Designing Websites for Sustainability







Do you think *aviation* or the *internet* produces more CO2 emmissions?



Answer: internet

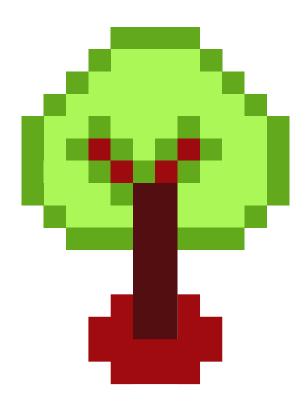
Aviation: 3.5% Internet: 3.8%

0.13g CO2 per view

Website Carbon Calculator

100% Accessibility

Google Lighthouse



DRUM Design Motion Thinking About Connect

We are DRUM

Sustainable digital media. For everyone

We are a multi-disciplined agency in Farnham, Surrey, who prides itself on its long-term *partnerships* with clients. We create accessible content that grows your customer engagement and drives your *business growth*.

View our digital work →

View our motion work →

Need a new website or animation?

Well, you've come to the right place. DRUM is an award winning digital agency based in Farnham, Surrey. We work with companies large and small across multiple industries across Surrey, London and the South East.

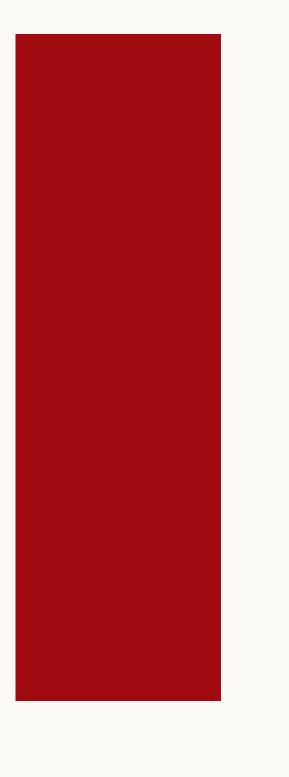
Helping brands **stand out** from the crowd

With so many digital tools at our disposal and *decades of experience*, we can concentrate on bringing your story to life in the most accessible and effective way possible. Regardless of whether you require a digital or brand strategy, website design and development, app development, video production or motion graphics, you are in safe hands.





OLD MEDIAN NEW 1.65g 🎧



0.50g



0.13g



0.13g

1000 page views p/m

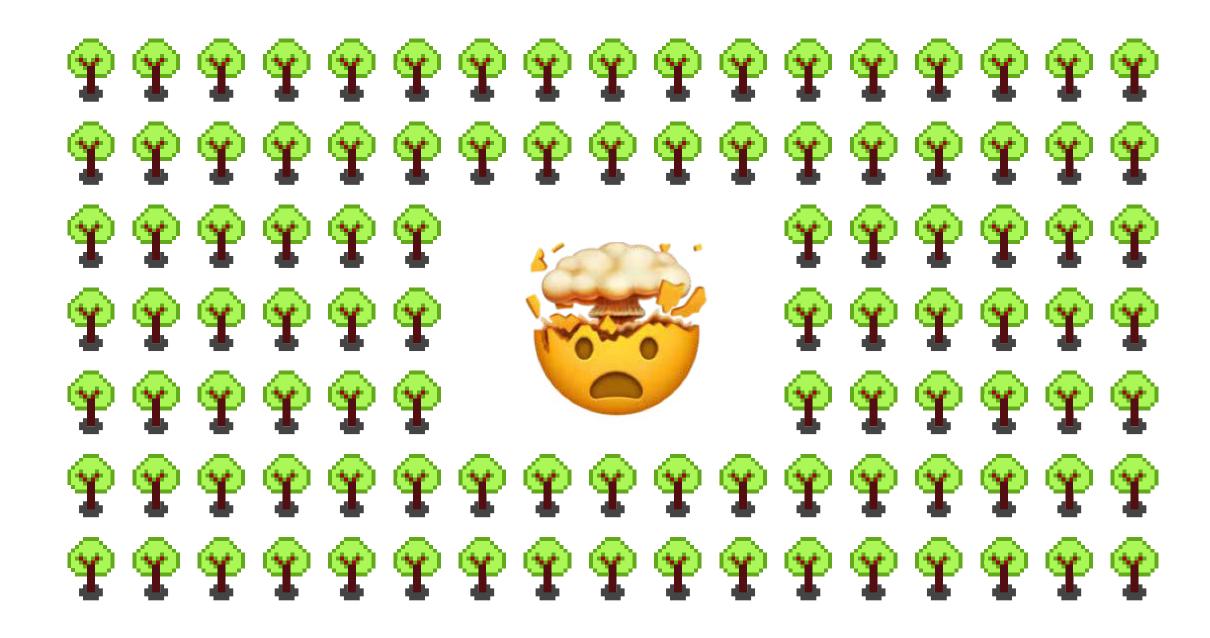
1.5kg CO2 emmitted per year



Google - 0.04g

1.2 trillion searches per year

48,000 tonnes CO2 per year



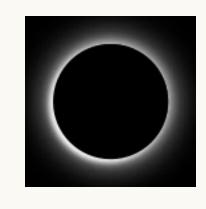
Measure your carbon



Website Carbon Calculator



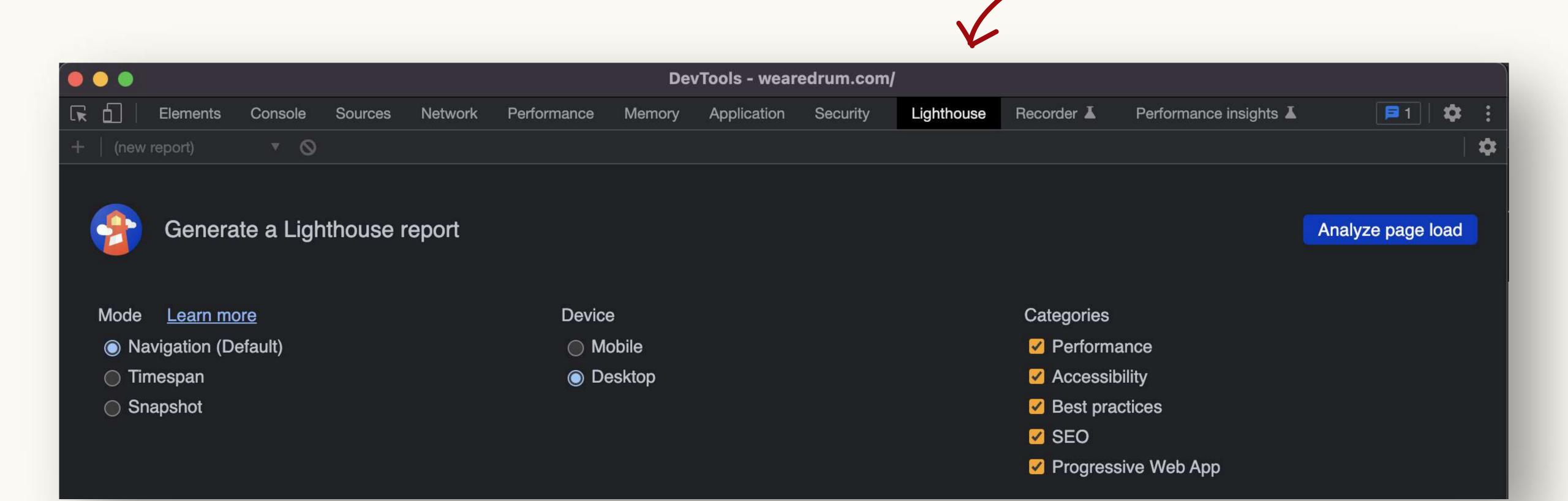
Ecograder



Beacon Chrome Extension

Measure your site performance

Chrome > more tools > developer tools > Lighthouse



Page speed



Old site 2.4s

Desktop - Google Lighthouse

New site 0.5s

Desktop - Google Lighthouse

Load content quickly

Complete tasks quickly

ess energy used

Old site RIP

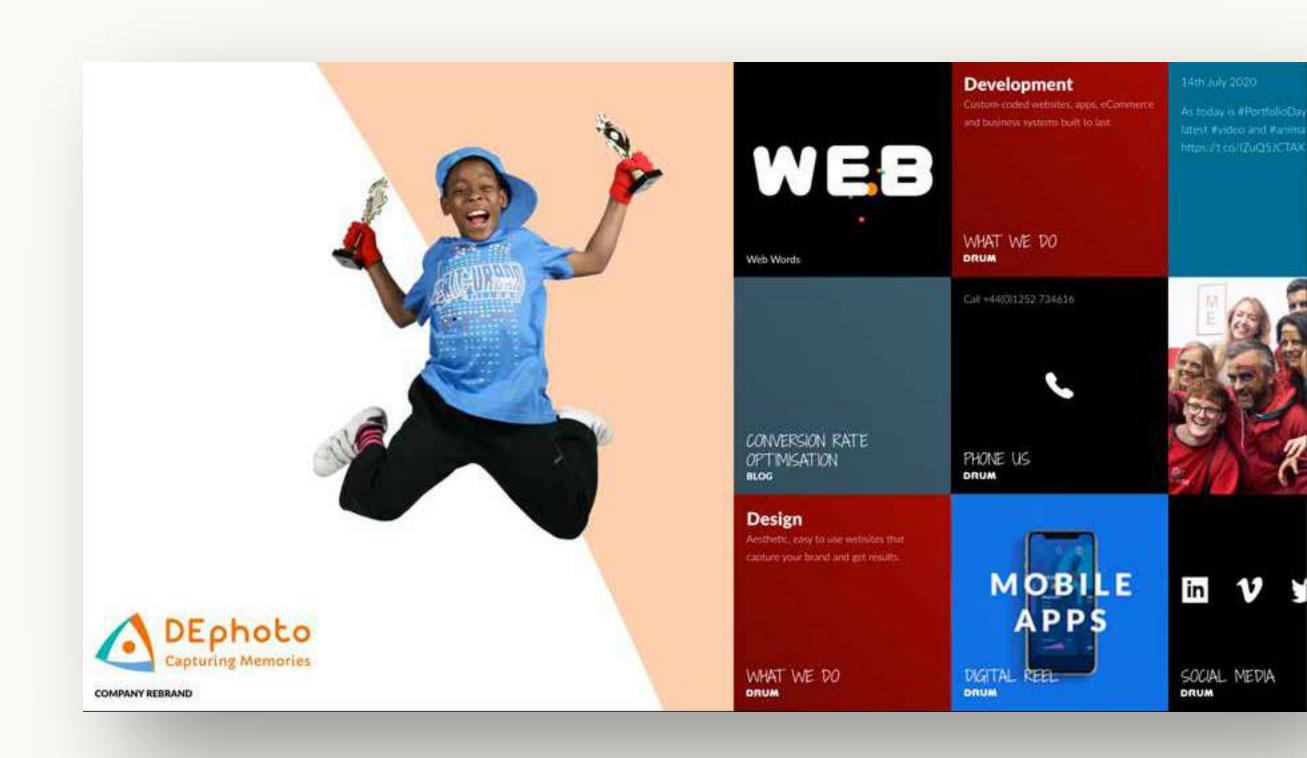


Horizontal design

Highly animated content

Image heavy

Javascript



What we didn't do



Video backgrounds

Large areas of imagery

Javascript animation

Multiple pop-ups

Multiple plugins

Parallax

Gradients

Carousels

WebGL 3D Graphics







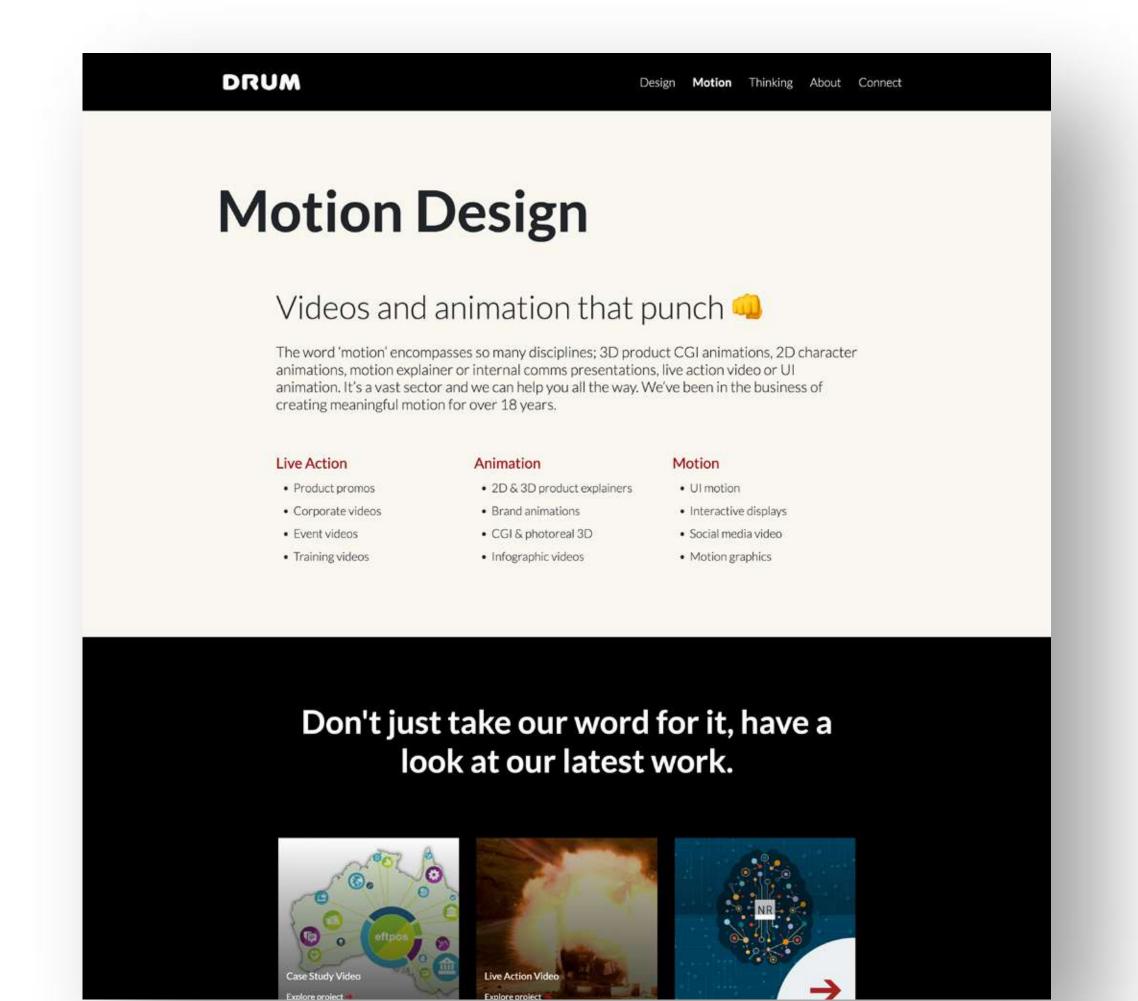








What we did do



Simple layout

Easy to iterate

Minimal imagery & animation

Custom CMS

Lazy Loading!

Copywriting (

Videos and animation that punch •

Let us inspire you

Want to keep up to date with digital marketing trends? We can help. Our geeks contribute regularly about all the latest digital buzz.

Every byte counts

Videos and animation that punch •

4 bytes ie. 0.004kb

Digital Design -

56 bytes ie. 0.056kb

HTML arrow

-

281 bytes ie. 0.281kb SVG arrow

Image file formats



webp 4kb

png 5kb

jpeg 11kb

svg 7kb

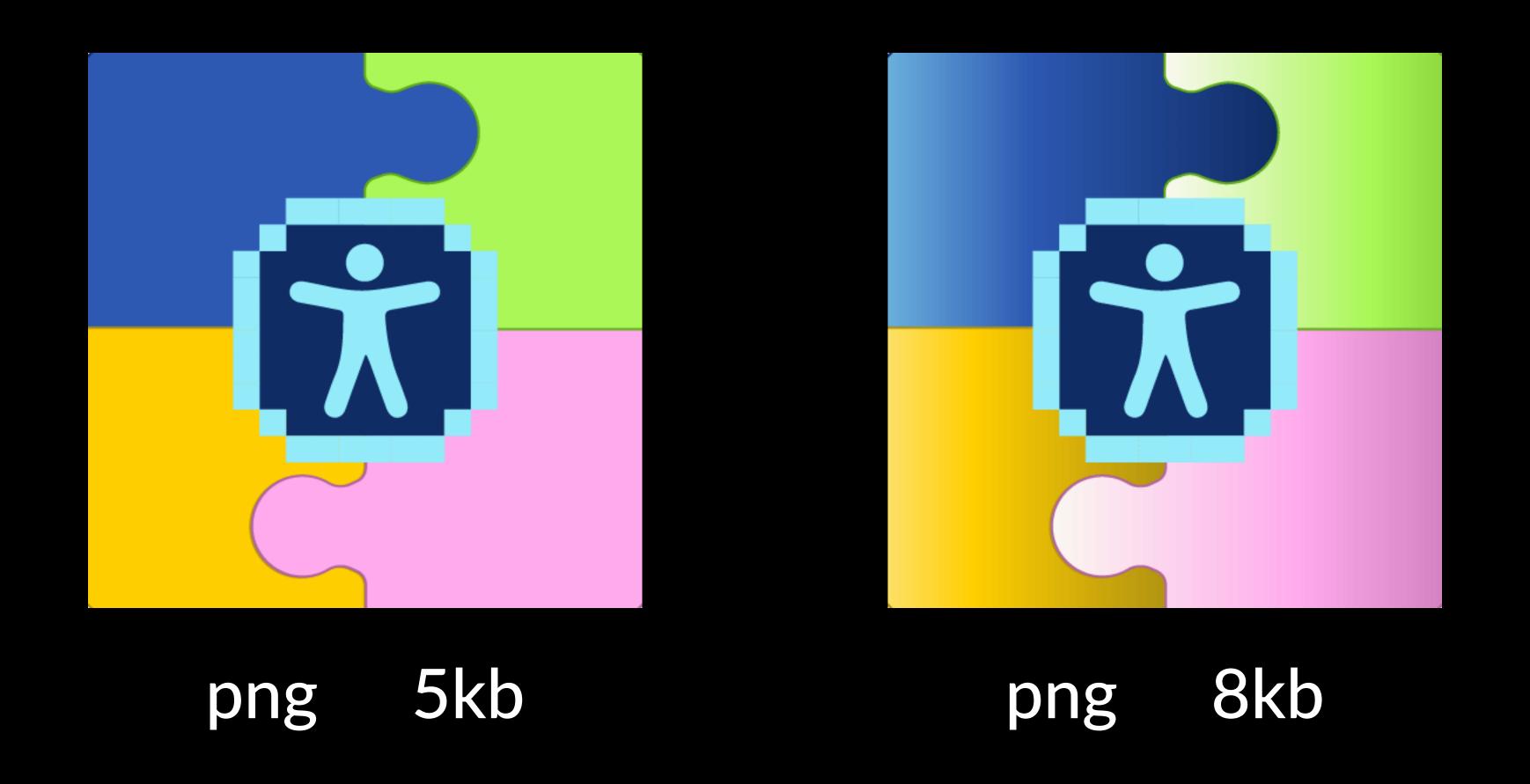


webp 35kb

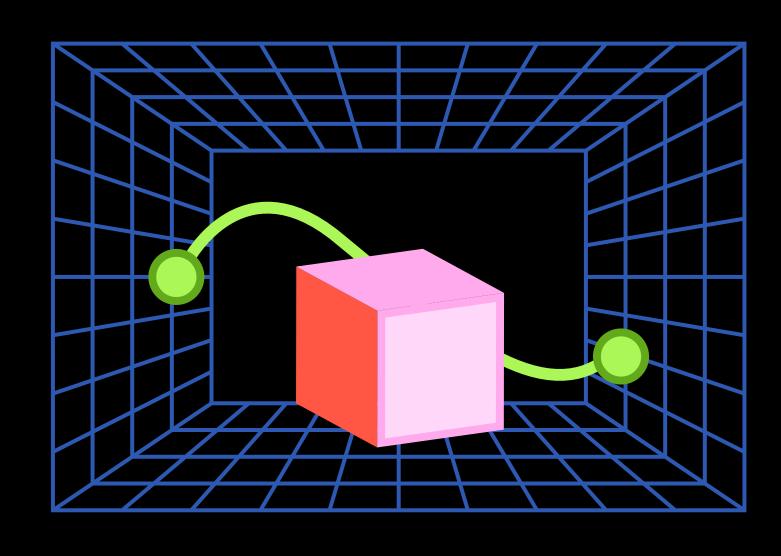
png 124kb

jpeg 67kb

Gradients increase file size



Animation



CSS

Lottie.js/bodymovin

GIF

MP4

Video



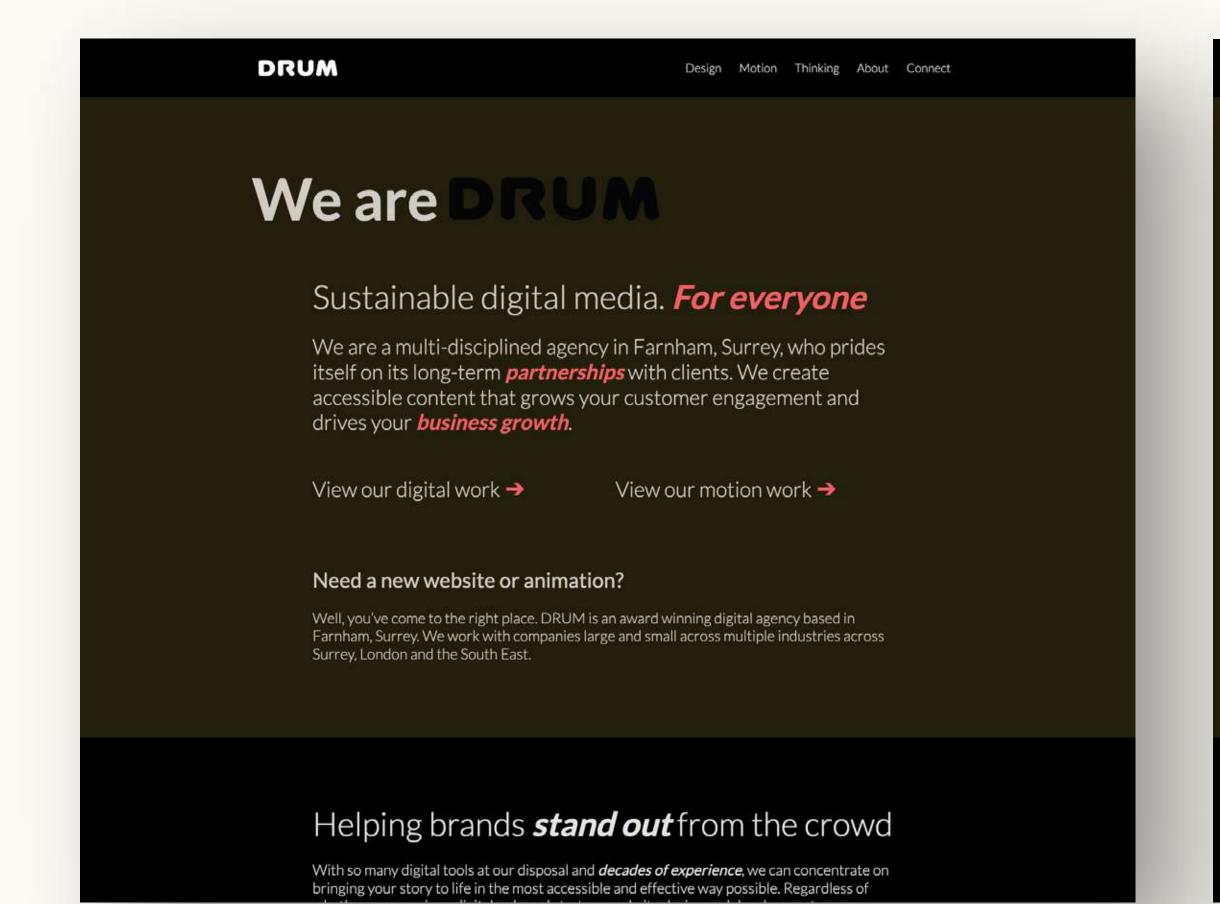
Embed vimeo/youtube

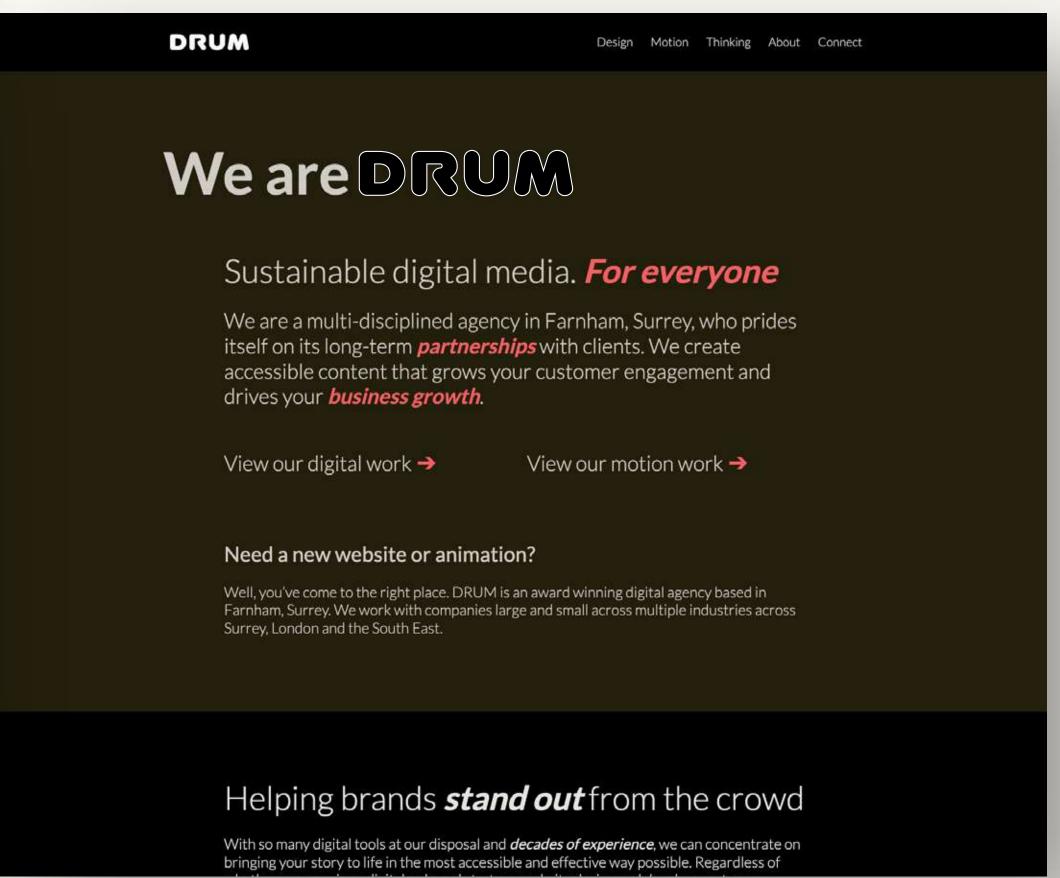
MP4 - max 3MB

Reduce length



Dark Reader Chrome extension





Things to discuss with your developer



CMS - install the minimum

Green Hosting - read the smallprint

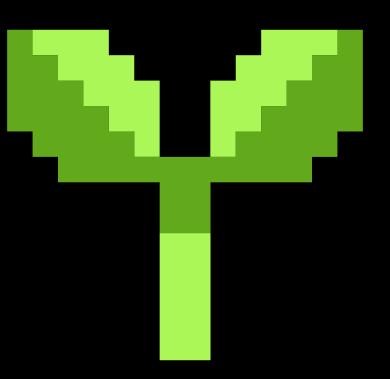
Framework - install the minimum

Plugins - can any be removed? What is long term plan?





Do you think green hosting is the primary way to reduce a website's CO2 emmissions?



DRUM