing:** This occurs when a document is printed but is ultimately not needed or used. The reasons for this? User error, ineffective communication, or a lack of print management policy.

- ◇ **Unused double-sided printing:** Due to forgetfulness, lack of habit, lack of awareness or simply not knowing how to do it, double-sided printing is still rarely used. This wastes half the paper.

- ◇ **Unnecessary colour printing:** When documents are printed in colour, this can waste ink or toner, which are expensive products. If colour printing is not necessary for the communication or understanding of the document, it can be considered wasteful.

- ◇ **Documents forgotten in the printer:** When documents are printed and left in the printer, this can lead to wastage of paper and ink (not to mention the problem of data confidentiality), as users will probably have to reprint the documents.

- ◇ **Using obsolete documents:** When documents are printed from an old version or copy, this can lead to a waste of paper, as previous versions are likely to be discarded or unused.

2. How Doxense can help companies reduce their paper consumption?

According to a study by France's Institut de l'économie circulaire, implementing sustainable paper management policies in companies can reduce paper consumption by up to 30%[8].

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[8] *Institut de l'économie circulaire, Diagnostic et perspectives pour l'économie circulaire du papier-carton*

The main actions recommended to reduce paper waste in companies are:
- ◇ Raising employee awareness of sustainable paper management
- ◇ Implementing responsible printing policies (double-sided printing, printer standby, etc.)
- ◇ Digitising documents and setting up electronic document management systems

To this can be added other actions to limit the impact of waste, such as the purchase of certified recyclable paper, consumables, and peripherals.

a. What solutions does Doxense offer?

Doxense offers 2 solutions to help companies manage their printing more effectively:

- ◇ Focalist, a web-based solution, enables you to manage your entire fleet of printing systems (printers and multifunction systems). Management of the installed base, system availability and costs: everything is accessible via a single, highly sophisticated web interface.

- ◇ Watchdoc is a print management solution that enables businesses to **simplify, secure and regulate their operations**. Thanks to environmental data and printing policies, companies can modify user behaviour and encourage eco-responsible printing habits.

For the remainder of this document, we will focus on the contribution of Watchdoc and its impact on changing business practices.

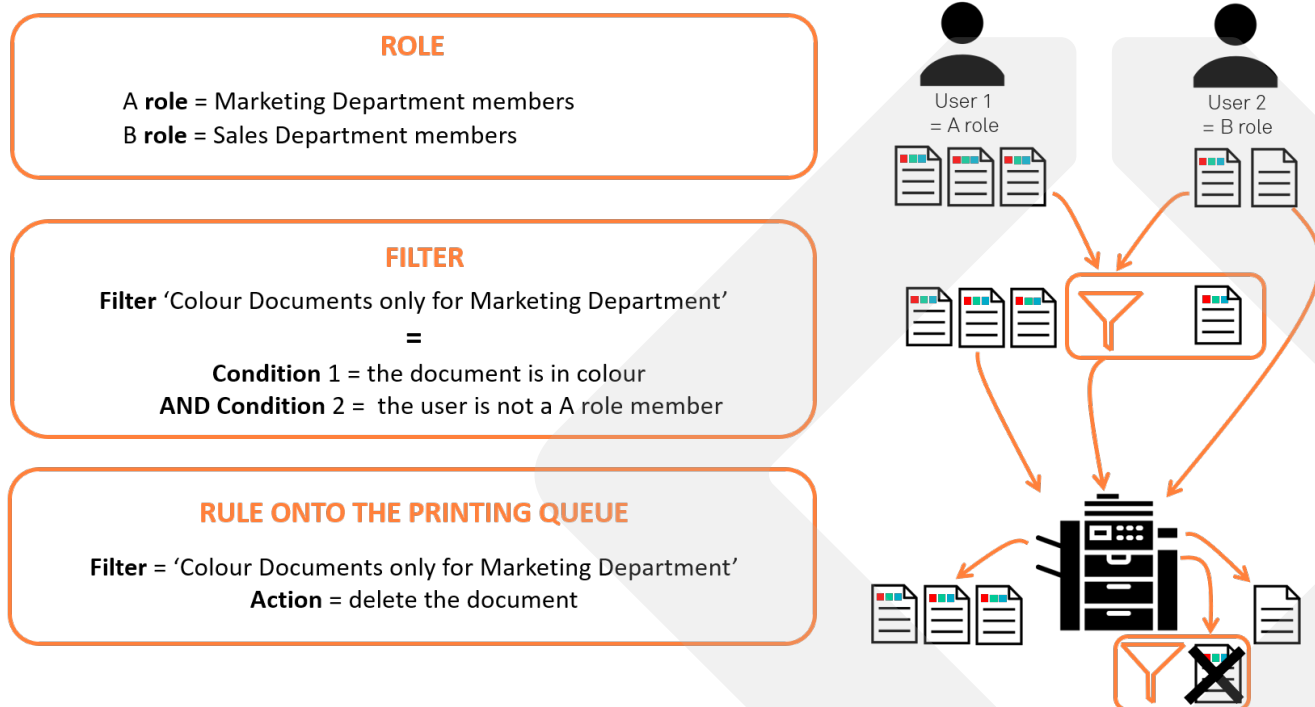### b. Watchdoc features to reduce paper waste.

Printing policy

Watchdoc allows you to set up a printing policy within your company. In order to control printing and reduce waste (printing single-sided or in colour when it is not necessary, for example), it is possible to define rules that apply to print queues.

These rules can be imposed or suggested and will be applied according to criteria that the administrator can define. For example, the type of document, the type of user, on which printers, etc.

 A few examples of applications:

◇ Restrict the use of colour printing for certain services
◇ Suggest double-sided printing before printing
◇ Redirect large print jobs to suitable printers

ROLE

A **role** = Marketing Department members
B **role** = Sales Department members

FILTER

Filter 'Colour Documents only for Marketing Department'
=
Condition 1 = the document is in colour
AND Condition 2 = the user is not a A role member

RULE ONTO THE PRINTING QUEUE

Filter = 'Colour Documents only for Marketing Department'
Action = delete the document

User 1
= A role

User 2
= B role

The impact on paper wastage will be immediate and significant.
If only by encouraging double-sided printing, which mechanically reduces the amount of paper used, even though only 25% of companies regularly use double-sided printing[9].

Savings calculator

To find out whether your printing policy will be effective, Watchdoc provides its users with a savings calculator.
This enables you to see at a glance the savings that can be made, as well as the environmental impact, by modifying certain parameters of your company's printing activity. All you have to do is apply simple rates and spooling criteria to measure the potential savings.

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[9] *ADEME, Guide de la gestion durable du papier en entreprise*
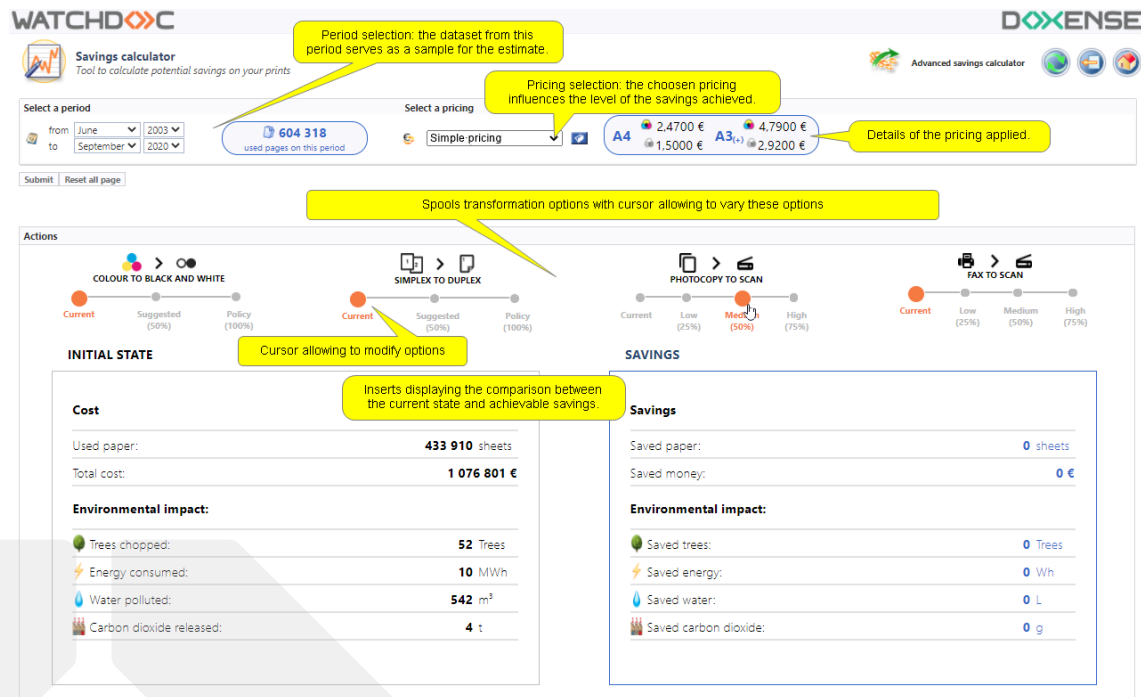
Reviews and reports

Watchdoc makes it possible to collect data on the use of printing systems, continuously and in real time.

The statistics collected in this way give a highly detailed view (who, what, when, how, how much, on what equipment, what costs) of a company's activity.
The statistical reports and summaries provided are invaluable tools for administrators, management controllers, buyers, and CSR managers.
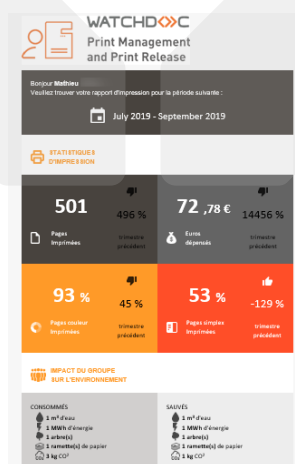
They make it possible to understand, anticipate and optimise printing resources and budgets. As well as the environmental impact of the business and the printing policies in place.

Watchdoc enables users to generate reports on printing activity. They will be sent by email at a frequency determined in advance by the administrator.

Monitoring energy consumption and machine condition

 Watchdoc allows you to monitor the energy consumption of your entire printer fleet. For a detailed understanding of the energy consumption of each printer, you also have access to a history of their status (on standby, waiting, processing).
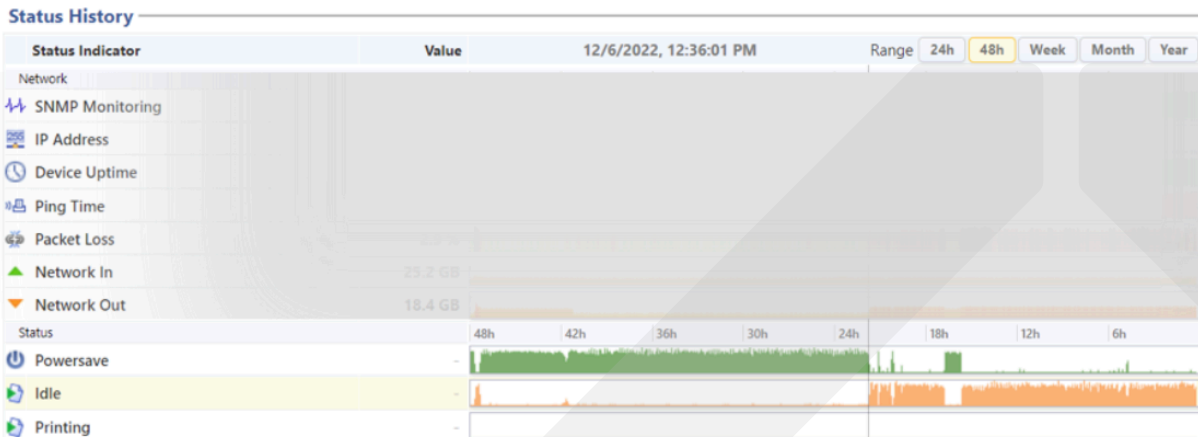
This makes it possible to identify any anomalies, such as a machine that has been idle for several days without printing.

So, you can carry out a few checks:
- ◇ Check the machine's standby configuration
- ◇ Check that the network socket is working properly
- ◇ Check whether several machines have the same problem and what they have in common.

You can then make the appropriate adjustments and optimise your energy consumption.

Communication with users

Watchdoc raises awareness among company employees at various levels.

- ◇ Through customised reports, as we saw above
- ◇ Directly from the Watchdoc interface displayed on the multifunction printer screens:
  - o Enables the environmental impact of printing to be identified for each document :

o It is also possible to pass on awareness-raising messages:

◇ From their user space:

c. Benefits for companies

Implementing an effective print policy, with the help of the Watchdoc solution, offers a host of benefits to businesses looking to reduce paper waste.

By working hand-in-hand with the Doxense teams, companies can expect a significant **reduction of around 20% in print-related waste**.

Using cutting-edge analysis tools, **Watchdoc enables an in-depth, personalised study of each case, identifying the sources of waste and proposing solutions tailored to each company.**

As well as saving on paper consumption, using Watchdoc also **saves valuable time for administrators and staff**. Watchdoc's automated features simplify and streamline the printing process, reducing the number of time-consuming technical tasks. Employees can concentrate on their core activities rather than wasting time managing their printing.

By implementing a responsible printing policy with Watchdoc, **companies are demonstrating their commitment to corporate social responsibility (CSR)**. By reducing their environmental footprint through more responsible paper consumption, companies are helping to preserve natural resources and combat climate change.

3. Documents scanning

Another source of reducing the environmental footprint, related to printing, is document scanning management.

First, digitizing a document for distribution rather than printing it reduces the amount of paper wasted.

Secondly, digitization solutions can offer tools to limit the impact of distributing documents digitally.
Watchdoc, for example, has a "Scan to URL" function that prevents a scanned file that exceeds a predefined size from being sent as an email attachment. This avoids overly large emails, which have a significant carbon footprint.
A URL link is then generated to facilitate distribution and downloading. And the files will be automatically deleted after a certain period of time.

4. Bonus: 10 quick tips to implement

We've listed a few simple tips to start reducing waste and implementing a policy to reduce paper consumption.

1) Do you really need to print this document?

Before you press the print button, ask yourself whether the document can be consulted electronically or shared digitally. Opt for a "paperless" approach whenever possible.

2) Reduce the number of pages

Is your document long? Or are there only a few lines left on the last page? It's probably possible to optimise it with a few easy tricks:

◇ Delete unnecessary pages
◇ Reduce text font
◇ Reduce the spaces between paragraphs
◇ Reduce the size of margins

Or adopt the age-old technique of the "magic digest". Summarise everything in one concise sentence. Sometimes less is more (especially for trees).

3) Duplex reflex

With duplex printing, paper and ecology have never been more in harmony. And if you think about it, it can reduce your paper consumption by up to 50%. So why miss out on it …

4) Recycle print pages

If you haven't used the previous tip and you've still got some unused paper printed on the back, reuse it!
It'll make a great scrapbook, for example.

5) Go for black and white

Colours are nice, but why spend ink on a simple meeting note? Long live black and white, sober, and effective, while saving money and ink!

6) Use recycled paper

Choose recycled or certified paper from sustainable sources. So that every essential printed document is still a gesture for the planet. Say goodbye to sacrificed trees and hello to paper with a fascinating ecological story.

7) Rationalise your fleet

You don't need an army of printers for every employee. What's more, personal printers in offices encourage printing. So, centralise printing on a few machines. And if they're far from the office: even better, getting up to fetch a document will make you think twice before printing.

8) Secure the release

Use access codes or badges to authorise document output directly from the printer. This will help you keep control, reduce waste, and prevent unnecessary and abandoned printouts from lying around the office.

9) Make it fun

Want to get the message across to your employees?
Share good practice with them. And why not offer them a challenge and a prize for the person who reduces their paper consumption the most?

10) Benefit from specialised tools

Watchdoc takes care of everything, so you don't have to. With its super-powered print workflow management, it guides you towards more ecological, economical, and simple choices.
Taking a breather has never been so good for the planet!

5. Conclusion

Producing paper has a strong environmental impact, that's a fact.
Paper consumption in companies remains high, and unfortunately a lot is wasted.
By implementing a rational print management policy, **it is possible to rapidly reduce environmental impact by facilitating changes in usage and limiting waste**.

The **Watchdoc** print management tool from Doxense **enables you to implement your printing policy and offers tangible benefits**. It reduces paper waste by around 20%, generates financial and time savings, and reinforces the company's CSR commitment.

What's more, Doxense's support prior to implementation enables us to study the possible impact of the solution on the organisation.

By adopting a proactive and responsible approach to printing, **businesses can reconcile operational efficiency, environmental sustainability, and social responsibility**, thereby contributing to a better future for all.

Find out more about Doxense and Watchdoc: www.doxense.com