

Sustainability in email marketing

A data-led look at lower-carbon email marketing



An introduction

Every email carries a small carbon cost. Send it to a full list, and that small cost adds up fast.

This report walks through where that cost comes from, and what marketers like you are already doing about it. We surveyed marketing professionals across eight industries, from e-commerce to insurance and NGOs, about how they approach sustainable email.

Email already beats paper on carbon, the bigger win sits in how you run your own program. A smaller list, a lighter template, and a cleaner send schedule all cut the footprint of every email you send. Most of these changes cut your costs too.

The numbers

4g

A standard marketing email produces around 4g of CO₂. Add images and attachments, and that figure can reach 50g. (EcoSend)

20g

A paper letter produces around 20g of CO₂, about the same footprint as 67 short emails. (ForTomorrow)

48%

48% of the marketers Apsis surveyed rate sustainability as very important to their marketing strategy. Another 43% call it somewhat important.

Let's start with why this matters at the scale you're working at.

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THE SCALE PROBLEM

One email is tiny.
376 billion a day is not.

A small cost, multiplied enough times, stops being small

SOURCE: CARBON LITERACY PROJECT , 2025

01

How big is the problem?

Why sending adds up fast

You probably send an enormous number of emails every year, and so does everyone else.

376 billion

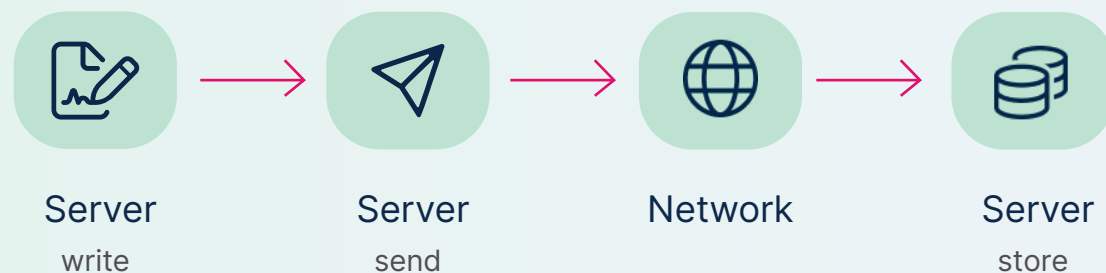
Carbon Literacy Project puts the number of emails sent worldwide every day at around 376 billion in 2025, and that number keeps climbing.

1 billion

Email isn't the only channel racking up numbers like that. **ChatGPT alone receives around 1 billion messages every day**, enough on its own to make it the fifth-most-visited website in the world.

The same rule applies: a small cost, multiplied enough times, stops being small.

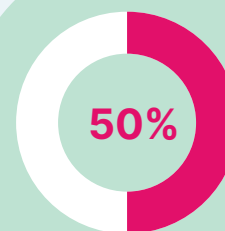
EVERY EMAIL YOU SEND NEEDS A



Those servers sit in data centres that run day and night. Running them takes power, and keeping them cool takes even more. Much of that power still comes from fossil fuels.

1. HOW BIG IS THE PROBLEM?

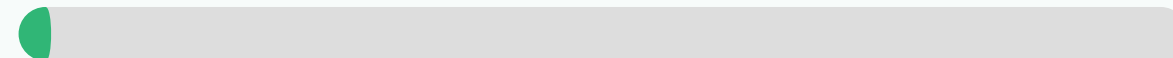
Your single email's carbon footprint may look tiny next to a flight's or a car ride's, but you send to lists, segments and campaigns that reach thousands of people at once.



And there's also spam! Around half of all email traffic never reaches an inbox at all... **Countryfile** puts the cost of each one at around 0.3g of CO₂, filtered out before anyone sees it but still paid for in electricity. Invisible waste, but waste all the same.

THE TOTAL FOOTPRINT OF GLOBAL EMAIL RUNS TO

Counting only the moment of sending



more than 2 million tonnes of CO₂ a year

once years of server storage and attachments are counted in.



300 million tonnes a year

The gap comes down to what each figure measures. Whichever you choose to take into consideration, one thing stays true: your email has a real footprint.

02

Email vs paper

The case for email over paper

2.1 The cost of paper mail

A letter's cost is baked in before it ever reaches a postbox: the tree, the mill, the ink, the van. That's true no matter what happens to the letter afterwards.

Your email skips nearly all of that. It looks free because the bill doesn't arrive all at once.

Paper's footprint is front-loaded but permanent: it lands in one go, and there's no taking it back. Email's is distributed but manageable: it trickles out for as long as that message sits on a server being stored, indexed, and backed up.

An email nobody deletes is still costing you, years after you hit send. Most of that cost hasn't happened yet, though which means you still have room to shrink it. A lighter template today or a shorter retention policy lowers the cost of every email still sitting in an inbox somewhere.

2.2 The numbers

Independent research puts these formats side by side:

Format	Paper letter	Short email	Standard marketing email	Email with attachments
CO2 per item	~20g	~0.3g	~4g	~50g

If every adult in the UK sent one fewer thank-you email a day, it would save 16 433 tonnes of carbon a year.

16 433
tonnes of carbon saved

3 334
diesel cars off the road

81 152
fewer one-way flights,
London to Madrid

Email vs paper

The case for email over paper

one paper letter
= about 67 short emails.

Paper letter ~20g CO2 · Short email ~0.3g CO2

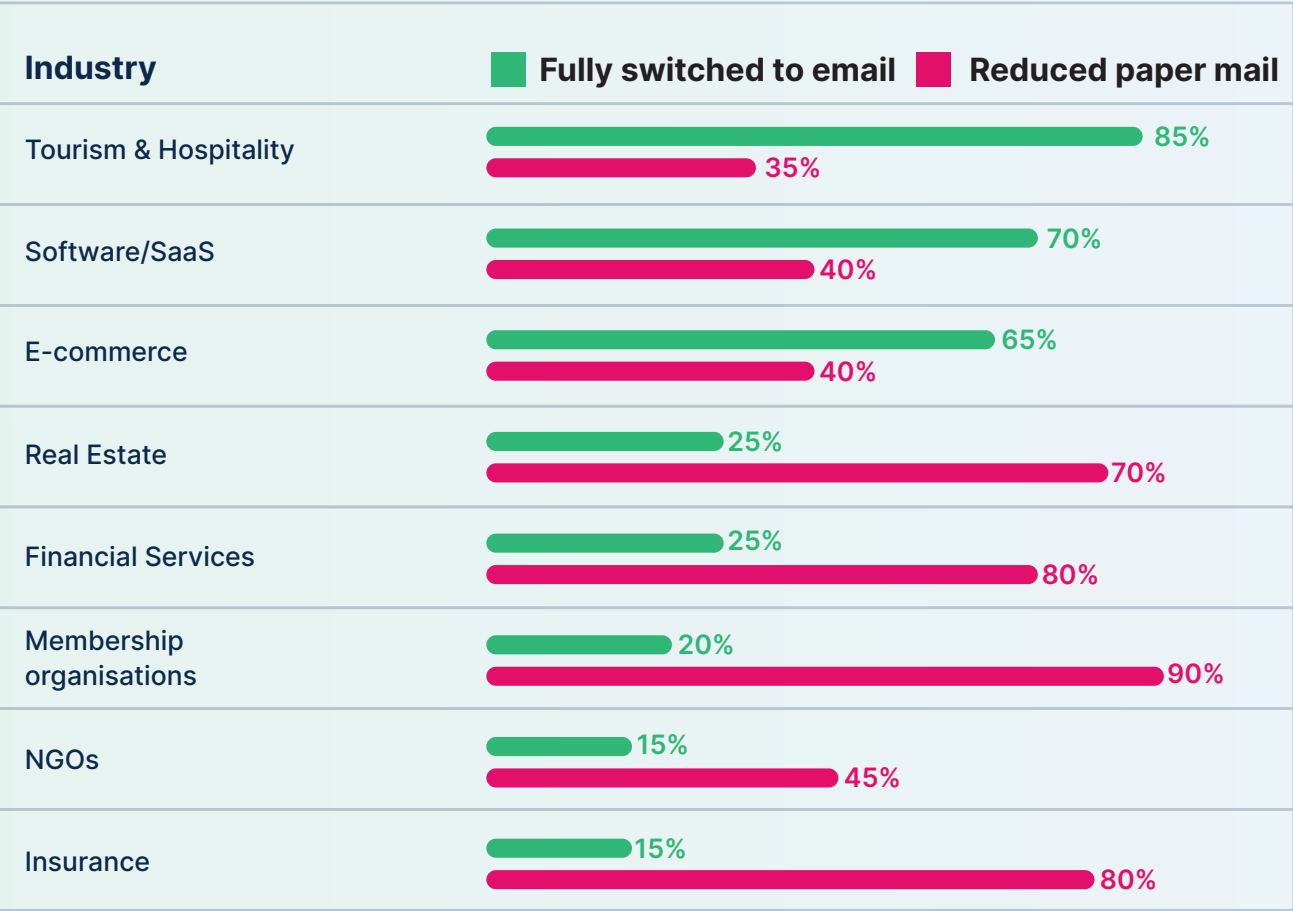


2. EMAIL VS PAPER

2.3 What the survey found

Our survey shows you're not alone in making the switch. We asked marketing professionals across eight industries what share of their communications go out by email versus paper. Only one organisation, in real estate, told us it still sends everything on paper.

1 in 160 is the number of organisations we surveyed that still send everything on paper. Every other one uses email for at least some of its communication.



Based on 160 marketing professionals surveyed in 2026, around 20 per industry. "Reduced paper mail" reflects every industry's response to a separate question: has your organisation reduced its use of paper mail in the last three years?

2. EMAIL VS PAPER

What stands out

Tourism and hospitality lead

85%

of those marketers sending everything by email. Software and SaaS follow at 70%, and e-commerce at 65%.

Insurance and NGO trail

15%

fully switched, the lowest of all eight. Every insurance market also keeps paper mail, most likely for regulatory paperwork. For NGOs 55% still use paper, and the same share point to donor preference.

Real estate and financial services land in the middle, both at

25%

fully digital. For real estate, the two biggest barriers are customer perference and a lack of customer email addresses, both cited by 65%.

Membership organisations show the sharpest shift towards digital with

90%

having reduced their paper mail in the last three years.

03

Sustainable list management

Why smaller lists matter

A long list full of dead addresses costs you twice: it hurts your deliverability, and it hurts your footprint too.

Every email you send to a dead address or to someone who stopped opening your emails wastes energy for no return.

Permission-based marketing already does double duty

GDPR asks you to email only the people who opted in. The planet benefits from the same rule, since a list built on real interest stays smaller and cleaner than one built on volume.

A few good list habits to help lower your carbon footprint:



Sunset flows

that stop emailing contacts who never engage.



One light check-in

A single, light-touch message before you remove someone.



One-click unsubscribe

People who aren't interested can leave cleanly.

04

Email design and efficiency

Why file size matters

Every part of an email adds to its file size, and file size drives its footprint. A mostly text email stays light. Add a few images and a PDF attachment, and EcoSend's own numbers show that weight climbing fast.



1x

Plain-text email



12x more carbon

Email with images and a pdf attachment

A REAL TRADE-OFF

between plain text and heavy HTML. Plain text loads fast, while an image-heavy template can convert better but costs more in data and in carbon every time you hit send.

Shorter copy helps on both counts too, as it's quicker to read, so it demands less of your subscriber's attention. It's also smaller to send, so it requires less of every server in between.

A lean email can still look sharp; it just needs each element built with intent. Here are a few traits of a lighter email:

- Shorter copy, since it loads faster and carries less weight through every server it passes
- Compressed images, or none at all where they don't add real information
- Tracking pixels and scripts removed once you stop using them
- Attachments linked out to a hosted document
- Plain text or simple HTML

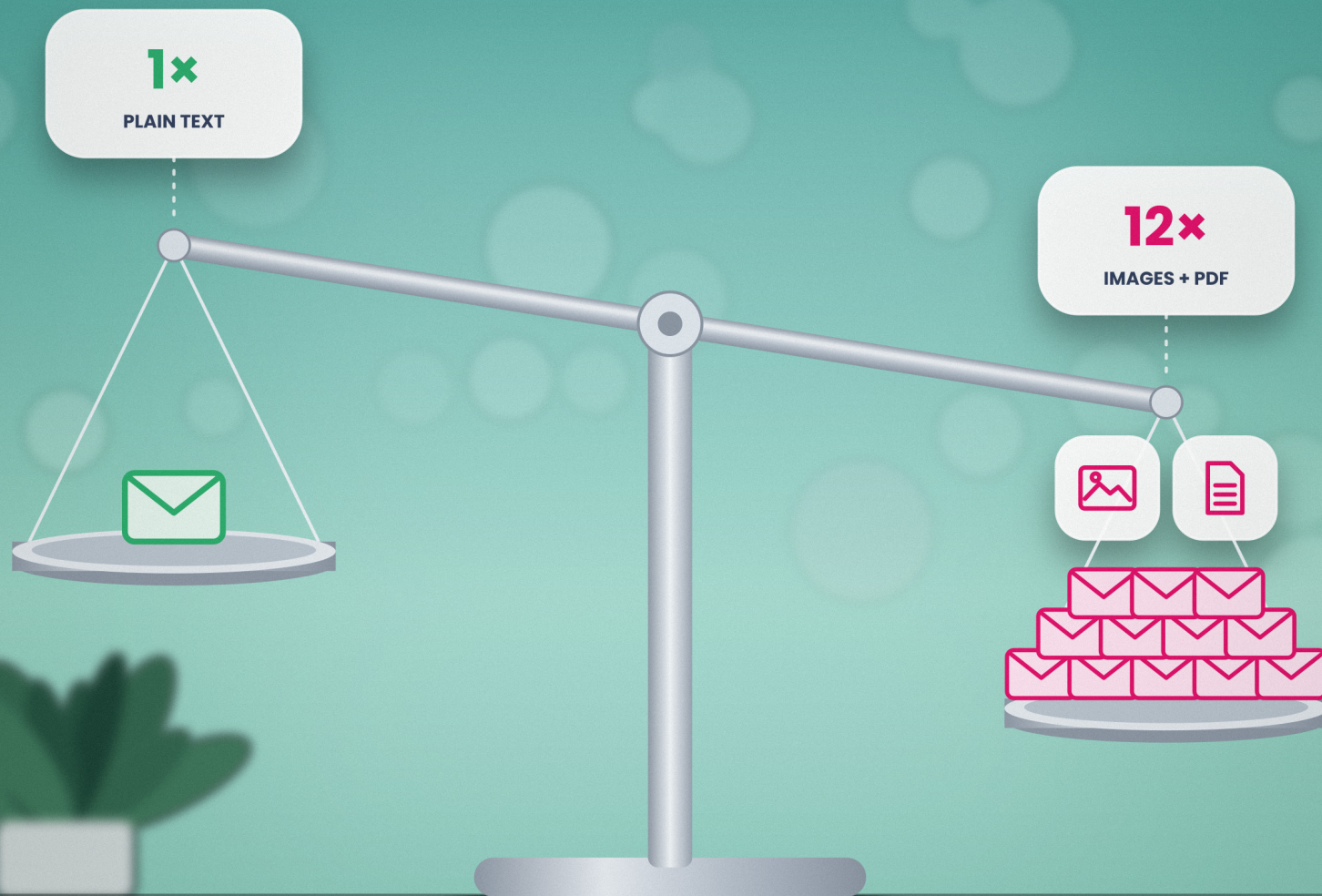
Every gram you add costs carbon, multiplied by every email you send. So, make it earn its place.

SECTION 04

Email design and efficiency

Why file size matters

**Every gram
earns its place.**

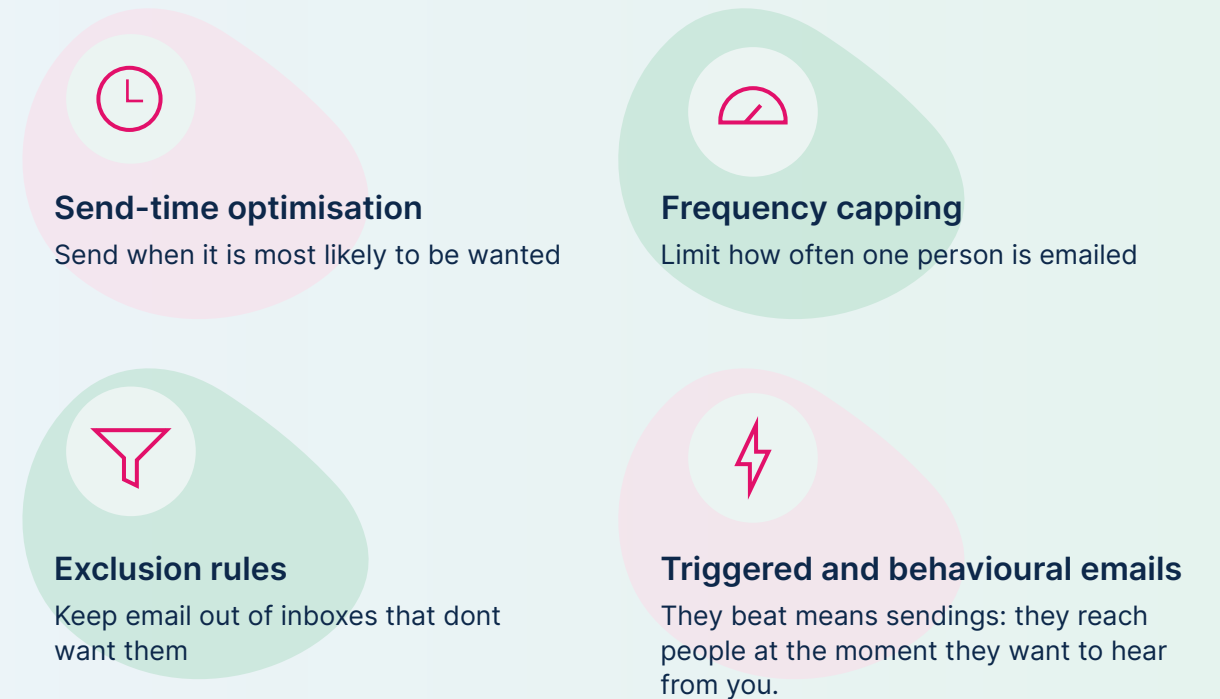


05

How to send more effectively

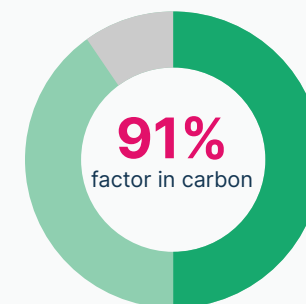
Send less, achieve more

An email sent to someone “who never opens it” uses the same energy as one that gets read and clicked. Relevance is a sustainability metric as much as a marketing one.



One goal: fewer emails landing in inboxes that do not want them.

Our survey found strong support for more effective targeting in the name of sustainability. 48% of marketers call sustainability very important to their marketing plans, and another 43% call it somewhat important. Together, that's 91% who treat it as a real factor in how they plan



Very important: 48%
Somewhat important: 43%

Rate sustainability "very important"



Together, 91% of surveyed marketers treat sustainability as a real factor in how they plan campaigns.

06

Rethinking what you measure

Open rate doesn't tell the full story

Open rate gets a lot of attention, but on its own it doesn't tell you much. It says little about sustainability, and not much about revenue either. A campaign can show a great open rate and still burn energy on thousands of sends that lead nowhere.

But two metrics say more about how well your emails are working:

- ✓ **Revenue per email**, which ties send volume directly to business result
- ✓ **List health**, which shows how many sends reach people who want them

CUSTOMER STORY

Filmweb, Kinoklubb

Filmweb, which runs Norway's Kinoklubb cinema loyalty scheme, measures its winback flows for churning members by how many people come back. In 2024, that meant saving or reactivating 2.5% of total churn. By the middle of 2025, that figure had risen to 3.2%, hundreds of members who would otherwise have been lost. This is something worth building into your own reporting: an email efficiency score

WORTH BUILDING INTO YOUR REPORTING

An email efficiency score

Score =

The result of a send

The resources it took to produce and deliver it



Every prompt has a data centre behind it.

Servers that run day and night, drawing power and water to saty cool.

07

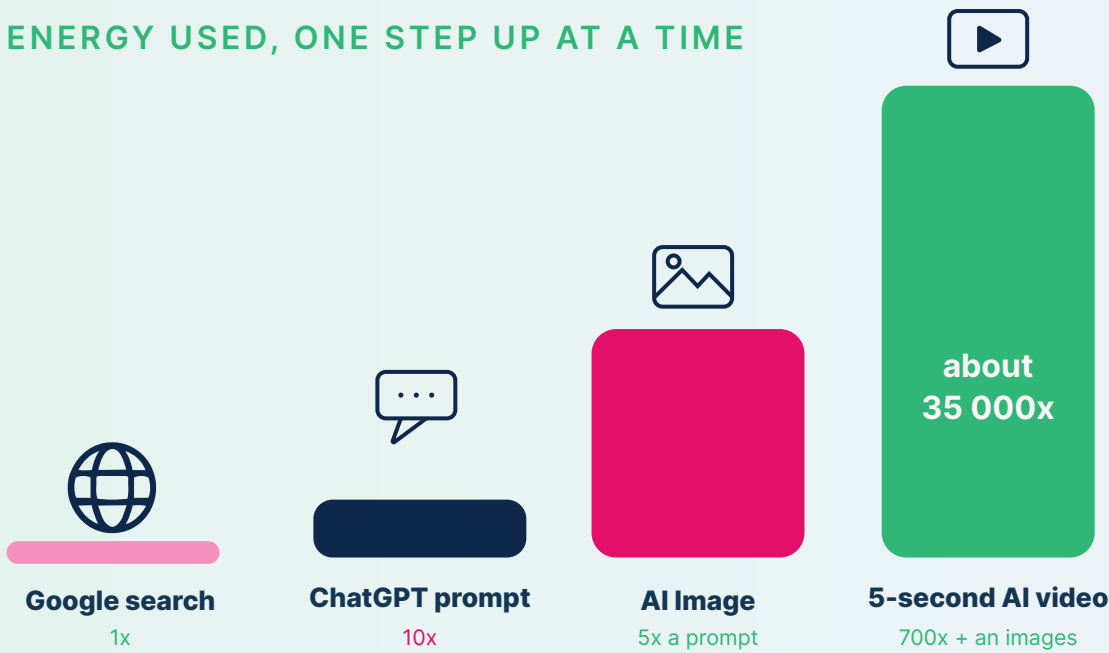
The cost of using AI

Smarter tools still carry a cost

Before any marketer sends a single AI-assisted prompt, there's already a cost built in. **Training OpenAI's GPT-4 is estimated to have used 50 gigawatt-hours of electricity**, enough to power San Francisco for three days.

AI tools make it easy to write more subject lines, test more variants, and personalise more segments than you could manage before. Every one of those tasks, drafting a line of copy, generating a header image, running one more test, sends its own request to a data centre and draws its own share of electricity.

ENERGY USED, ONE STEP UP AT A TIME



Bars are illustrative and not to scale. sources: Google, MIT Technology Review.

THE COST OF USING AI

50 GWh

Estimated electricity used to train GPT: enough to power san Francisco for three days.

75%

of a model's electricity went to keeping it ready in memory, not answering requests (an 18-day study co-authored by Sasha Luccioni).

0.03g

of CO₂ for a typical AI prompt per Google, about a microwave running one second, and tiny next to a 4g email.

0.26ml

of water behind a single prompt, per google: about five drops. Multiply by chatGPTs 1 billion messages a day.

Which way does it tip?

Run that same task across every segment of every campaign, and the number adds up fast. AI can help you send fewer, sharper emails, and that lowers your footprint. But it also lowers the barrier to creating more variants, for more segments, more often, and that raises it. How you use the tool decides which way that goes.

Our survey shows most marketers already measure the environmental impact of their digital work. E-commerce, SaaS, financial services, and insurance all hit 100%: every company in those industries we surveyed does it. The other four industries are a little behind: real estate at 95%, NGOs at 90%, membership organisations at 85%, and tourism at 80%.

94% track their footprint

of the marketers we surveyed already do this in some way. Almost none of them yet count what AI-assisted work adds to that total.

Choosing an AI provider with a real sustainability commitment matters here, the same way choosing a green email service provider

TO WARP UP

What to do next

The shift away from paper has already happened for most of the organisations we surveyed. Only one still sends everything on paper

What's left is a shift in how you use email itself. Think smaller lists, lighter templates, sendings timed for someone who wants them. Most of these choices improve your results at the same time as they lower your footprint. A clean, relevant list was always the foundation of good email marketing.

THREE STEPS TO TAKE THIS QUARTER:

1

A list audit

Remove or re-engage the contacts who've gone quiet

2

A lighter template

Cut anything that doesn't earn its place

3

Better measurement

Track list health and revenue per send

PUT IT INTO PRACTICE

Automation, templates and reporting, in one platform.

Apsis one covers all three, so a smaller list, a lighter template and a cleaner send schedule are easy to put in place.

Try it free for 14 days

Book a demo

No credit card required