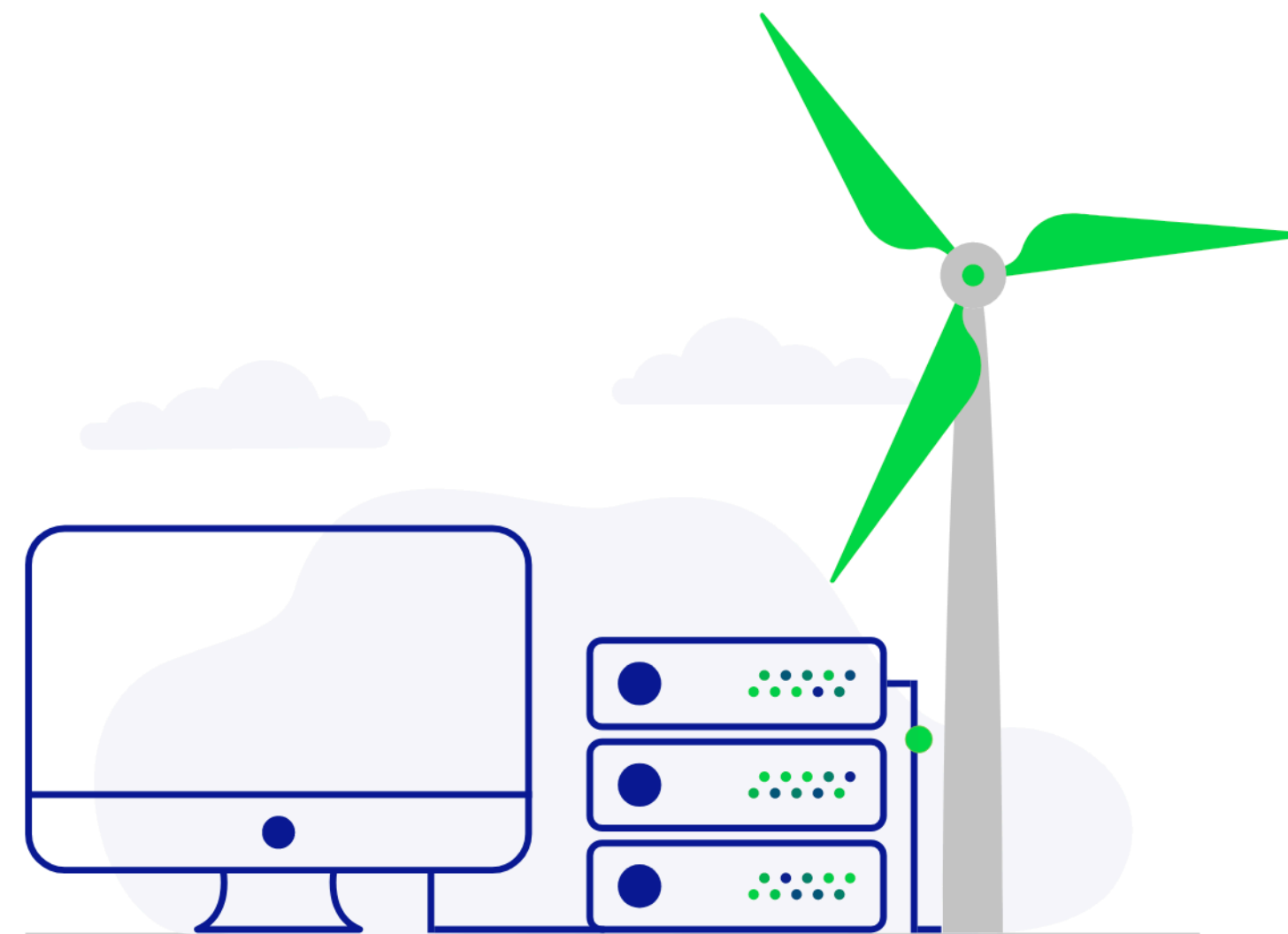


CASE STUDY:

REDUCING THE CARBON FOOTPRINT OF THE GLOBAL GOOD AWARDS WEBSITE



THE STARTING POINT

We've launched Website Carbon version 2 with updated, more accurate data – [find out more](#)

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

How is your website impacting the planet?

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.


The internet consumes a lot of electricity. 416.2TWh per year to be precise. To give you some perspective, that's more than the entire United Kingdom.

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

Carbon results for globalgoodawards.co.uk [Share](#) [f](#) [t](#) [in](#) [v](#) [e](#)

 Uh oh! This web page is dirtier than **84%** of web pages tested

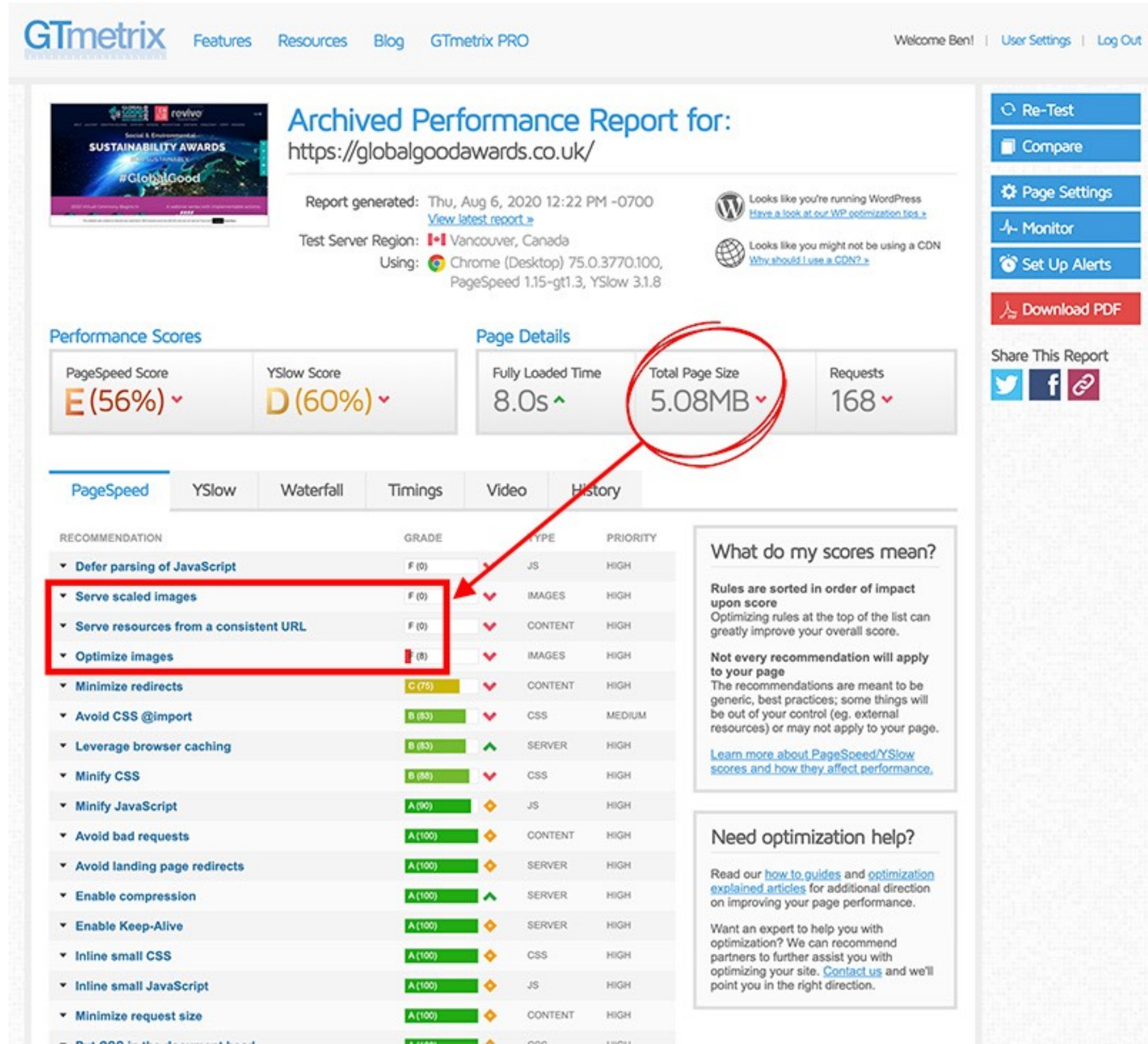
 Oh my, **2.79g of CO2** is produced every time someone visits this web page.

 This web page appears to be running on **sustainable energy**

We began by testing the carbon emissions of the website at websitecarbon.com

The results indicated that although the website was already running on sustainable energy with a different hosting provider, its carbon emissions were relatively high, at 2.79g every time a visitor visited the home page of the site.

EXPLORING THE CAUSE



When a website has high carbon emissions, the cause is that it loads a relatively large amount of data when the page opens.

The basic principle is that data and carbon emissions have a positive relationship. The larger the page size, the larger the amount of data that needs to be stored and transmitted through the internet, which uses more energy and has a larger footprint.

We used a free tool called GTmetrix to measure the total page size. The result was 5.08MB, which is relatively large - in an ideal world a website should load no more than around 1.5MB.

The results also indicated that images on the page hadn't been optimised and that large images were being scaled down into smaller containers - these are both opportunities to improve.

DIGGING INTO THE DETAIL



Waterfall Chart

A request-by-request visualization of the page load. [Learn how to read a waterfall chart.](#)

Filter requests...

All

HTML

CSS

JS

XHR

Fonts

Images

Social & Environmental Sustainability Awards Global Good Awards UK					
URL	Status	Domain	Size	Time	Tim
* Home-Page-header1.png	200	globalgoodawards.c...	863.7 KB		2.8s
* IWM0912_981X471.jpg	200	globalgoodawards.c...	462.9 KB		1.91s
* base.js	200	youtube.com	448.5 KB		
* GGA-2019-Web-Visual-I...	200	globalgoodawards.c...	251.6 KB		
* GGA-2020-Web-Visuals...	200	globalgoodawards.c...	250.1 KB		
* GGA-2019-Web-Visual-I...	200	globalgoodawards.c...	229.2 KB		
* GGA-2019-Web-Visual-I...	200	globalgoodawards.c...	200.8 KB		
* GGA-2019-Web-Tag-Re...	200	globalgoodawards.c...	189.6 KB		2.04s
* GGA-2019-Web-Visual-I...	200	globalgoodawards.c...	176.3 KB		
* GGA-2019-Web-Visual-I...	200	globalgoodawards.c...	175.3 KB		
* IWM_0506-2-1-1.jpg	200	globalgoodawards.c...	135.5 KB		
* EevQm_SWsAldIW_?fo...	200	pbs.twimg.com	131.7 KB		
* main.min.js?ver=9.0.1	200	globalgoodawards.c...	86.3 KB		
* fa-solid-900.woff2	200	globalgoodawards.c...	77.6 KB		
* fa-brands-400.woff2	200	globalgoodawards.c...	74.8 KB		

WE DON'T JUST TALK SUSTAINABILITY.
WE WALK, WEAR AND EAT IT TOO.

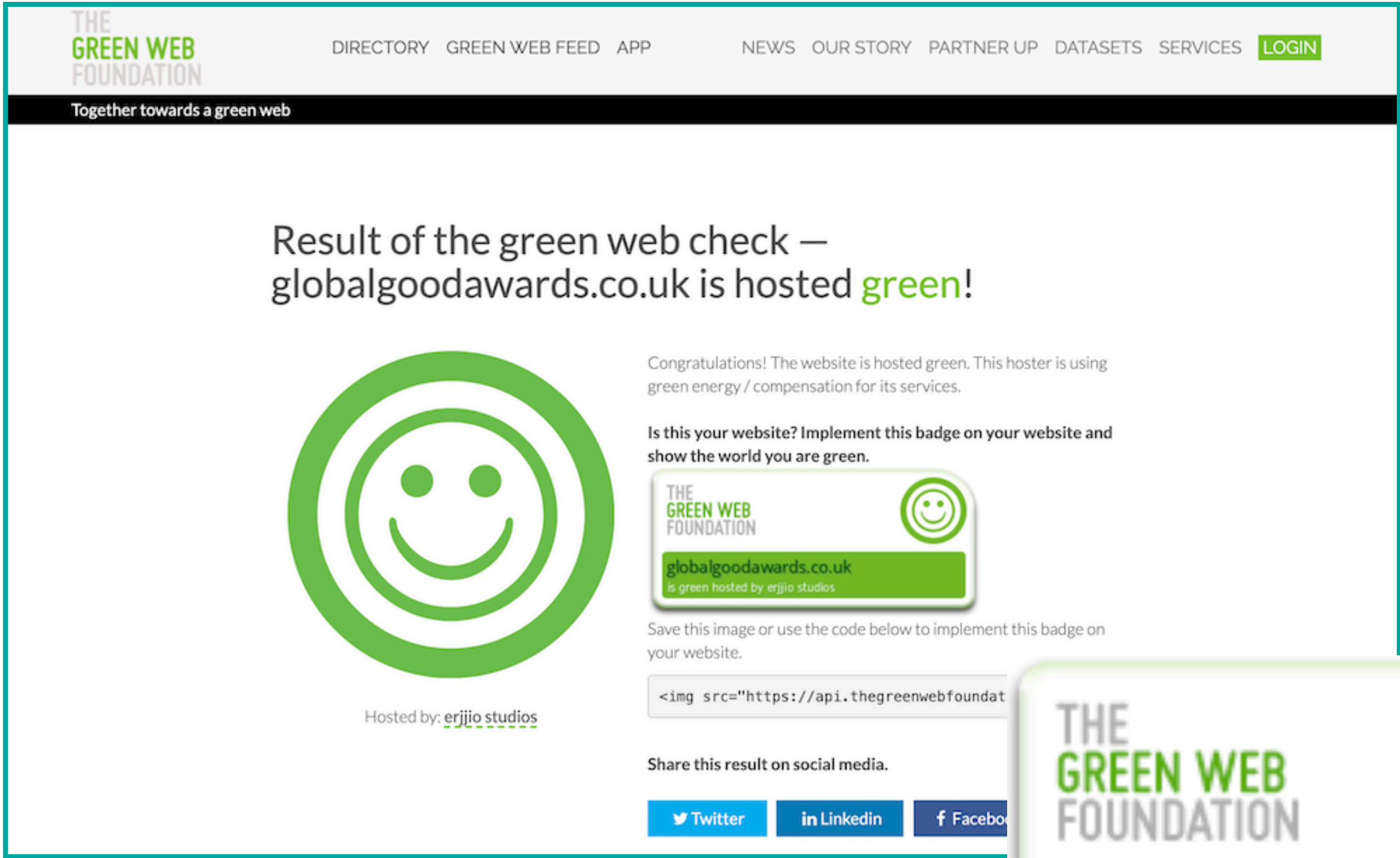
Watch the video

By viewing the Waterfall tab in GTmetrix and sorting by image file size, we identified the main contributors to overall page size.

A number of large images were shown - particularly the header image which was over 860KB. Ideally images should be no more than around 150KB each or hopefully lower. This can be achieved using a variety of image compression techniques.

In addition, we noticed that a YouTube video accounted for around 450KB of the total page weight, although this video isn't actually displayed on the home page when the page opens. It would be better to only load this video data once a user decides to view it.

SWITCH TO ERJJIO HOSTING



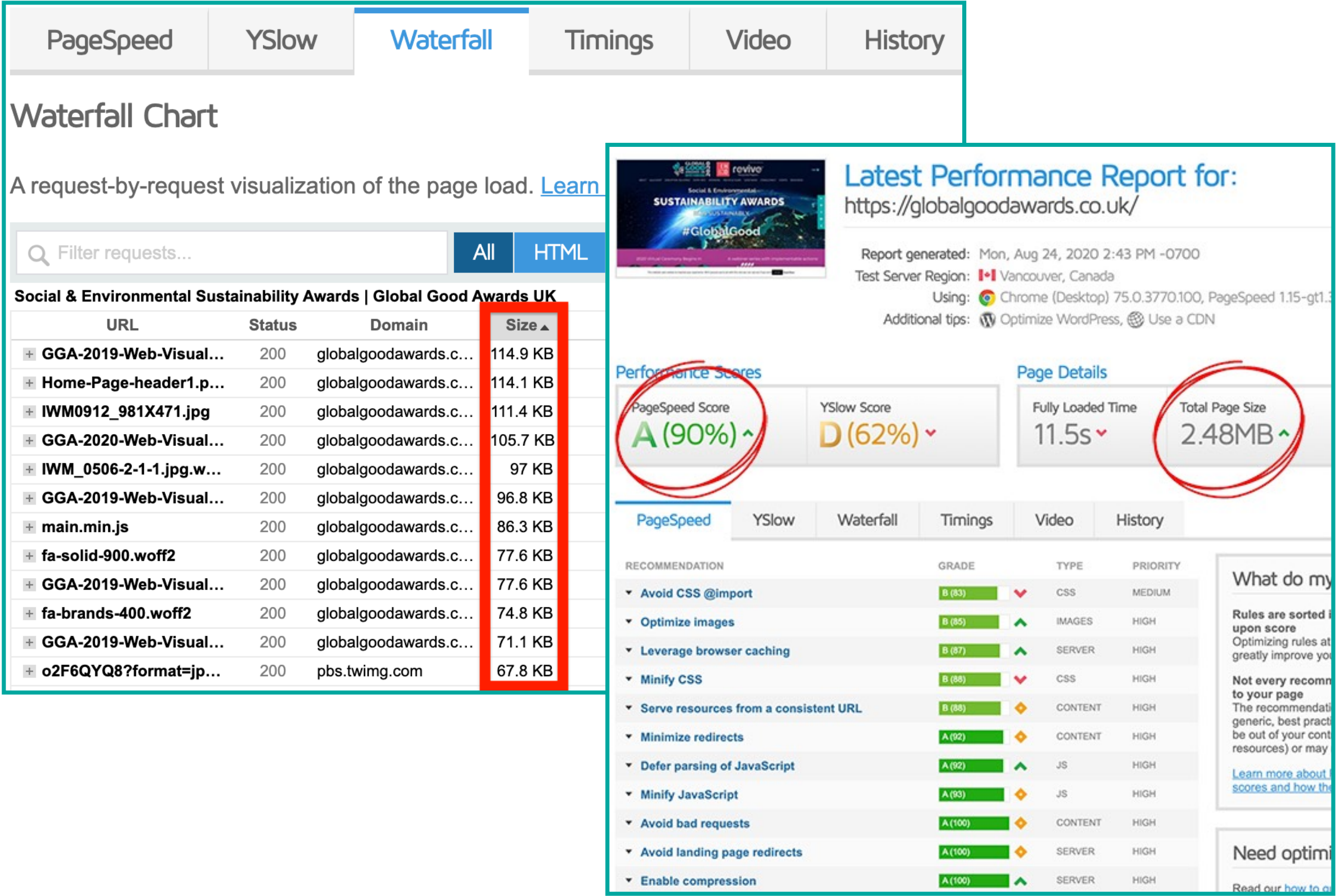
We began by switching the website to our planet-friendly hosting plan, which runs on green energy as verified by the [GreenWebFoundation.org](https://www.thegreenwebfoundation.org)

We carefully plan these transfers to ensure they are seamless, painless and don't cause any downtime.

We never require you to have any technical knowledge, and are happy to handle it all for you - there are no additional charges or hidden fees.



OPTIMISATION



Using a variety of specialised techniques to optimise the website, we dramatically reduced the file sizes being loaded by the page.

These techniques include image compression, conversion to a web-optimised image format called WebP and “lazy load” to avoid the YouTube being loaded until a user asks for it.

The optimisation has been applied across the entire website which contains 1000+ images.

Overall, the Total Page Size reduced from 5.08MB to 2.48M - a saving of just over 50%.


In addition, the page caching elements of our optimisation process improved the overall Page Speed Score to A which was previously E.

CARBON EMISSION REDUCTION

Carbon results for
globalgoodawards.co.uk

Share     

 Uh oh! This web page is dirtier than **65%** of web pages tested

 Oh my, **1.42g of CO2** is produced every time someone visits this web page.

 This web page appears to be running on **sustainable energy**

Testing the website a second time using websitecarbon.com, the result has significantly improved from its original score of 2.79g to 1.42g - a **49% reduction in the page's carbon emissions**.

Despite the positive impact of the optimisation process, there is still room for improvement. The key reason that the website still has a relatively high score is that a relatively large number of images are displayed on the home page. In future, the GGA team could consider rethinking the page layout - particularly exploring opportunities to use a few less images if possible.

FINISHING TOUCHES



Sponsors & partners

Sustainability Awards - More Information

Tweets by @GlobalGoodAward

Global Good Awards @GlobalGoodAward

PisRT 4 days 2 book 4 'Social Justice is everyone's business' webinar. REAL IMPLEMENTABLE ACTIONS for you to take away, helping U understand #language #culture & #UnconsciousBias. Speakers: Dave Carlos, Kendal Archer, @misavi & @HayleyTVB bit.ly/3QTek2S #BLM #Racism

Embed View on Twitter

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SUSTAINABLE WEB

Certified Green Website

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Menu

Certified Green Website

When a website displays this badge, it means that the owner has chosen to host it on a clean, green and ethical web hosting plan, with erjjio studios.

Certified Green Website

Certified Green Website

Certified Green Website

The website is powered by 100% renewable energy, as verified by the Green Web Foundation

The website has been optimised to improve its efficiency and reduce its carbon emissions

At least one tree is planted on the website's behalf every month, helping to reduce climate change

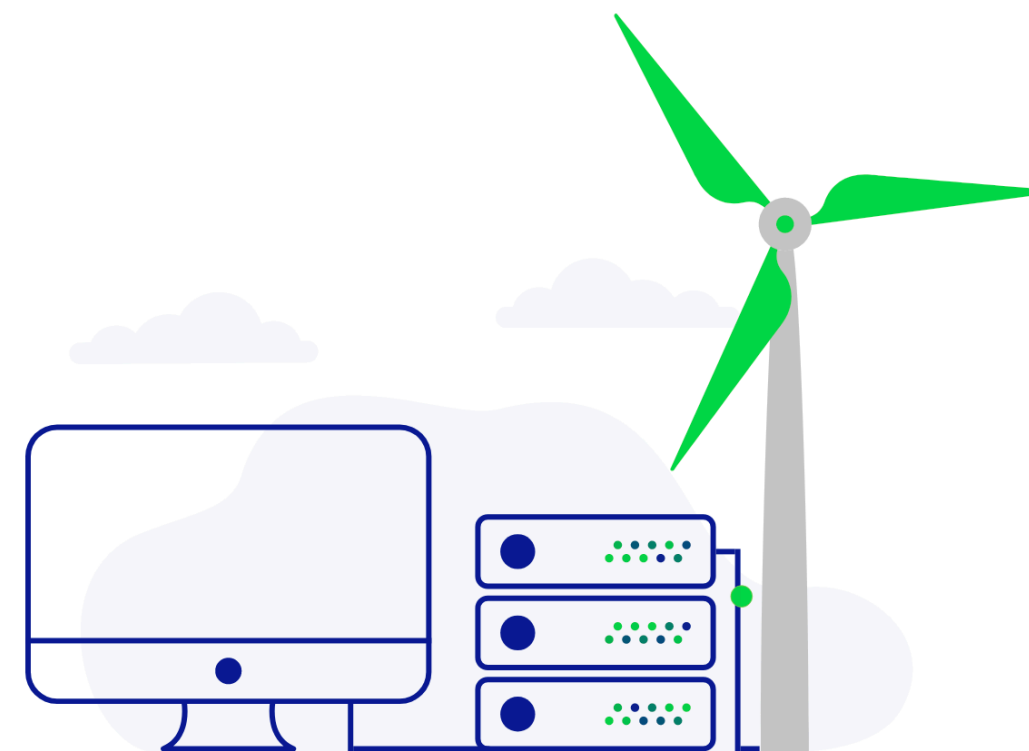
The website contributes to villagers in impoverished regions of the world being lifted out of poverty

The tree planting is achieved through our partnership with the wonderful team at Eden Reforestation Projects. More than 200 million trees have been planted across their project regions of Ethiopia, Haiti, Indonesia, Madagascar and Nepal, creating more than 2 million days of employment for villagers.

As a finishing touch, we added our exclusive Certified Green Website to the footer of the website, which indicates that:

- The website is hosted by erjjio, on a server in a UK data centre powered by **100% renewable energy**
- The website has been optimised to reduce its carbon emissions - in this case it has **achieved a saving of 50%**
- **Trees are planted** exclusively on the website's behalf every month, through our partnership with Eden Reforestation Project

JOIN THE PLANET-FRIENDLY WEBSITE REVOLUTION



Get started by requesting your FREE website health check at:

erjjio studios . com