

Making your website more sustainable

Q&A with Tom Greenwood

Andy Leitch, 4th July, 2023






Welcome

Before we get started

1. Today's webinar is scheduled to last 1 hour including Q&A
2. Captions will be provided
3. This webinar is being recorded and will be available on the website alongside additional resources within 7 days
4. Say hello in the chat (select "Everyone" from the dropdown) and ask questions using the Q+A button. You can also use the reaction buttons! 🤔🎉😊

digitalculturenetwork.org.uk

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We've created resources and advice for you to use during the COVID-19 lockdown. [Read More](#)

Digital skills for the arts

Welcome to your Digital Culture Network

We are here to develop your organisation's digital skills. Working across the arts and culture sector, the Network is led by nine specialist Tech Champions. We want you to be a part of it.

[Browse our Knowledge Hub](#)




Knowledge Hub



Beginner Read
Video and Digital Content

Podcasting and how to get started

This resource provides information and advice on making podcasts. As well as considerations for generating content, it contains guidance on hardware, software, and distribution methods.

 Marc Burns · 2 months ago



Beginner Read
Social Media

Engaging Audiences with Social Media

Whilst your audiences, participants or stakeholders may not be able to engage with you physically at the moment, you can still reach people through social media.

 Haydn Corrodus · 2 months ago

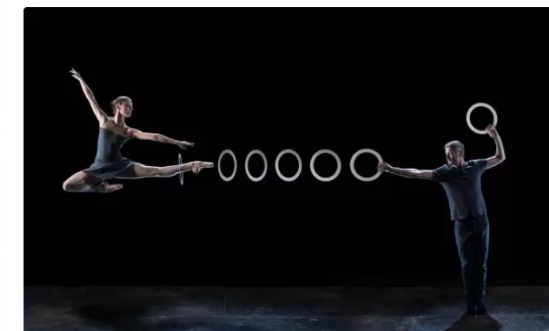
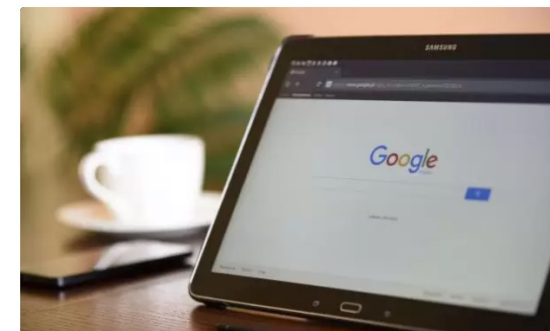


Beginner Read
Social Media

Introduction to Social Media

Social media is a unique and powerful way to help your organisation thrive and engage with your audience. Read on to find out more.

 Haydn Corrodus · 4 months ago



What you will learn today

- Why web and digital sustainability matters
- How to judge if your website is eco-friendly
- How to make your website more sustainable and reduce your digital carbon footprint

Running order

- Introducing Tom
- The carbon problem
- What is sustainable web design?
- How eco-friendly is your website?
- What is green hosting?
- Optimising images and video
- Other website sustainability tips
- Q&A

Introducing Tom Greenwood



The carbon problem

The carbon footprint of our gadgets, the internet and the systems supporting them account for about 3.7% of global greenhouse emissions*



*<https://www.bbc.com/future/article/20200305-why-your-internet-habits-are-not-as-clean-as-you-think>

What is sustainable web design?



How eco-friendly is your website?

Website Carbon Calculator [How does it work?](#) [FAQ](#) [Get the badge!](#) [API](#) [Consultancy](#)

The original Website Carbon calculator

Estimate your web page carbon footprint:

Your web page address


Web page URL


By using this carbon calculator, you agree to the information that you submit being stored and published in our public database.

www.websitecarbon.com

Carbon results for [www.yourwebsite.org](#) [Share](#) [f](#) [t](#) [in](#) [m](#) [e](#)

This page was last tested on 3 Jul, 2023.

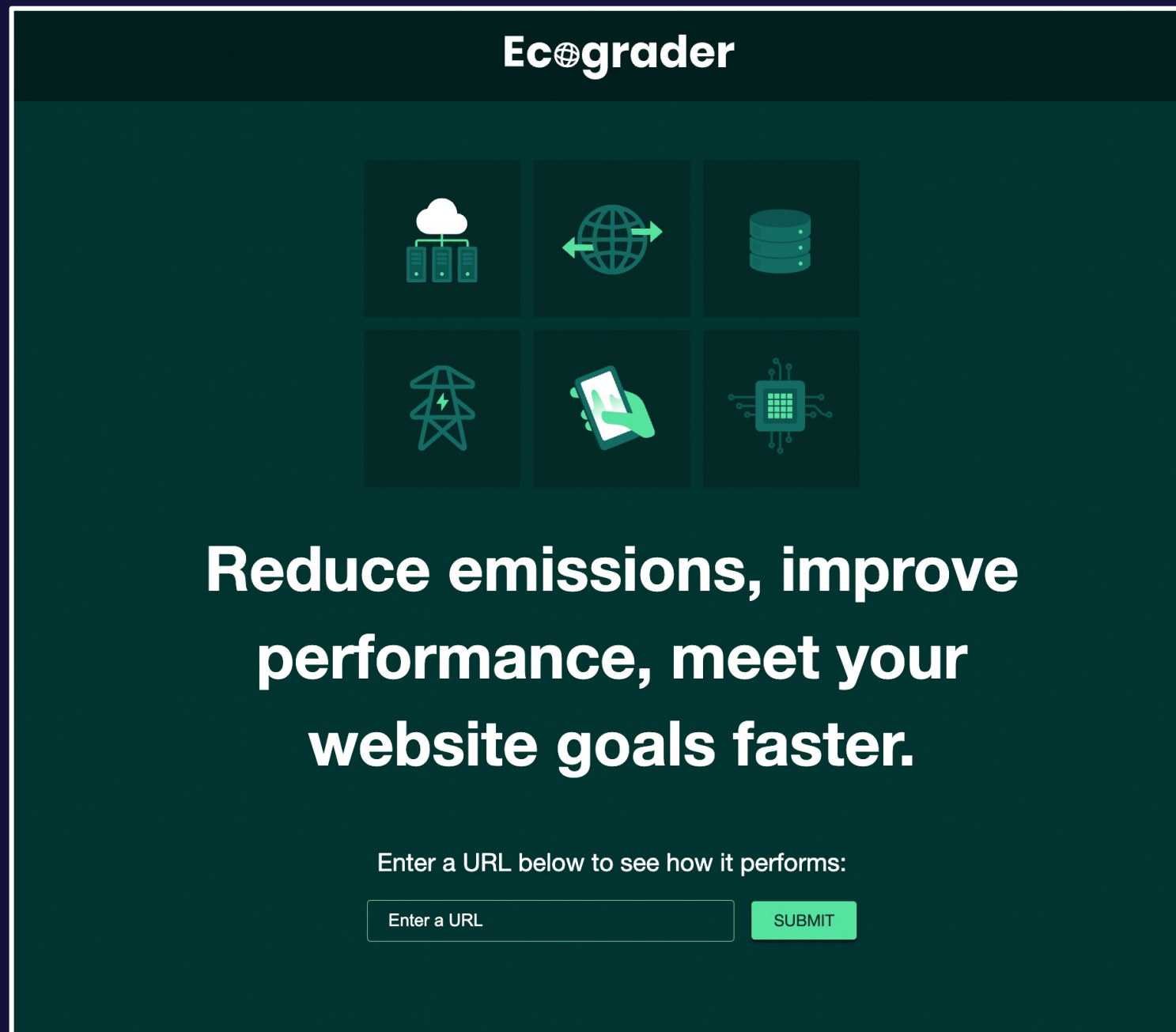
 Uh oh! This web page is dirtier than **82%** of web pages tested

 Oh my, **1.34g of CO2** is produced every time someone visits this web page.

Webpage sustainability results

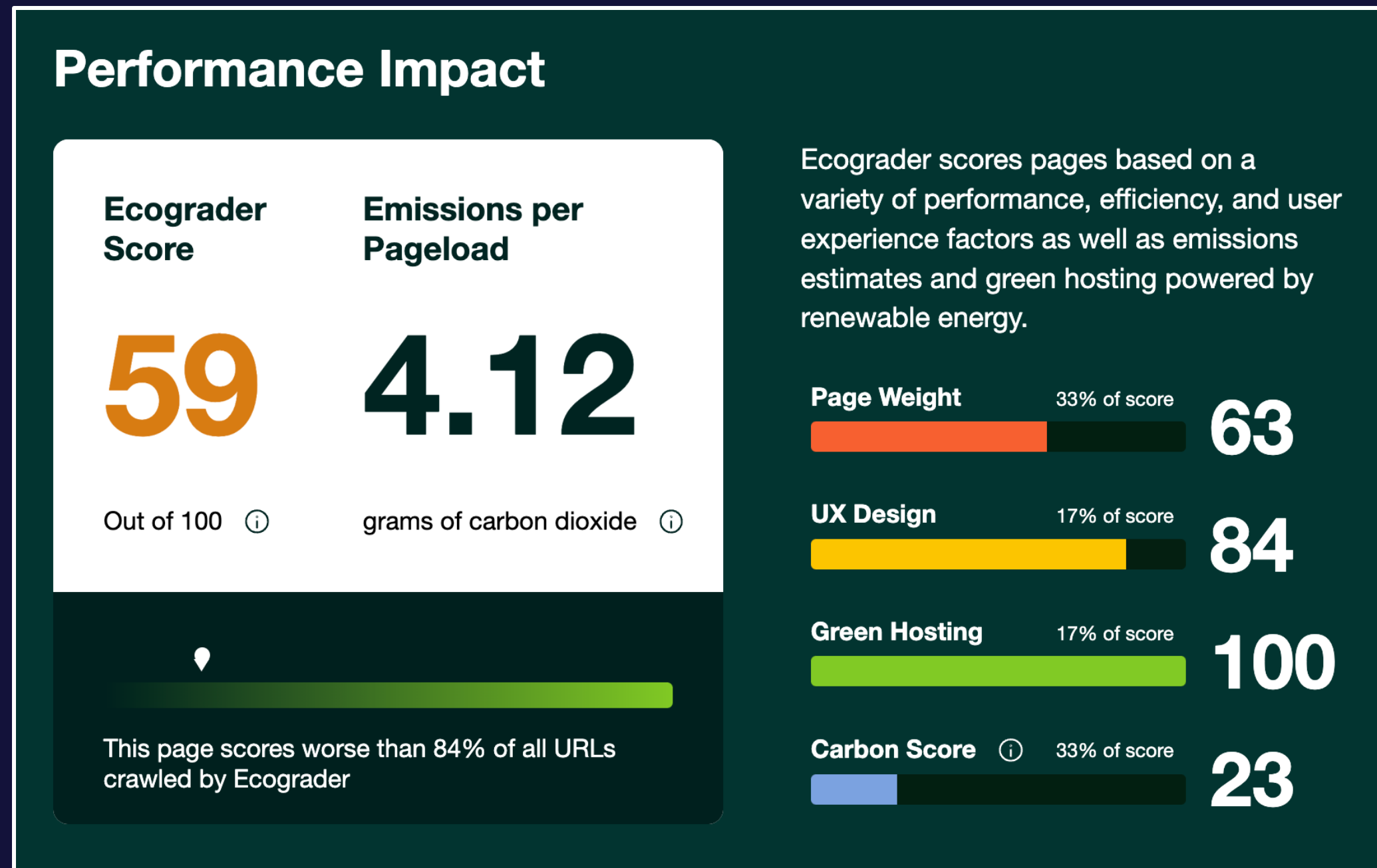


How eco-friendly is your website?



The image shows the Ecograder website interface. At the top, the logo 'Ecograder' is displayed. Below it, there are six icons representing different aspects of website performance: a cloud with servers, a globe with arrows, a database, a lightning bolt, a smartphone, and a microchip. The main text reads: 'Reduce emissions, improve performance, meet your website goals faster.' Below this, there is a form with the text 'Enter a URL below to see how it performs:', a text input field containing 'Enter a URL', and a green 'SUBMIT' button.

<https://ecograder.com>

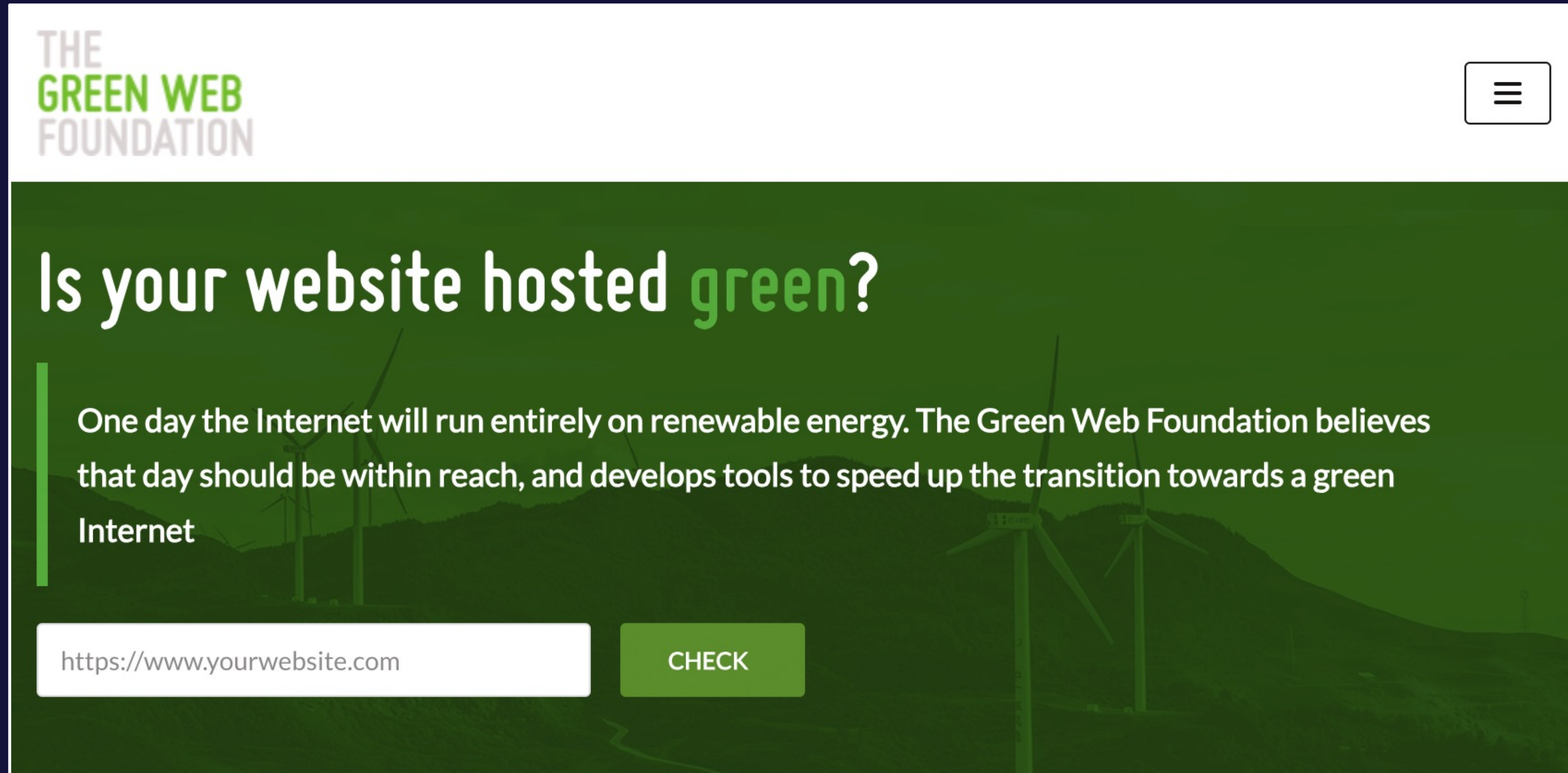


The image shows the 'Performance Impact' results from Ecograder. It features a white box with two main metrics: 'Ecograder Score' of 59 (Out of 100) and 'Emissions per Pageload' of 4.12 grams of carbon dioxide. Below these, a green progress bar indicates that 'This page scores worse than 84% of all URLs crawled by Ecograder'. To the right, a list of factors with their respective scores and percentages of the total score is shown: Page Weight (63, 33% of score), UX Design (84, 17% of score), Green Hosting (100, 17% of score), and Carbon Score (23, 33% of score). Each factor is accompanied by a horizontal bar chart showing its contribution to the total score.

Factor	Score	Percentage of Total Score
Page Weight	63	33%
UX Design	84	17%
Green Hosting	100	17%
Carbon Score	23	33%

Webpage sustainability results

What is green hosting?



THE GREEN WEB FOUNDATION

Is your website hosted **green**?

One day the Internet will run entirely on renewable energy. The Green Web Foundation believes that day should be within reach, and develops tools to speed up the transition towards a green Internet

The screenshot shows a website header with the logo 'THE GREEN WEB FOUNDATION' and a hamburger menu icon. The main content area has a green background with a wind farm image. It features a heading 'Is your website hosted green?' and a paragraph explaining the foundation's mission. At the bottom, there is a search bar containing 'https://www.yourwebsite.com' and a green 'CHECK' button.



Optimising images for the web

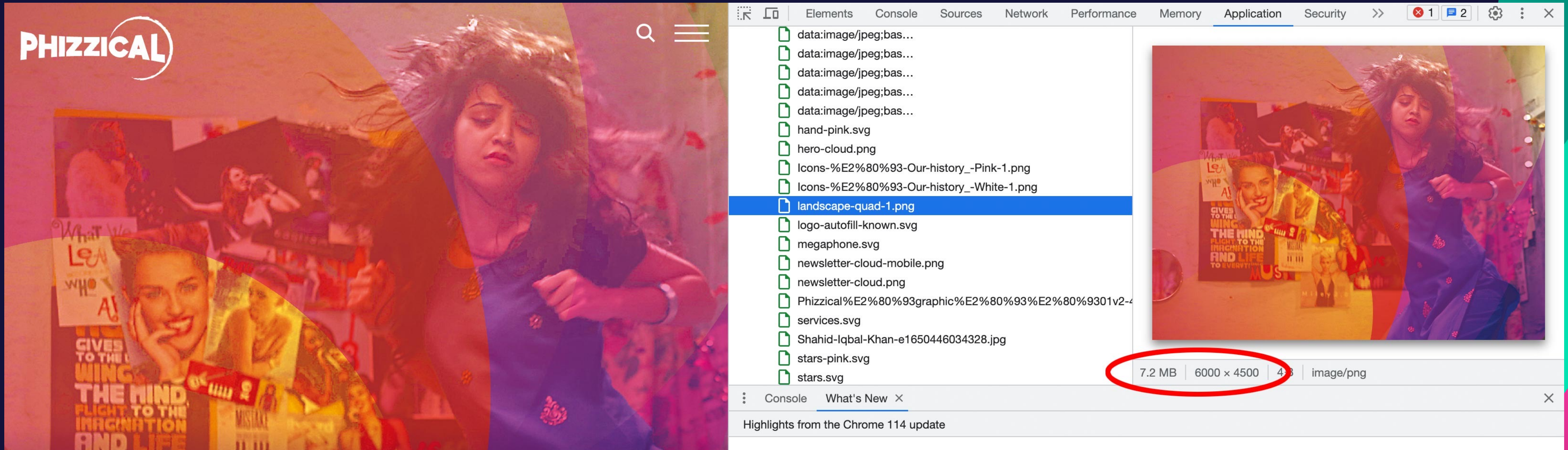


PNG file – 1.7Mb



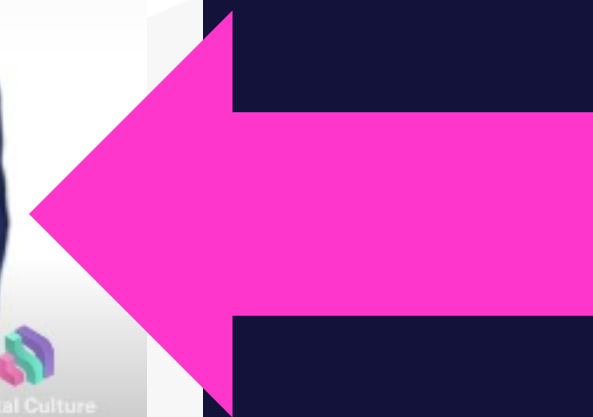
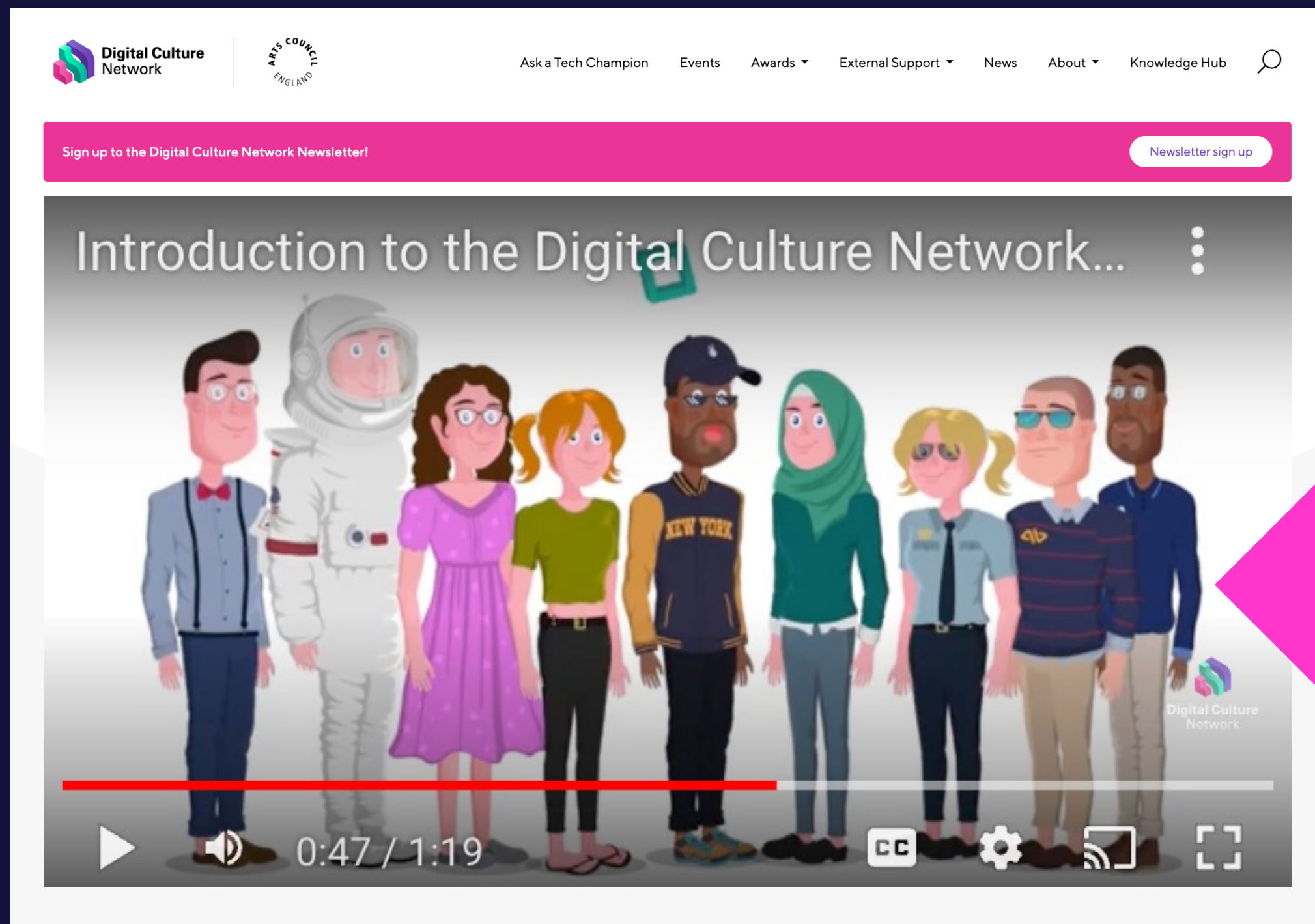
JPG file (50% compression) – 215K

Optimising images for the web



This homepage contains a background image that is 6000x4500 pixels in size and weighs in at a massive 7.2Mb

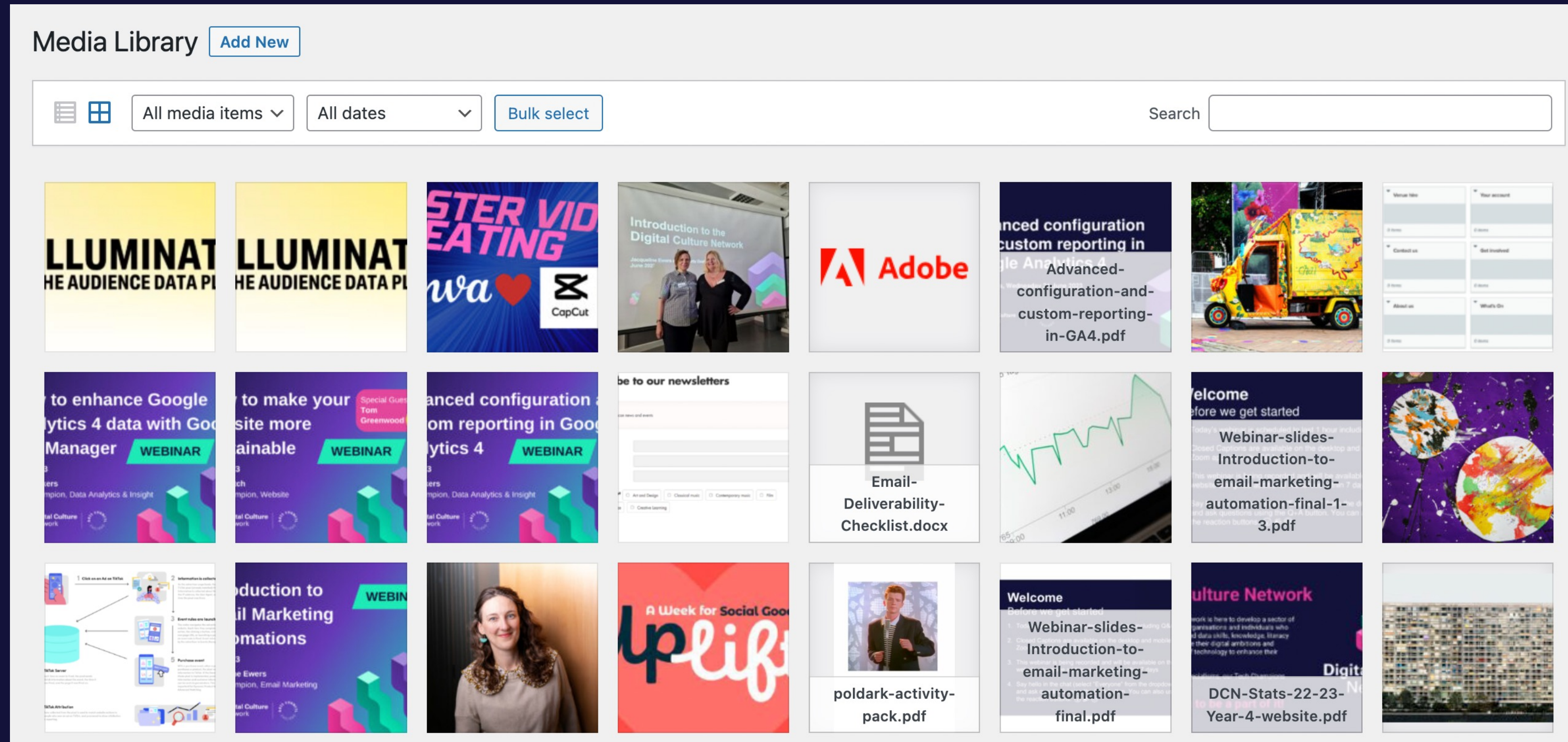
Embedding video on your site



Other ways to reduce your website's carbon footprint

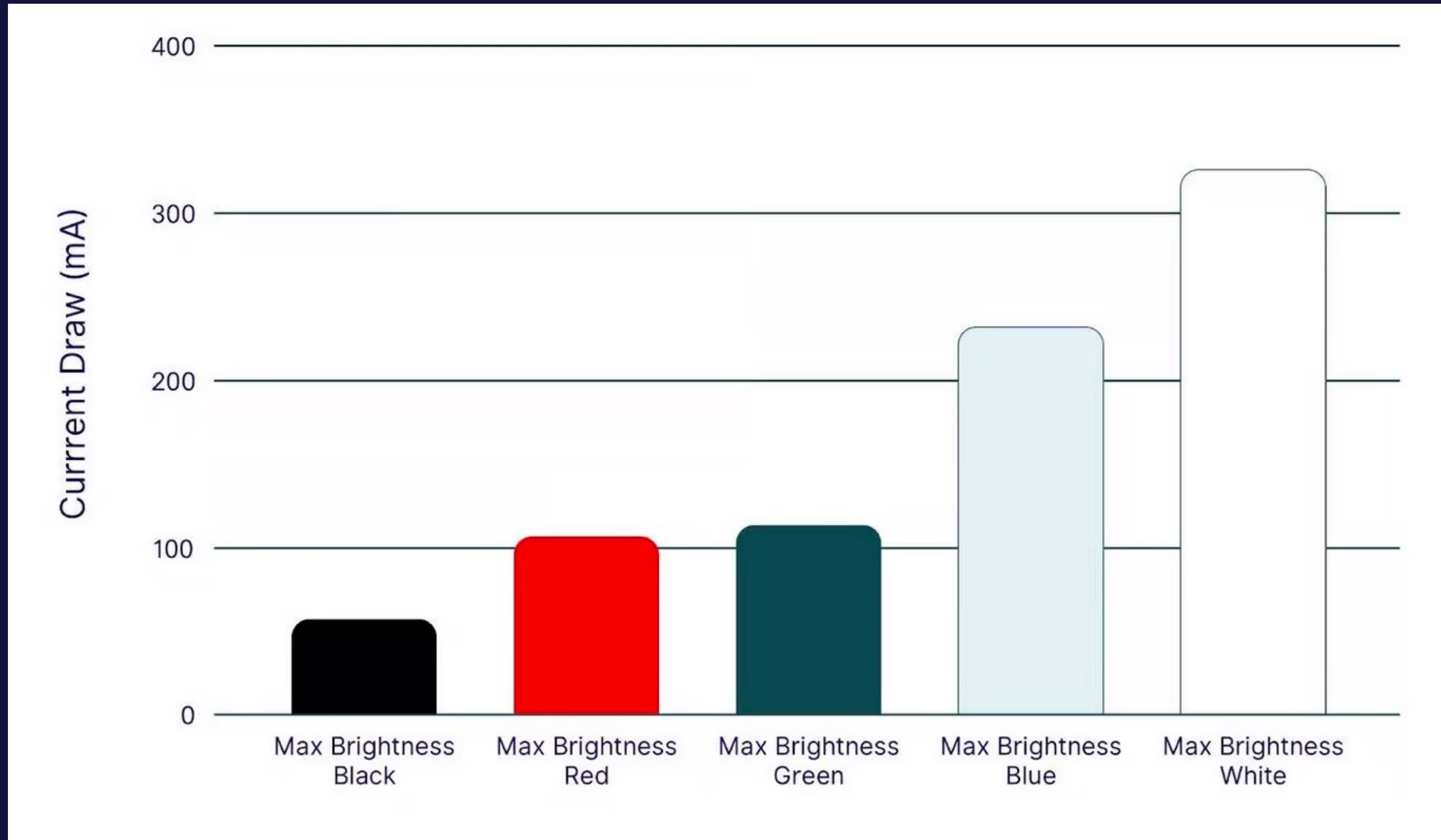


CMS Housekeeping



Remove redundant images and files from your CMS Media library

Colour and screen energy



Bar chart showing higher energy consumption of white and blue pixels compared to red, green and black

Colour and image file size



As a general rule – the greater the colour variation in an image, the larger the file size

Custom fonts

Helvetica Neue 25 Ultra Light

Helvetica Neue 35 Thin

Helvetica Neue 45 Light

Helvetica Neue 55 Roman

Helvetica Neue 65 Medium

Helvetica Neue 75 Bold

Helvetica Neue 85 Heavy

Helvetica Neue 95 Black

Designers need to select fonts and weights carefully to avoid slow and bloated webpages

Tracking scripts

Platform	Size	Cookies?
Google Analytics	17KB	Yes
GA with GTM	75KB	Yes
Minimal GA	1.5KB	Yes
Matomo	40KB	Yes
Fathom	1.2KB	No
Plausible	1KB	No

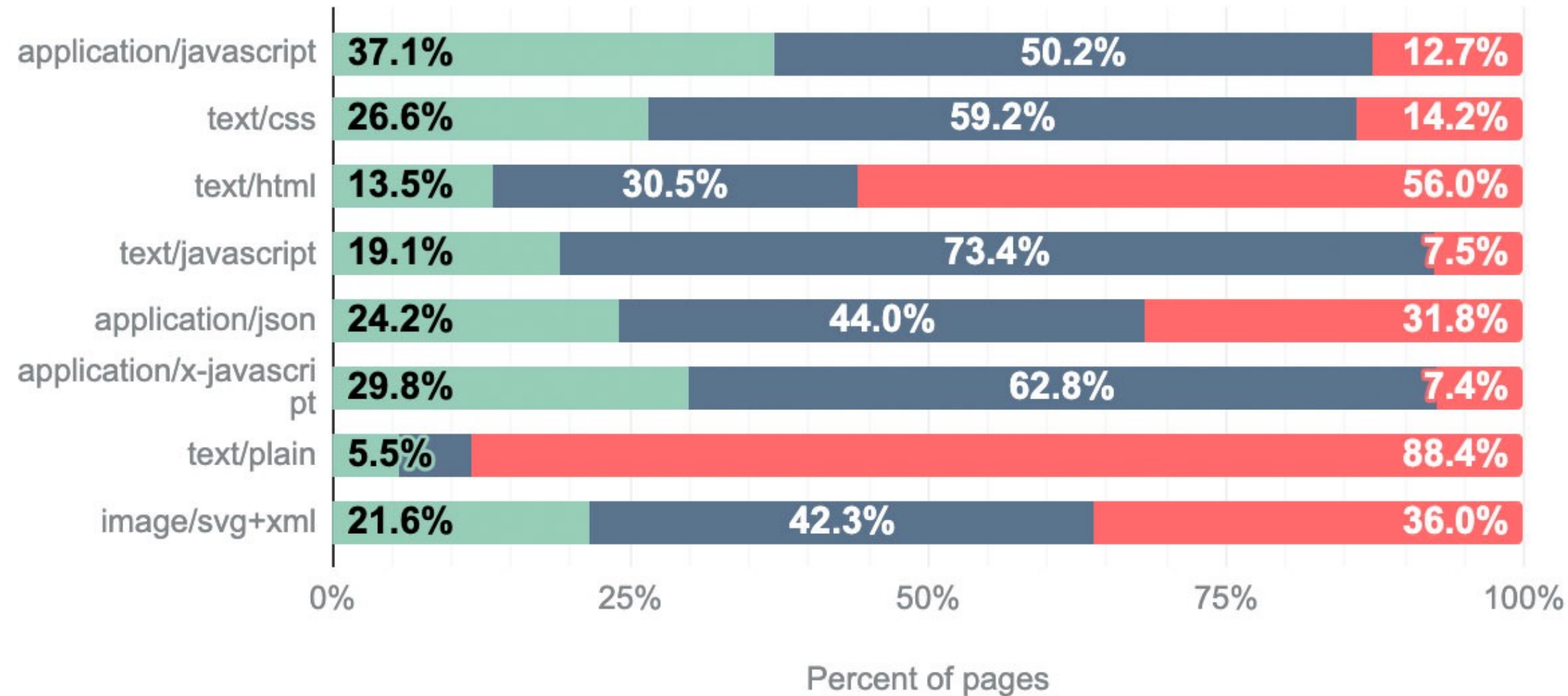
Ask yourself, do you need all the tracking scripts installed on your website?

Compress your code

Compression methods for different content types

Web Almanac 2021: Compression

■ Brotli ■ Gzip ■ No text compression



Speak to your web developer or agency about code compression to speed up your site

The benefits of a sustainable approach to web design



In conclusion...

1. Look into green hosting
2. Audit your website – how sustainable is it?
3. Speak to your supplier about improvements
4. Talk to DCN if you need help

Q&A



**Digital Culture
Network**



Get in touch

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digitalculturenetwork.org.uk

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[#DigitalCultureNetwork](https://twitter.com/hashtag/DigitalCultureNetwork)

