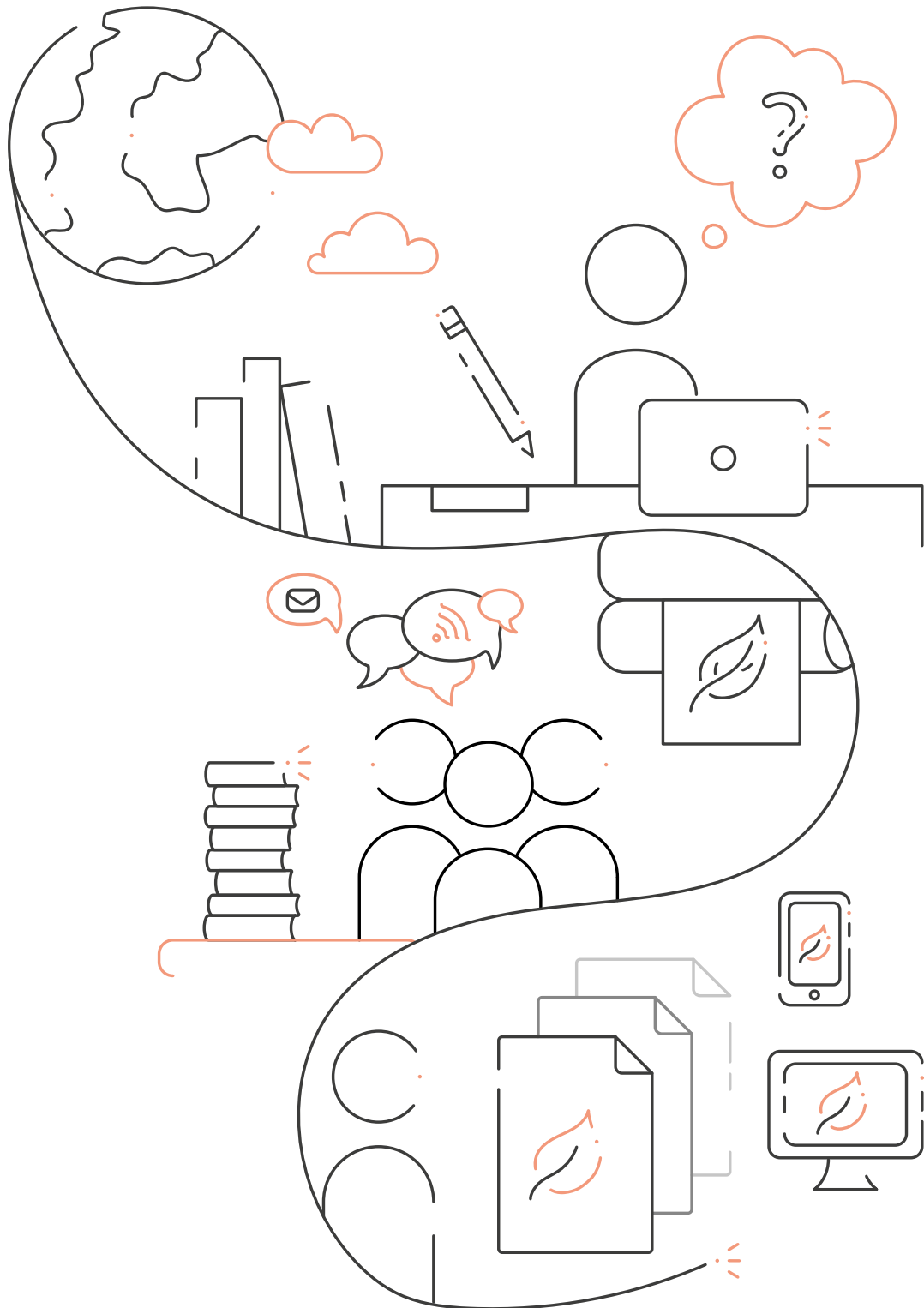


# 4

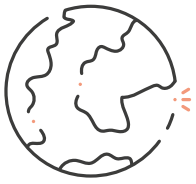
## Graphic eco-socio-design (print and web)



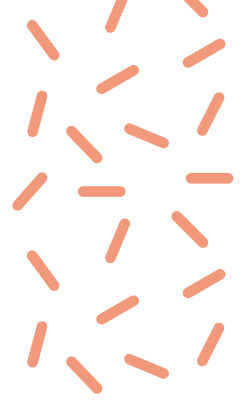


# Chapter Contents





# Graphic design : what impact on the environment?

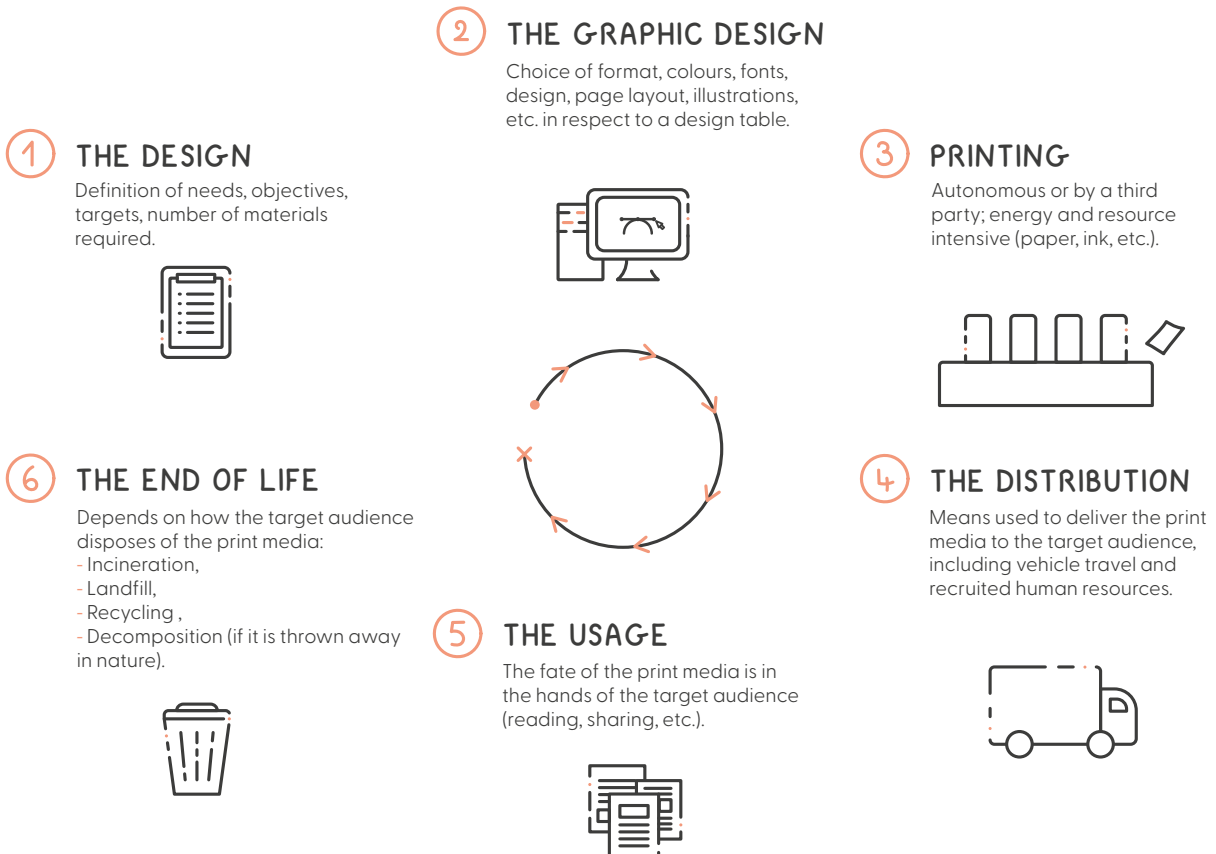


How long do you think it takes for an ink cartridge to decompose in nature? Five years? Much more. 50 years? No, no, you're not even close since they can take up to **1000 years to degrade in the natural environment**<sup>1</sup> ! It's perplexing when you know that **1.1 billion ink cartridges are used per year worldwide**<sup>2</sup>! In addition to the amount of energy and non-renewable resources needed to manufacture them, the toxic components they contain are also the cause of soil and water pollution when they are degraded in nature.

However, ink cartridges are essential for all printing of print communication, and only represent a part of the resources needed to produce them. Between printing and distribution, the environmental footprint of the materials we create for communication campaigns

can no longer be ignored. Beyond print communication media (brochures, flyers, posters, packaging, business cards, etc.), what about the environmental footprint of digital communication materials (videos, images, photos, publications, newsletters, etc.) when they are uploaded, hosted or distributed on the web? As mentioned several times in this guide (see Chapters 2, 6 and 7), the ecological argument for choosing digital before physical media has often been over-stated. Print publishing still has a bright future ahead of it, as long as it is designed in the right way (see next chapter on environmentally friendly printing techniques).

## The life cycle of a print material



Environmental impacts in communications campaigns are largely the consequence of choices made before the printing or distribution phases of communication media, i.e. at the time of their design. In other words, we can reduce

them by integrating not only environmental considerations, but also social ones (in terms of accessibility, for example) from the creative phase. This approach can be referred to as (print and digital) **graphic eco-design**.

For communicators in charge of producing communication media (print and/or digital) following a graphic eco-design approach means taking into account the different creative factors :

- **The formats and number of pages** : determining factors for the size of the file and/or the quantity of paper needed for printing.
- **The materials** that will be used for printing, such as paper types or inks, etc.
- **Graphic design and colours** : essential for the visual identity of a structure or a product but potentially heavy on ink (print) and energy (digital).
- **Fonts** : fundamental for a good understanding of the messages transmitted, their accessibility to visually impaired people, but also the optimisation of the space taken up by the contents of the page and therefore the weight and/or the quantity of paper required during printing.
- **Digital media** on which the communication materials will be hosted and distributed.

In this fifth theme, you will find all the tips you need to integrate these parameters into your creative process.

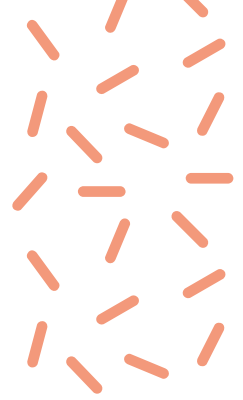


### Focus in on the eco-design of BeeCom's practical guide

It goes without saying that BeeCom's creative teams have followed an eco-design approach to produce the 101 ways to practice sustainable communication guide! Throughout this chapter on graphic eco-design (print and digital), 'Zoom' boxes will allow you to follow the process of reflection and creation from which the guide results. Don't hesitate to take inspiration from them!



# How to eco-design graphic media



## 1. PREFACE

As communicators, we think about business deals, design logos, write stories and then tell them orally or in writing. Design is both the product and basis of many of our jobs in the communications field. We must therefore adapt and, above all, find a balance between the eco-friendliness of a creation, the artistic freedom of the creative teams and the good understanding by the target audiences. To do this, we need to adopt a new mentality, reflexes and rethink our profession as communicators in its entirety.

We agree that this new mentality and these sustainable habits are not found in the "ideas" section of the local supermarket... So how do you adopt them for good? And what are the right questions to ask yourself? You've come to the right place! We advise you to read good practice files 1 and 2 without further delay.



## SUMMARY OF GOOD PRACTICES

## GLOSSARY

### Accessibility

The guarantee that graphic production can be understood and appreciated by as many people as possible, including all disabilities.

### Eco-design

A way of designing while minimising the negative impacts on the environment.

### Graphic sobriety

Moderation adopted by the graphic designer in order to propose graphic designs that are both relevant and eco-friendly.



# Making compromises

## Define the relevance

To design sustainably, you must first ask yourself the right questions : eco-design starts even before you create! Start by asking yourself about the relevance of your future communication materials by referring to the diagram opposite.

## Promoting sobriety

Sometimes, we just want to go all out with the colours, to design an eye-catching logo. Yet there's nothing better than simplicity. In addition to being more pleasing on the eye, simple logos adapt more easily to the media, are easier to understand, lighter in digital size and use less ink whilst printing. After all, isn't simplicity and minimalism fashionable?

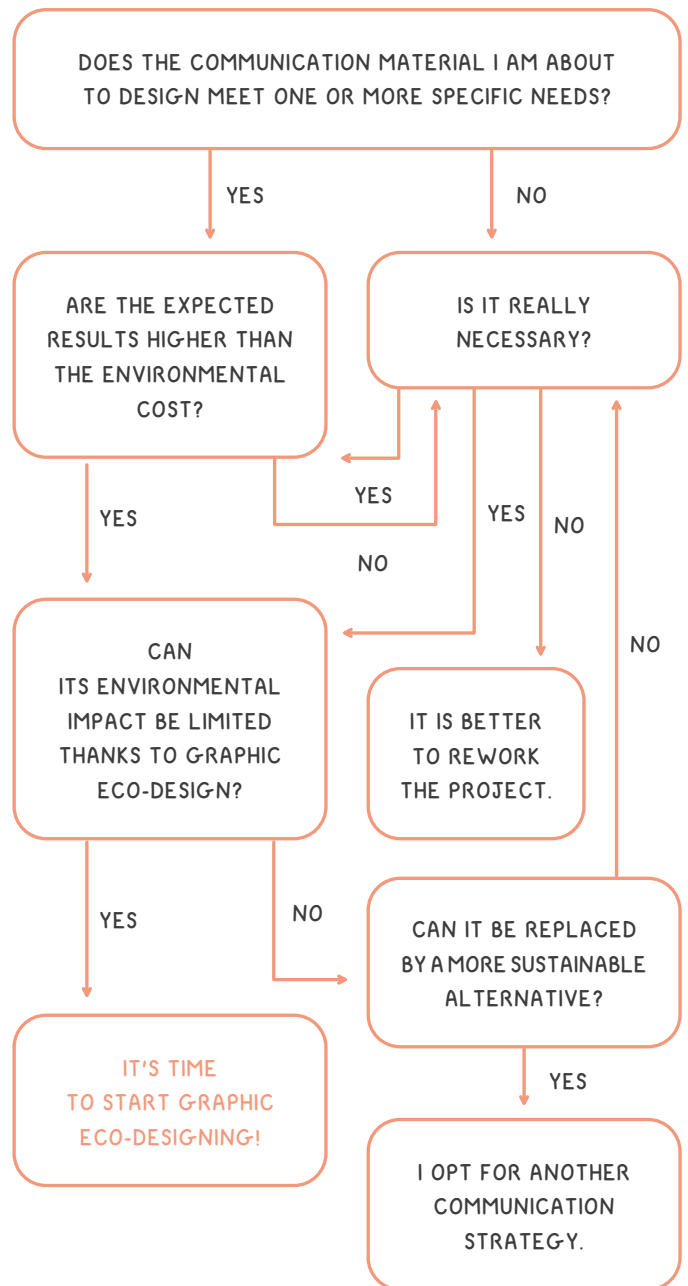


### Focus in on the BeeCom logo

With its fine fonts, its eco-colours and its 'e' transformed in an artistic and symbolic way, the logo imagined by BeeCom's creative teams is eco-friendly. It saves ink while remaining impacting and attractive.



Before embarking on eco-design, let's ask the right questions!



## Maintaining creative freedom

Adapting your design more sustainably does not mean putting an end to all artistic freedom, but simply not resorting to unnecessary frills. After all, if the product, service or message you're trying to sell and/or promote is relevant and attractive, it should be able to stand on its own and should not require technical gimmicks such as an overly rich colour scheme or varnish.

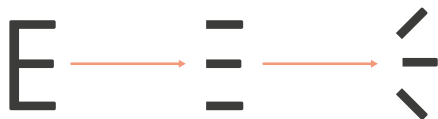
The conceptual restrictions linked to eco-design should therefore be seen as an opportunity to surpass yourself as a graphic designer and even to find a new artistic style. Designing in an eco-friendly way is a challenge that could not be more stimulating!



### Tips

The "e" characteristics of the BeeCom logo are the product of a true reflection of the creative teams. The restrictions that they put on the goal of obtaining an eco-friendly logo have pushed them to put their creativity to test.

Are you also looking to make your loco eco-friendly? We advise you to deconstruct them, play around with the fonts, and see where your imagination takes you!



## Remaining accessible

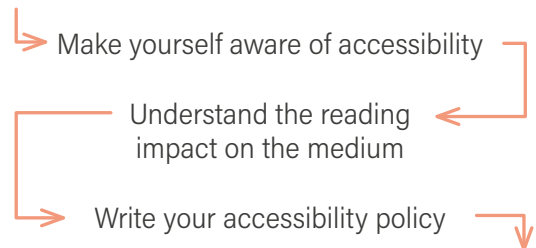
In order to design eco-friendly media, you will need to adapt your creative processes : adapting 'eco-colours', regrouping more content on one page, using black backgrounds, etc. All of these choices make it possible to limit the environmental impact of the materials that can be detrimental to reading, especially for visually impaired people. Eco-design is not limited to ecological considerations, but extends to taking into account the diversity of the public to whom the materials are addressed so that they can be accessible to everyone. Several courses of action are recommended in the following good practices files in this chapter..



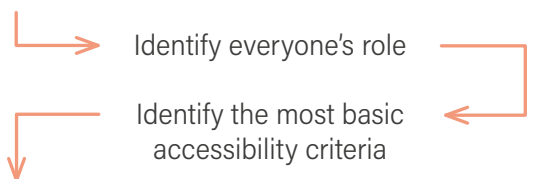
## Key stages to a creative approach

Accessibility cannot be achieved overnight, it takes time. To commit to this approach long-term, it is necessary to think about it from the moment a product, service or message is investigated. Here are the steps to follow :

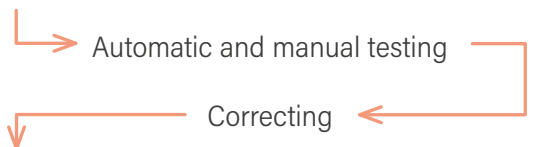
### RESEARCH



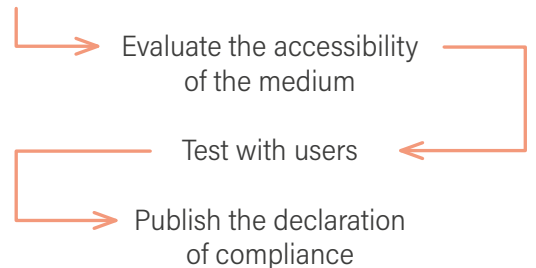
### CONSTRUCTION



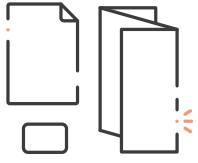
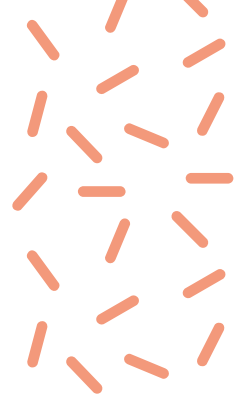
### ACCELERATION



### CONSOLIDATION



Source : Le « Kit de l'accessibilité » du Guide de la communauté beta.gouv



# Adapting the creative process to the media

## Considering all types of media

Print and digital : the famous duality in the world of communication. Two types of media that don't follow the same rules, that don't have the same characteristics or the same limits. As communicators, we are obliged to adapt ourselves to the media in order to be as relevant

as possible to our target audiences and our objectives. This is why it is important to remember to approach print and web differently, more especially in eco-design.

## Comparative table of print and digital communication media

TYPE OF MEDIA CRITERIA	PRINT MEDIA	DIGITAL MEDIA
ACCESSIBILITY	Less customisable, the medium must be optimised before being rolled-out	The experience can be personalised : font size, light or dark themes, etc
TANGIBILITY	Concrete and palpable, more personal for the target audience	Intangible, therefore less impactive
TARGETING	More limited targeting, requires considerable resources (printing, delivery, etc.)	Can reach a very large audience, around the world
RELIABILITY	Timeless, its reliability is proven effective	More interactive and faster, but can be easily lost in the masses (mails, feeds, etc.)
IMPACT MEASURE	Less obvious and precise than digital	Very precise and updated live
COST	More expensive than digital	Less expensive than print
ENVIRONMENTAL IMPACT	Less, as paper is one of the most sustainable materials	Consequential, especially in the manufacture of electronic devices



## Bringing back paper and printing

Many organisations now prefer digital to paper in an effort to reduce their environmental footprint and to 'save trees' But is this zero-paper campaign really relevant? Contrary to popular belief, paper is one of the few truly sustainable materials for a number of reasons :

- The raw material of paper, wood, is grown and harvested in a sustainable way in certified forests (recognisable mainly through the FSC® label, or PEFC™, which however is less strict).
- The surface area of European forests has **increased by 44 000 km<sup>2</sup> in ten years, equivalent to 1,500 football pitches everyday<sup>3</sup>** ! It should be noted, however, that the biodiversity of tree species has reduced, as certain species have been favoured for their greater profitability. Furthermore, deforestation in Europe has not stopped imported deforestation, although the European Parliament and Council have agreed to adopt a law to stop a considerable part of global deforestation.
- In Europe, **almost 75% of paper is recycled<sup>3</sup>**.
- With **barely 1% of global greenhouse gas emissions<sup>3</sup>**, the paper and print sector is one of the lowest industrial emitters.

Compared to paper, digital no longer seems so green. Between manufacturing electronic equipment and data centres, the environmental impact is undeniable (see chapters 2 and 7). Hence the interest in balancing the ecological arguments put forward for one medium or another; the perfect solution doesn't exist, but there are ways of doing things so as to reduce the environmental impact of the chosen media.

## Differentiating between eco-design in print and digital

To eco-design, you will need to adapt yourself to the chosen medium. Here are the main objectives for print and digital :

### Print eco-design

- Use the least amount of ink possible (ink rate, solid colours)
- Optimise the space used to avoid wasting paper (font size, line spacing)
- Use finer fonts, even eco-fonts

### Digital eco-design

- Choose the right colours (energy consumption, accessibility)
- Adapted and correctly sized visuals (images, videos)
- Streamline and lighten the website as much as possible (light fonts and files)



### Share of global greenhouse gas emissions

Paper : 0.9%

VS

Digital : 4%

Sources : *Two Sides* & *Green IT*



## 2. PRINT ECO-GRAPHICS

Flyers, magazines, posters, business cards and leaflets, etc. There is no doubt that various print media are found everywhere in our lives. And they still have a great future ahead of them, despite the rise of digital technology! This is why it is important that we, as sustainable communicators, reconsider our way of design in these different media. Although paper and print are still going strong, there is nothing to stop us rethinking about our printed products to further reduce our environmental footprint, right from the design phase.

Therefore, what are the solutions? Is it a question of reworking your templates? Of watching your ink consumption? Of reconsidering your page layouts? And the fonts used? Actually, it's a bit of all of that. Don't worry, we'll tell you all of that in good practice files 3, 4 and 5, and then in chapter 5 which is dedicated to eco-friendly printing techniques.

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### SUMMARY OF GOOD PRACTICES

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### GLOSSARY

#### Eco-colours

A colour that has an inking rate of less than 100%.

#### Fonts

Techniques allowing the reproduction of texts by assembling characters.

#### Inking rate

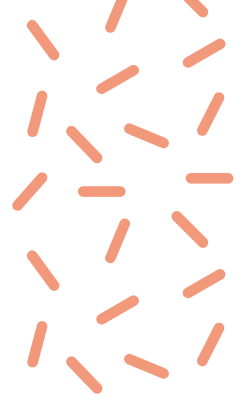
The addition of the percentage of each of the colours of a document.

#### Pattern

A set of points producing an image.

#### Quadrichromia printing process

A printing process using four base colours (cyan, magenta, yellow and black) to reproduce a large range of colours.



# Lowering the inking rate

## Defining the inking rate

The inking rate is the sum of the percentages of the ink used to produce an image, combining the four primary colours of the print : cyan, magenta, yellow and black. The printing technique is called the quadrichromia printing process.

The aim of eco-design is to lower the rate of ink consumption during printing. You will find below some tips on how to achieve this without affecting the relevance and aesthetics of the printed products and other visual creations.

## Adopting eco-colours

The first stage to reducing your inking rate is to use more sustainable colours, also called eco-colours. These are colours that have an inking rate lower than 100%.

You can also play with the whites and adopt some techniques with great artistic potential, such as two-colour printing or even one-colour printing. And it also allows you to stand out!



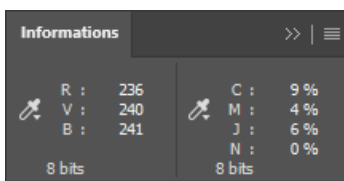
### How to calculate the inking rate

#### In Photoshop :

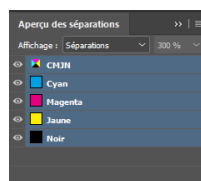
- 1- Open the image.
- 2- Click the "information" tab.
- 3- Add the indicated percentages on the right.

#### In InDesign :

- 1- Open the image.
- 2- Click "Window".
- 3- Then on "Exit".
- 4- And finally on "Overview of separations".
- 5- Then add the indicated percentages.



Photoshop

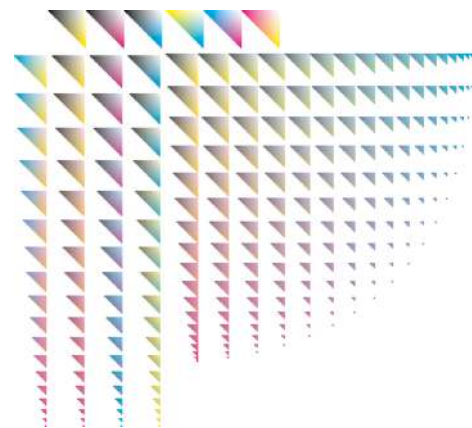


InDesign



### Zoom in on BeeCom's Eco-colour Directory

BeeCom's creative teams have developed a tool that gives an overview of colours with an inking rate lower than 100% in order to facilitate their choice for the eco-design process. The tool is freely available on <https://beecom-responsible.com> in the "Resources > Toolbox" tab.



## Reducing the pattern

The pattern is a set of ink points used to accurately produce the desired image. By reworking and adapting your pattern, you will be able to limit its density, and therefore solid colour, which will allow you to save ink and make your image lighter.

By doing this, you can adopt different techniques :

- Choose gradients over solid colour.
- Use dotted lines over grids.
- Opt for material effects and textures.



### Use patterns to save ink and to lighten your images



*Original photo = 32 268 Ko*

*New version = 1 297 Ko*



# Choosing the right fonts

## Sorting out traditional fonts

The ink consumption of these typefaces depends on their design, size and boldness; a bold font such as Arial will naturally be heavier than a thin Serif font such as Garamond. This is why you need to choose your fonts carefully! Here is a non-exhaustive list of really useful fonts that have much lower than average environmental impact :

- Garamond
- Times New Roman
- Calibri
- Century Gothic
- Courier New

## Adopting eco-fonts

Certain fonts have been specifically designed to reduce the amount of ink used in printing :

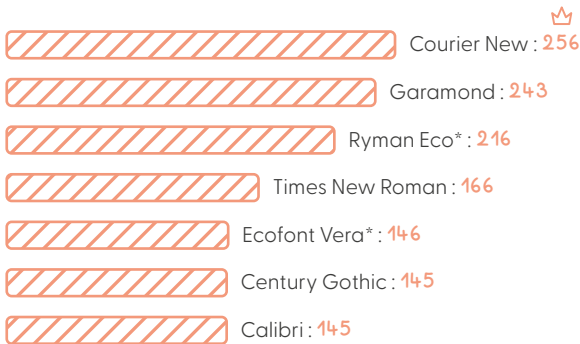
- **Ecofont** is a font with holes, thus requiring less ink than a traditional font.
- **Ryman Eco** is a font with solid and hollowed-out areas that saves ink when printing while combining legibility and elegance.

You can also create your own eco-friendly font with the **Eco-Font!** software! The latter will fill your font with small, unnoticeable holes, but enough to reduce the inking rate of your prints.



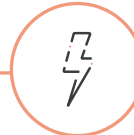
### Good to know

These are classifications of fonts that consume the least amount of ink, depending on the number of pages printed before the ink cartridge runs out.



\*Eco-fonts

Source : **Toner Buzz**



Typography

*Garamond*

Typography

*Courier New*

Typography

*Eco Font*

Typography

*Ryman Eco*

## Adapting to spare 'printed' fonts

Spare 'printed' fonts are all the texts that are 'printed' in white on solid colour. The term "printed" is between inverted commas because it's not actually the case; the solid colour is printed, but the text is not and therefore takes on the colour of the background (most often white). In this case, you should use larger, bolder fonts to save as much ink as possible.



### How to easily adapt your fonts to your media to save ink

Garamond

Arial

Encre

Encre

LESS

ink coverage

MORE

ink coverage

Encre

Encre

LESS

ink coverage

MORE

ink coverage

- There is sufficient space between characters to distinguish one letter from a group of letters (for example, to avoid confusion between the "m" and "r" associated with "n" : m/rn).



### Focus in on the fonts of our guide and their accessible character

Museo  
500

1llijJ rn m MW dpbq B8 COOo ea

Greycliff CF  
Light

llijJ rn m MW dpbq B8 COOo ea

Acumin Pro SemiCondensed  
Light

llijJ rn m MW dpbq B8 COOo ea

*Research inspired by the work of Anne-Sophie from Hello Bokeh*

## Ensuring the accessibility of the font

The primary goal of fonts is to be easily understandable so that reading is as smooth as possible. However, people with disabilities face certain difficulties with reading which can be exacerbated by the font used. **Here are some tips<sup>4</sup>** to use to ensure that the font you use is accessible to everyone :

- These characters are easily identifiable from one another, for example : Between the number 0 and the upper-case letter O (0/O), between the lower-case L and the upper-case i (l/I), etc.
- Its characters are not mirrors of each other, such as lower-case p and q or b and d are not identical characters whose meaning has simply been inverted.



# Optimising the use of space

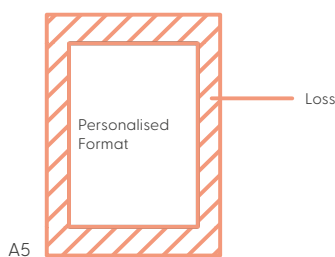
## Preferring standard formats

Before optimising the use of space, you need to determine the format in which the print communication media will be produced. Knowing that the standard formats (A4 and A5) are used as reference sizes in printing, we advise you to choose these formats. They allow you to not only use envelopes and standard cardboard (generally more economical) to distribute your products, but they will also limit the amount of paper waste since there is no need to cut them. By contrast, opting for a personalised format requires cutting the paper to size, which usually results in the waste of excess paper.



### Good to know

Amount of potential paper wasted to get a personalised format (11x16cm) from an A5 (14.8x21cm) :



## Adapting the page layout

In eco-design graphics, the objective is to use the least amount of pages possible whilst using the most amount of available space possible on the format. The first course of action consists of being efficient but synthetic in writing, so as to print only the text essentials. The second course of action consists of adapting the page layout so as to put as much content as possible on one page (taking care not to overload the page, as this could make

the material counter-productive). By doing this, you can for example :

- Reduce the size of the font and its boldness (although care should be taken to ensure that it is still readable to visually impaired people).
- Reduce the space between lines.
- Reduce the margins on each side of the document.



## Zoom in on the page layout of BeeCom's practical guide

Each page has been designed to optimise the available space on a page to avoid waste, while maintaining the reading comfort and aesthetic of the guide.



- 1- Margins : white head and white foot = 15 mm, large background and small background = 13 mm to allow the page to breathe.
- 2- Gutters : 7 mm to have a compromise between readability, breathing and space saving.
- 3- Typography : choice of a legible font with a fine grease to decompose ink.

## Limit the usage of visual displays

In order to save as much ink and paper as possible, avoid using images or other types of solid visuals on your printed products, unless they are absolutely necessary in terms for getting your message across or for the aesthetic of your document. In this case, apply the different tips from the good practice files. 4 in the processing of images :

- Pay attention to the inking rate (no 100% colour).
- Reduce the density of the pattern (think about the dotted lines).
- Try two-colour printing (or even monochrome).

## Making text-only design work for you

Not putting a visual on a piece of creative work is a perfect opportunity to highlight the text! Working creatively with text can lead to an interesting design and, especially, be more ecological (and economical)! You can bring true added value to your texts in different ways :

- Playing, for example, with boldness (which can be relevant on solid colour).
- Experimenting with paragraph forms (to form letters, words, or even symbols, etc).



### Zoom in on the image processing of BeeCom's practical guide



Before



After

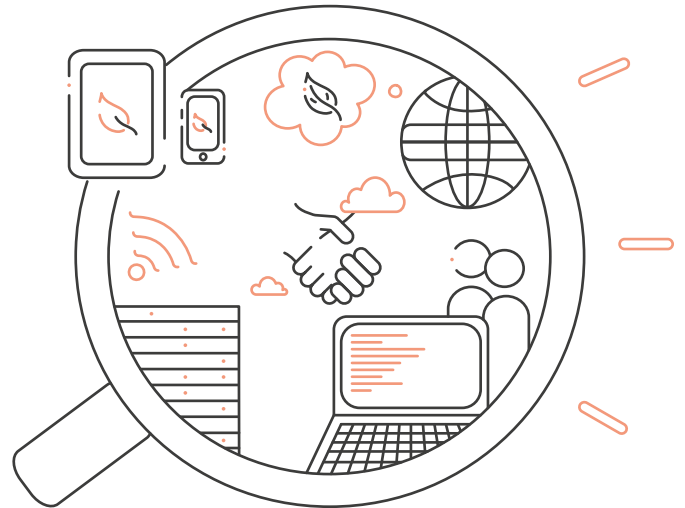
- 1- The image is in black and white.
  - 2- A coloured monochrome filter is added to add dynamism. The applied colour is chosen according to the theme of the guide, to which a colour has been associated in the graphic chart to facilitate navigation between chapters.
  - 3- The brightness of the image is slightly increased to reduce the amount of ink used to print this image.
  - 4- At the bottom is added a pattern that does not affect the readability of the image : to create openwork spaces that will not be printed.
- This image processing allows you to pass ink coverage of 32 268 Ko to 3 082 Ko.



### 3. WEB ECO-GRAPHIC

Printing is great for communicating, but so is digital. If not more so, it's still faster and more mainstream. Only, as we have seen earlier in this good practice guide, the digital world pollutes, and not just a little! It is therefore really important to keep this detail in mind when working on content and virtual creations for your websites or different social media. This is why we present you with the digital (or web) eco-design.

But to do that we need to think about how we can produce digital content in a more sustainable way. Should we rethink the aesthetic aspect of our entire website? What should we do with the files that we put online on our different web platforms? We will explain all of this in the good practice files 6, 7 and 8 in this section entirely dedicated to sustainable digital communications!



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## SUMMARY OF GOOD PRACTICES

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## GLOSSARY

### Colour-blindness

Genetic sight anomaly which confuses different colours, often green and red.

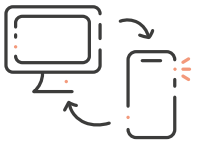
### Dyslexia

Impaired ability to read or recognise written language.

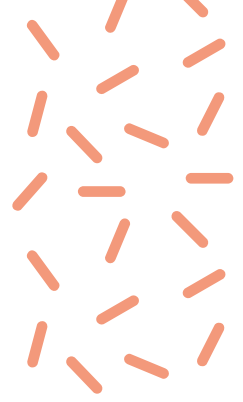
### Photophobia

Sensitivity of the eyes which can lead to fear of light.

## GOOD PRACTICE NO. 6



# Adapting graphics to media



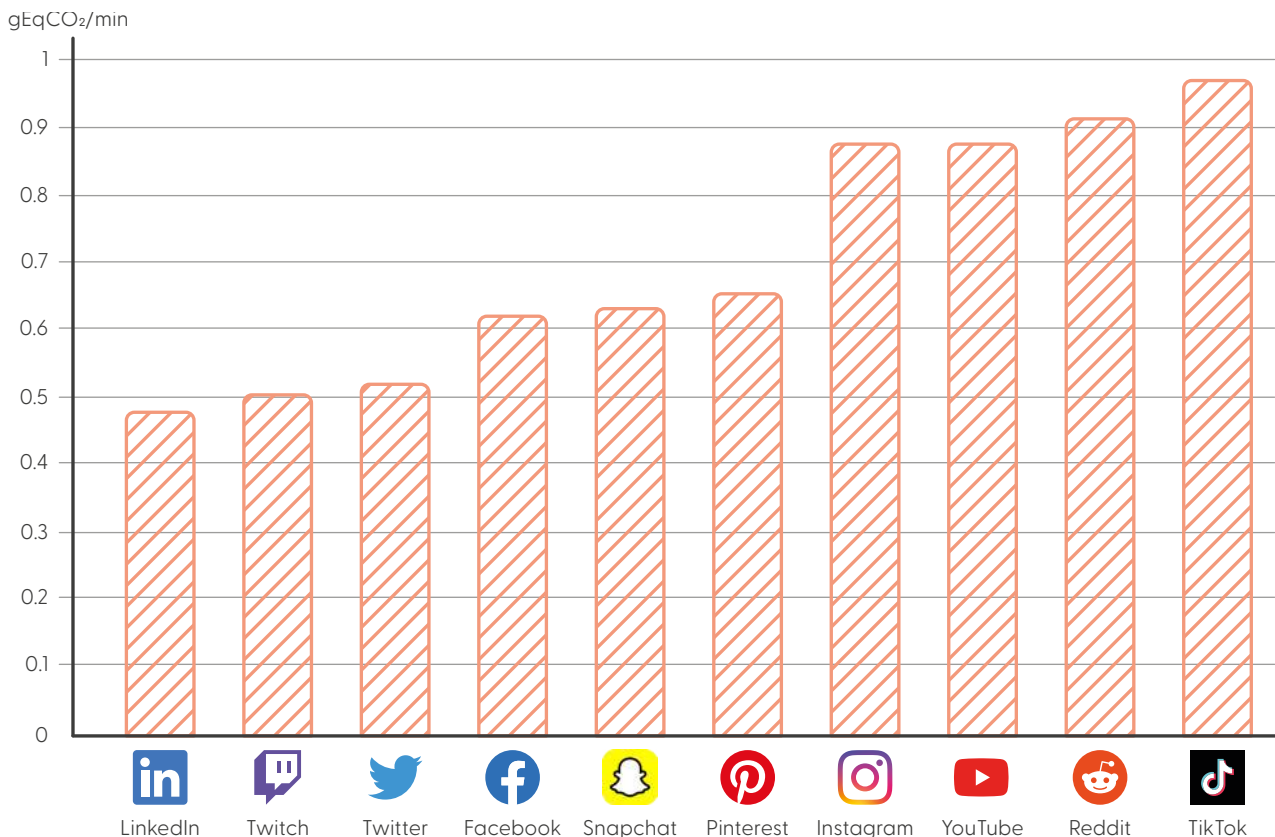
### Understanding the interest of adapting oneself to the media

Instagram, TikTok, YouTube, websites, etc. There are so many digital media platforms. We tend to communicate on all these media so that we can reach as many people as possible... But is it the right strategy to adopt? We must not forget that the more we multiply our presence on networks the more we pollute! It is therefore important

to target the networks we want to publish our content on : not only in relation to our audiences, but also removing the most energy-consuming networks. This will also allow us to eco-design content specifically adapted to the media on which its published.



### Classification of social networks in relation to their carbon impact



Measurement carried out by Greenspector 13 April 2023, over a period of 60 seconds

Source : **Greenspector**

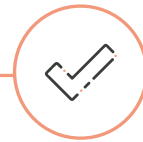
## Designing for the website

On your website, you are free to design as you wish. But if you want to reduce your environmental impact, it can be good to measure your image and video usage, and to focus on writing instead. Therefore try to make your texts beautiful, and to give them more value and use visual content if necessary. You will find some tips on this subject in the good practice files 8 and in chapter 7, which is dedicated to digital eco-design!



### Zoom

You can combine your texts with some well-dimensioned photos and lighter geometric illustrations. Keep in mind that adding a low-energy mode, which would allow you to optimise your website's energy consumption, would be very interesting !



### How to limit the impact of your videos

- Resolution** : no more than 480p.
- Length** : no longer than one minute 30 seconds.
- Format** : 1 :1 on news feeds.
- Accessibility** : subtitles.

## Designing for social networks

Visuals and videos are necessary on social networks. So here are a few things you can do to reduce your environmental impact without compromising the relevance of your content.

### Visuals :

- Make sure that your images are not bigger than the dimensions supported by the social network.
- Moderate the number of visuals that you post, you don't always need to make image carousels.

### Videos :

- Think mobile : the users are most often on their telephones You can therefore reduce the quality of your videos.
- You don't need to post long videos, one minute 30 seconds is enough.
- Add subtitles to maximise accessibility, particularly for the hard of hearing.



# Prioritising dark themes

## Understanding the consumption of colours on a screen

The colours displayed on your screens have an impact on the energy consumption of your device, as well as the brightness. On the same screen, white and blue are the most energy consuming, by contrast black is the colour that consumes the least. But pay attention, you need to bear in mind that these differences in energy consumption depend on the device used, as well as the screen technology with which it is equipped.



### Good to know

Energy consumption of the main colours on an AMOLED screen (Nexus 6), in increasing order :



Source : Greenspector

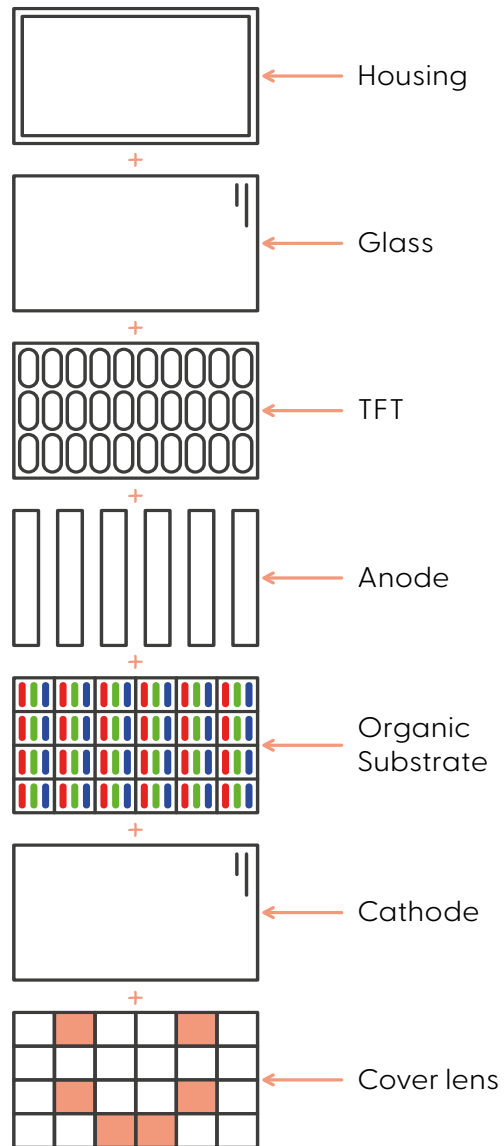
## Comparing different screen technologies

Not all screen technologies are made the same : some save energy when dark colours are displayed, while others do not. That's why we focus on one technology in particular : AMOLED.

To display black, AMOLED screens turn off their LEDs, which reduces their energy consumption. On these screens, dark themes are less energy consuming, and therefore more interesting! This is not necessarily the case on other types of screens, such as LCD.



## Operation of an AMOLED display



Source : Tech Society

## Evaluating the accessibility of dark themes

Dark themes bring their own set of questions, particularly in terms of accessibility. According to **Sheri Byrne-Haber**<sup>5</sup>, writer and expert on this topic, dark themes don't provide the best contrasts and are not necessarily easier to read than bright themes, contrary to common beliefs. On these points, it really depends on the person. Bright themes are, on the other hand, susceptible to cause the user to have photophobia! But they can pose more problems for colour-blind people and dyslexic people.

## Summing up the relevance of dark themes

Developing dark themes is important : they allow you, on the right screens, to save energy. However, not everyone is equipped with AMOLED screens (yet), and therefore can't benefit from this advantage. Furthermore, we have seen that black screens are not the most accessible for certain groups of people.

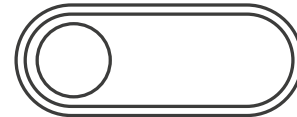
The idea is therefore to offer both a light theme and a dark theme, leaving the choice to the user. You can facilitate the switch between the two themes, by making it obvious it can improve the user's comfort, for example.



### Good to know

What's an obvious switch?

A slider begging to be clicked, for example!



### Attention

People affected by colour-blindness have more problems with reading on black backgrounds than on white backgrounds.

By adopting **eco-friendly graphic designs**, it is possible to reduce **the environmental impact** of our graphic creations.

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Source : *Sheri Byrne-Haber*



## Optimising file size

### Reducing visual content

Images represent almost half of a website's size. Hence the interest in rethinking about their use and their format. First of all, think about uploading your images in the right dimensions because the user consumes energy by resizing them.

To reduce your visual content, here are the formats to pick when you export your visual creations :

→ .jpeg or .webp for photos

→ .svg or .jpg for photos

Also reflect on the relevancy of your images : are several really necessary? Wouldn't one be enough?



VS

It's better to pick just one photo to use than several. This can be your opportunity to communicate your creativity!



or



### Compressing visuals

One effective way to reduce the weight of your images, and as a result the environmental impact of your website, is to compress your visuals. There are two types of compression :

→ 'Lossy' compression lightly reduces the visual quality of your image to lower its file size.

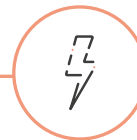
→ 'Lossless' compression reduces the size of the image but keeps its visual quality to the human eye.

There are several software programmes that help you compress your images :

→ Shortpixel

→ Image Compressor

→ TinyPNG



Do you see the difference between these two images?

Yet, one is compressed, the other isn't.



Uncompressed image  
32 268 Ko

Compressed image  
1 297 Ko

## Moderating videos

Videos alone account for **more than half of internet traffic**<sup>6</sup>. They take up a significant amount of bandwidth across websites and social media, much more than images. As a result it's a good idea to rethink our use of videos, and question their relevance. Here are some tips to use to limit the environmental impact of your video on the internet :

- Suggest short videos, no more than one minute 30 seconds.
- Don't exceed more than a 720p resolution, which is enough for most computer screens.
- Don't insert a background video that starts automatically (in the header, for example).

Bonus : consider putting subtitles to improve not only accessibility but also the effectiveness of the video. In fact, a lot of people watch them without sound (on public transport or in open space for example).



### Did you know?

Online videos generate more than **300 million tonnes of CO<sub>2</sub> per year**.

Source : *The Shift Project*

## Compressing videos with the Handbrake tool

- **Step 1** : Freely download the Handbrake tool from the website.
- **Step 2** : Open the software and select the video that you want to compress.
- **Step 3** : Choose the MP4 format in the "Summary" tab and click "Web Optimized" and "Align A/V Start".
- **Step 4** : Click the "Video" tab and select "H264" as video encoder, choose the "Same as source" framerate, and click "Constant framerate". For the quality, select "Constant Quality" then drag the cursor. The lower the number, the higher the quality. The Shift Project recommends 22.

- **Step 5** : Click the "Dimensions" tab and enter the values 1280 and 720 in the two "Storage size" spaces and then click "Keep Aspect Ratio". Select "off" in the "Anamorphic" space and 2 in the "Modulus" space. Leave the "Cropping" preference in automatic.

- **Step 6** : Click on the "Audio" tab and make sure to have only one audio track at the top of the list. Select "stereo" in "Mixdown" and leave the "Samplerate" in "auto".

- **Step 7** : At the bottom of the Handbrake window, complete the "Save as" field with the name you want to give your compressed video, then select in "To :" the place to where you want to export this video.

- **Step 8** : Click on "Save new preset", give it a name and then click "Add". This allows you to use the same method on other videos.

- **Step 9** : Start compressing your video by clicking "Start"!



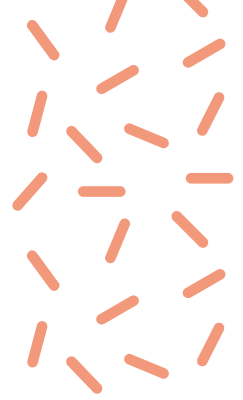
### Reducing the weight of videos using Handbrake (en Mo)

	BEFORE	AFTER	REDUCTION
TRANSITION PARTS	100	1,7	98,3 %
ETHICS AND MORALITY	35,93	5,5	84,7 %
EARTH!	351	32,5	90,8 %
TOTAL	486,93	39,7	91,85

Source : *Gauthier Roussilhe, The Shift Project*



# Want to go further?



## ADDITIONAL RESOURCES

### 1) Useful tools

**Aa**

#### Colorable

evaluates the contrast between two colours in terms of accessibility.



#### Handbrake

compresses your videos.

**COOLORS**

#### Colors

allows you to create your own colour pallets.



#### Image Compressor

compresses your images.

**ECOFONT**

#### Eco-Font

allows you to create your own eco-friendly font.



#### Shortpixel

compresses your images.

**eco Index**

#### Ecoindex

evaluates the environmental impact of your website.



#### TinyPNG

optimises the weight of your images.

### 2) Inspirational bibliography

#### Main sources

<sup>1</sup>Pourquoi une cartouche d'encre est nocive pour l'environnement? Consulted on February 24 2023 on <https://www.cartouche-vide.fr>.

<sup>2</sup>Consommation mondiale de cartouches d'encre pour imprimante. Consulted on March 14 2023 on <https://www.planetoscope.com>.

<sup>3</sup>TWO SIDES (2021). *Print and paper, myths and facts*. Consulted on March 13 2023 on <https://www.twosides.info>.

<sup>4</sup>ANNE-SOPHIE DE HELLO BOKEH (2023, January 12). Accessibilité et typographie : qu'est ce qu'une police de caractère accessible? Consulted on January 18 2023 on <https://blog.hello-bokeh.fr>.

<sup>5</sup>SHERI BYRNE-HABER (2019, September 16). Dark UI themes are new and cool - but are they accessible? Consulted on November 16 2022 on <https://uxdesign.cc>.

<sup>6</sup>ADEME (2022). *En route vers la sobriété numérique*. Consulted on November 16 2022 on <https://librairie.ademe.fr>.



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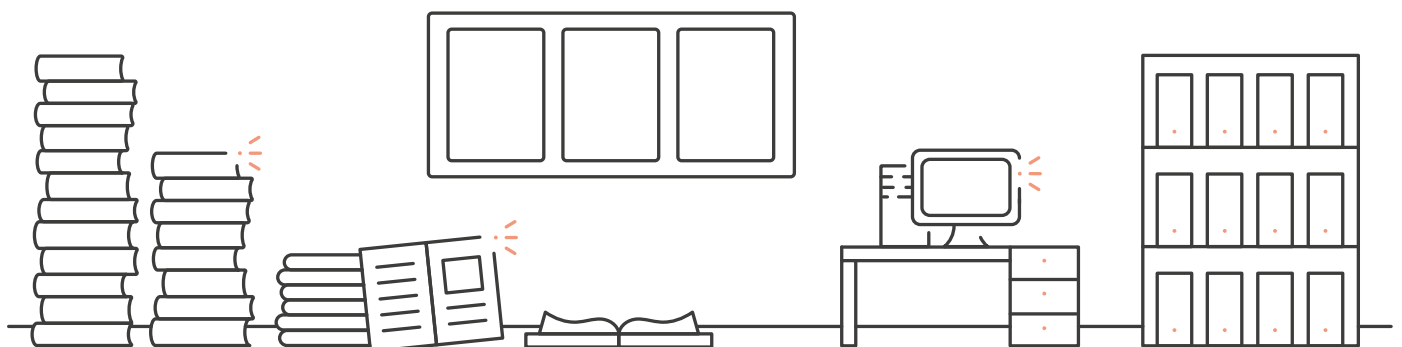
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# THE CHECKLIST FOR YOUR SUSTAINABLE PROGRESS!

*Tick the boxes when you plan to implement these accountability levers in your practices. For unticked boxes, go to the associated good practice sheet to get lots of tips!*

## Preface

Good practice no. 1 : Making compromises

Good practice no. 2 : Adapting the creative process to the media

## Print eco-graphics

Good practice no. 3 : Lowering the inking rate

Good practice no. 4 : Choosing the right fonts

Good practice no. 5 : Optimising the use of space

## Digital eco-graphics

Good practice no. 6 : Adapting media graphics

Good practice no. 7 : Prioritising dark themes

Good practice no. 8 : Optimising file size

## NEED TO WRITE SOMETHING DOWN?

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