Sustainable graphic design solutions

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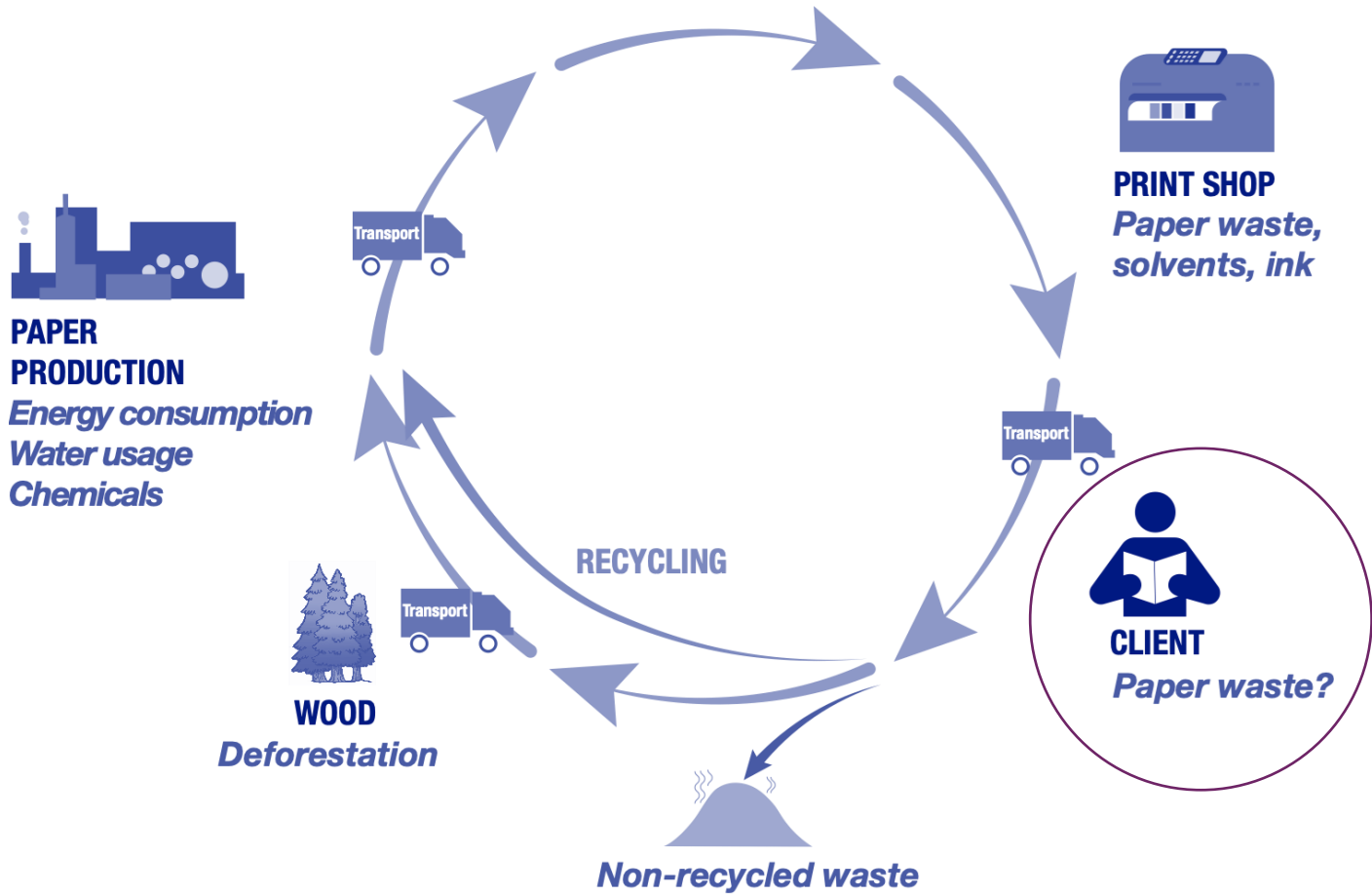
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Sustainable graphic design solutions for CERN

"Sustainable graphic design (SGD) refers to the design process that integrates an environmentally friendly approach and considers natural resources as part of the design".

- It is to be understood as a process, where the focus is not on the 100% sustainable product, but on the gradual improvement of existing products and processes

- SGD has gained increasing attention over the last years, many companies / Organisations have realised that their communication should have an ecological focus.

- When companies claim to be eco-friendly based on a myopic view of sustainability and without looking at all the implications of their actions, they may end up being accused of "greenwashing".

- This presentation is oriented on recommendations with graphic design focus. In line with the "CERN's Main objectives" report, page 12, 13 & 14 (CEPS and SDG).

Sustainaible graphic design solutions_Issues & opportunity

PRINT SHOP
Paper waste, solvents, ink

PAPER PRODUCTION
Energy consumption
Water usage
Chemicals

Transport

RECYCLING

CLIENT
Paper waste?

WOOD
Deforestation

Transport

Non-recycled waste

Minimize PAPER use

1. Avoid paper waste: choose smallest standard format (A3, A4, …)

2. Choose lighter paper and two-sided printing

3. Only print the minimum number of copies needed
   < 2000 copies : choose digital printing
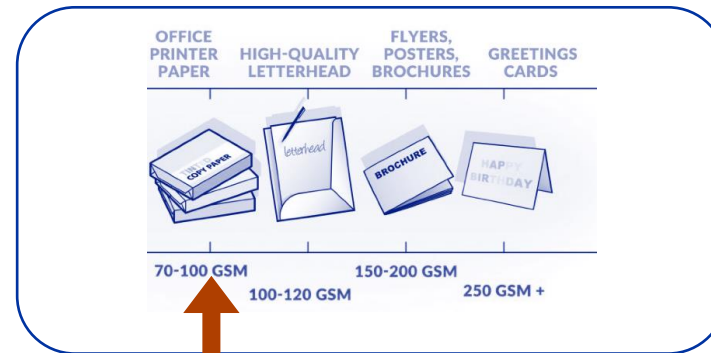


Non-standard format *versus* Standard format

Minimize INK use and Favour digital

1. Printer ink is poisonous and not bio-degradable

2. Maximize white space and avoid filling paper with unnecessary colours

3. Limit number and amount of colours and avoid metallic/neon colours, glossy varnishes

4. Favour digital printing

- More ecological for < 2000 copies
- No cleaning work
- Less emission of volatile compounds
- Adapted for use of environmentally friendly papers
- Toner cartridges can be recycled

Choose a GREEN PRINTSHOP
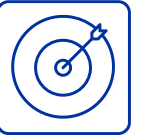
1. Support local companies (CERN rules / transport)
2. Support companies that care about the environment:
   - Use of environmentally friendly printing techniques
   - Use of FSC- or PEFC-certified virgin fibre (or recycled paper)
   - Paints/cleaning with little volatile organic compounds
   - Water based, chlorine-free adhesives and coatings
   - Safe waste disposal for paper and chemicals
   - Efficient use of materials
   - Energy saving measures
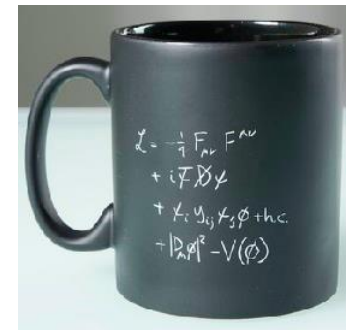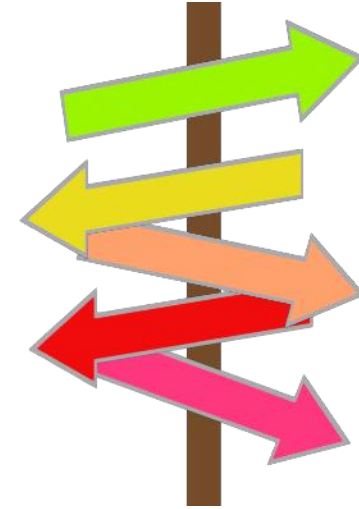
Minimize PLASTIC use

Exhibitions, signage and events

- choose durable and recyclable materials
- minimize amount of plastic (no PVC) for posters
- minimize amount and size of objects for signage

Object branding, CERN shop, conference goodies …

- choose renewable materials
- avoid plastic materials for physical objects
- avoid plastic packaging

Digital media: LESS (data) is more

Design for websites, social media, videos:

- minimize amount of required data transfer
- minimize use of CPU processing (electricity consumption)
- offer image resolution and format adapted to devices
- offer videos with optimized resolution and compression
- disable auto-play
- prefer vectorized formats (SVG)
- use collaborative documents
- avoid big attachments (e-mails)
- reduce mail banners / email signatures / company logos

Create a SUSTAINABLE workspace

Promote environmentally - aware attitudes:

- Energy saving lamps
- Digital collaboration - no printouts
- Check proofs on screen, only print when necessary
- Print on FSC/PEFC certified (or recycled) paper

Education:
Pass on knowledge & experience about SGD

Share among CERN community

ETHICAL brand messaging

- Factual and transparent communication
- No 'greenwashing'
- No overpromise (or overcommitment)
- Avoid cliché :

hands clutching planet

holding trees

water droplets

wind turbines

Summary

- Minimize: paper use, transport, ink use, plastic use

- Favour: digital printing, green print shop

- Digital media: less (data) is more

- Create a sustainable workplace

- Focus on environmentally conscious choices

> Key actors that can help CERN integrate SGD: procurement, printshop, printer services, Library, Departments and Experiments comms teams, event organisers, future projects, CEPS …

References

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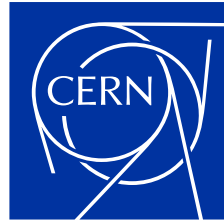
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