Toolkit for Individual Digital Decarbonisation and Decluttering

A practical guide to **reducing** the **climate impact** of **everyday digital systems**

The Problem

Digital defaults are **extractive**

On average, digital content consumption emits around 229 kg of CO_2 per person per year, which is up to 4% of our individual carbon footprint.

But this **isn't just about personal habits**. It's about the **systems we've inherited**: Auto-play, HD streaming, endless cloud backups and algorithm loops aren't accidents, they're defaults, designed to maximise engagement and extract value, **not minimise emissions**.

What We Can Do

We're not expected to opt out of the internet. But we can **reimagine how it works**, together.

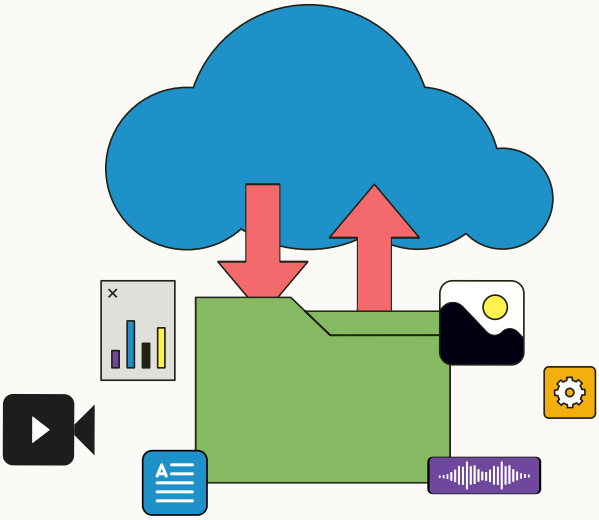
Whether you're part of a team, a creative community, or an organisation, this toolkit offers **tangible**, **collective shifts**: not just how to consume less, but how **to build better**, a**dvocate for change**, and **challenge what's been normalised**.

These aren't individual fixes. They're stepping stones toward **digital systems that serve people and planet**, not just platforms.

Web and Content Design

	Action	Why It Matters	Example
Short-Term	Stop using autoplaying carousels and homepage animations	Autoplay and animation increase page size and energy use across every visit	Replace with static hero images or lazy-loading visuals
Mid-Term	Audit your website and reduce web bloat	Oversized media and unused plugins increase emissions and server load	Use Website Carbon tools to test and monitor your website
Long-Term	Push for green defaults in CMS platforms	Most platforms optimise for aesthetics over sustainability by default	Request green defaults in product surveys and feature feedback forms

Cloud and Storage

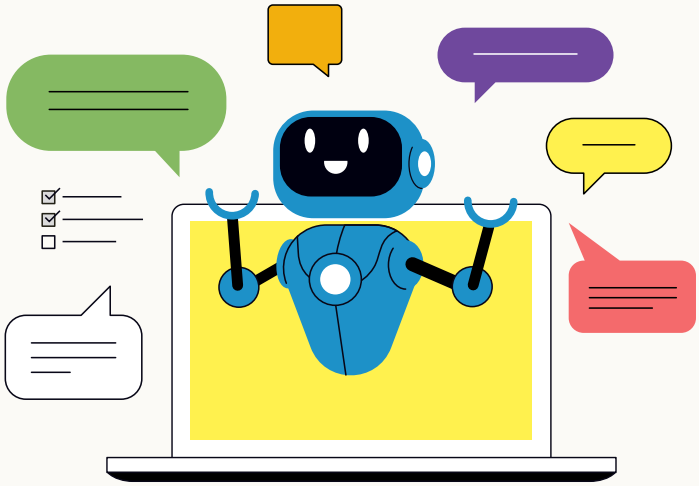


	Action	Why It Matters	Example
Short-Term	Delete redundant files and archives from cloud drives	Cloud storage consumes energy 24/7 to power and cool data centres	Delete duplicates or unused folders in Google Drive
Mid-Term	Switch to green cloud providers	Cloud choice affects energy source and efficiency	Host shared files on Greenhost or Hetzner-powered Nextcloud
Long-Term	Push for cloud transparency in procurement policies	Public and corporate contracts fund major cloud emissions without scrutiny	Push suppliers to disclose their server energy mix up front.

Communication and Collaboration

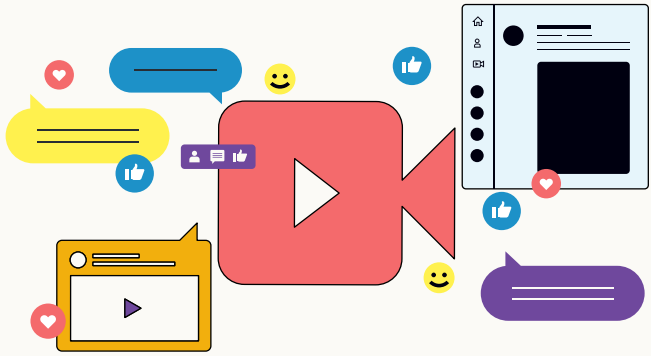
	Action	Why It Matters	Example
Short-Term	Limit large attachment use in emails	High-res attachments increase bandwidth, storage and server load	Use compressed PDFs or cloud share links
Mid-Term	Switch from live calls to updates you can read or watch anytime	Video calls use more energy than audio or asynchronous collaboration	Use voice notes or shared docs for updates
Long-Term	Advocate for email platform reform to reduce auto-sends	Newsletter spam contributes to unnecessary cloud processing and delivery emissions	Campaign for built-in digest modes or sustainable default toggles

AI and Computing



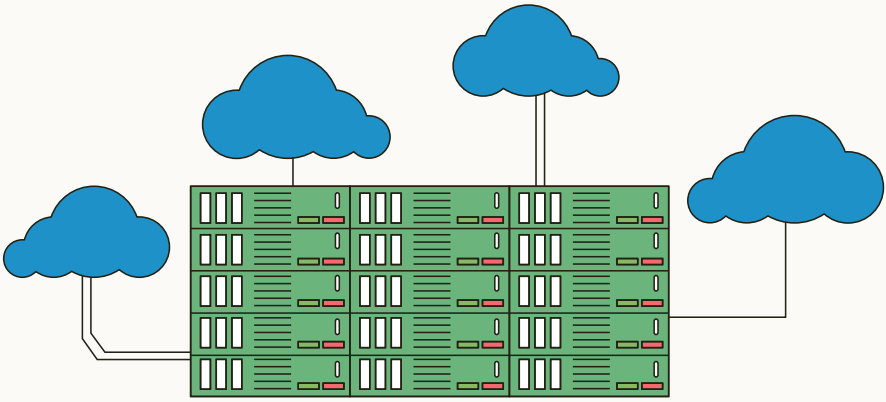
	Action	Why It Matters	Example
Short-Term	Use local AI models instead of cloud-based tools	Local LLMs don't rely on energy-intensive server processing	Use LM Studio or MacWhisper instead of ChatGPT in browser
Mid-Term	Avoid default AI integrations in design/collab software	Most built-in AI tools run on the cloud with high emissions	Disable auto-AI in Canva, Figma or Notion
Long-Term	Campaign for AI energy disclosure and regulation	LLMs require huge water and energy inputs that are often hidden	Petition providers to publish training and inference footprints

Streaming and Media



	Action	Why It Matters	Example
Short-Term	Choose audio-only modes when possible	Reduces passive streaming and energy use	Pick a podcast over a long-form video
Mid-Term	Add a “low-bandwidth” option to hosted media	Empowers collective shifts by giving users a lower-emission alternative	Include an “SD version” or “audio only” toggle on your website or community platform
Long-Term	Advocate for sustainable streaming defaults on video platforms	Platform settings shape user norms, sustainable defaults reduce systemic impact	Petition YouTube/Netflix to add low-energy settings

Infrastructure and Hosting

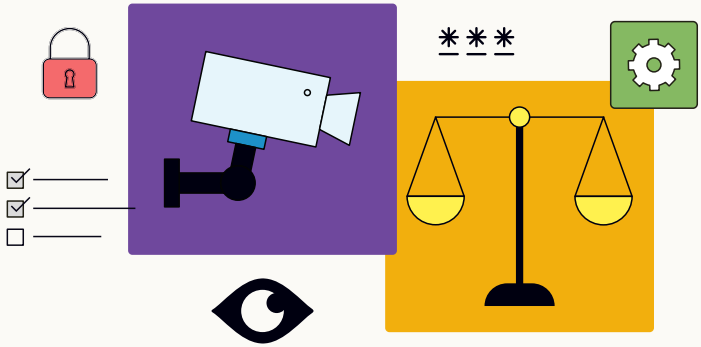


	Action	Why It Matters	Example
Short-Term	Move your website to a green host	Reduces server emissions through renewable-powered data centres	Switch from GoDaddy to GreenGeeks, Kualo or Krystal
Mid-Term	Conduct a carbon audit of your digital estate	Helps identify hotspots and trim web bloat	Run site pages through Website Carbon Calculator
Long-Term	Campaign for carbon labelling on web services	Pushes platforms to disclose energy use and make impact visible	Lobby CMS providers for visible carbon tags

Procurement and Policy

	Action	Why It Matters	Example
Short-Term	Buy refurbished instead of new devices	Manufacturing accounts for up to 90% of device emissions	Use BackMarket or Circular Computing for device purchase
Mid-Term	Choose tech tools that offer transparency on energy use	Shifts demand toward platforms that prioritise emissions reporting and transparency	Use digital tools and services that publish annual energy or emissions reports
Long-Term	Lobby the government to include digital emissions in net-zero targets	Current policy often ignores the digital carbon footprint	Respond to public calls for evidence or petitions on digital carbon targets

Surveillance and Ethics

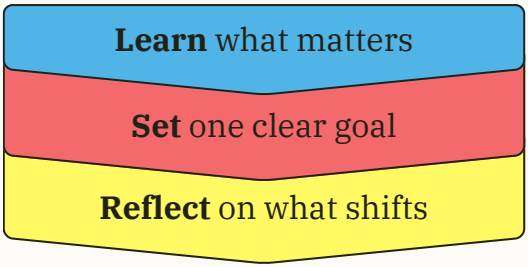


	Action	Why It Matters	Example
Short-Term	Install ad and tracker blockers	Reduces surveillance-based data mining and background data traffic	Use browser extensions that block trackers and intrusive ads
Mid-Term	Avoid using livestreams for public or security cameras	Always-on feeds waste bandwidth and normalise surveillance	Replace live CCTV with motion-activated uploads
Long-Term	Campaign for regulation on biometric surveillance and AI usage	Reduces hidden emissions from mass surveillance systems	Join coalitions opposing mass facial recognition

How To Use

This toolkit offers a **practical approach** to lowering the climate impact of digital habits by focusing on what **individuals** and teams **can** actually **influence**.

Our method is based on a simple behaviour change cycle:



Step 1:

Information

Why it matters

Understanding is the first step to **meaningful change**. We often underestimate the impact of everyday digital behaviours, not because we don't care, but because the systems we use **rarely make that impact visible**.

By learning the hidden costs behind common actions, we can start making more **conscious choices** and **shift both habits** and **systems from the ground up**.

Everyday example:

"I often leave autoplay or background video running, even when I'm not actively watching."

This contributes to emissions by **continuously pulling data from servers**, even when there is no real engagement or intent.

Step 2:

Goal-setting

What you aim to change

This is where intention becomes action. Now that you understand the impact of certain behaviours or systems, choose **one small shift** to try this week.

You **don't need to overhaul everything**. Just pick something that feels **possible**, **useful** or **interesting**, and **see what changes**.

Goal Examples

	Goal Example	How it helps
Level One	Delete old files in Google Drive or iCloud you no longer need	Less storage = less server energy running 24/7
	Use "lite" versions of apps (like TikTok Lite or Facebook Lite)	These use less data and work better on low-energy connections
	Install browser extensions that block trackers and intrusive ads	Reduces surveillance data mining and background traffic
Level Two	Choose tools and services that publish energy or emissions reports	Shifts demand toward platforms that prioritise emissions and transparency
	Turn off built-in AI in Canva, Notion, and Figma unless needed	Avoids auto-activating high-emissions AI tools
	Review your website and digital tools to see which areas use most energy	Helps you find where to make improvements to cut emissions
Level Three	Join or support climate coalitions (e.g. Green Screen Coalition)	Adds your voice to structural change in tech systems
	Talk publicly about your shift to low-carbon digital practices	Visibility breeds action and new norms
	Advocate for stronger environmental policies in digital regulation	Pushes governments to include digital emissions in climate or net-zero plans

Step 3:

Feedback

What you notice

Sustainable change starts with **awareness**.

Use this 5-point reflective scale once a day or week to check in. No guilt, just a moment to **notice what's shifting**.

Unconscious	"I didn't notice my habit until afterwards."	Still running on autopilot
Interrupting	"I noticed, but didn't change anything."	Awareness is growing
Adjusting	"I made one change this week."	Beginning to experiment
Consistent	"I stuck to my goal 3+ days this week."	Habit is forming
Integrated	"This feels normal now."	Becoming a new default

Digital sustainability isn't about deleting the internet, it's about **reimagining our shared systems of use**, access and care.

Individual changes matter, but they're **not enough on their own**. The real impact comes when we **organise**, through **community choices**, **collective pressure**, and **shifting the defaults** written into the digital world.
This toolkit is a starting point, not a list of chores.

Pick one action, sure. But more importantly, **talk** about it. **Share** it. **Challenge norms** in your workplace, your group chat, your university, your platform. **Lobby** for better tech. **Start** a co-op. **Push** your org to do better. **Build** something together.

We've been told it's on us to unplug, to stream less, to delete apps. But systems change when people do things together, **not alone**.

The internet is part of our lives, but how we shape it next is up to **ALL of us**.

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This toolkit was peer reviewed by sustainable Web Developer Nick Lewis.

UKRI Arts and Humanities Research Council

BSU Bath Spa University