

# Designing for Sustainability

ICT4S  
May 17, 2018  
@timfrick





A better digital agency for people and planet.





**Mightybytes**

**Certified**



**Corporation™**

## Sustainability Blueprint

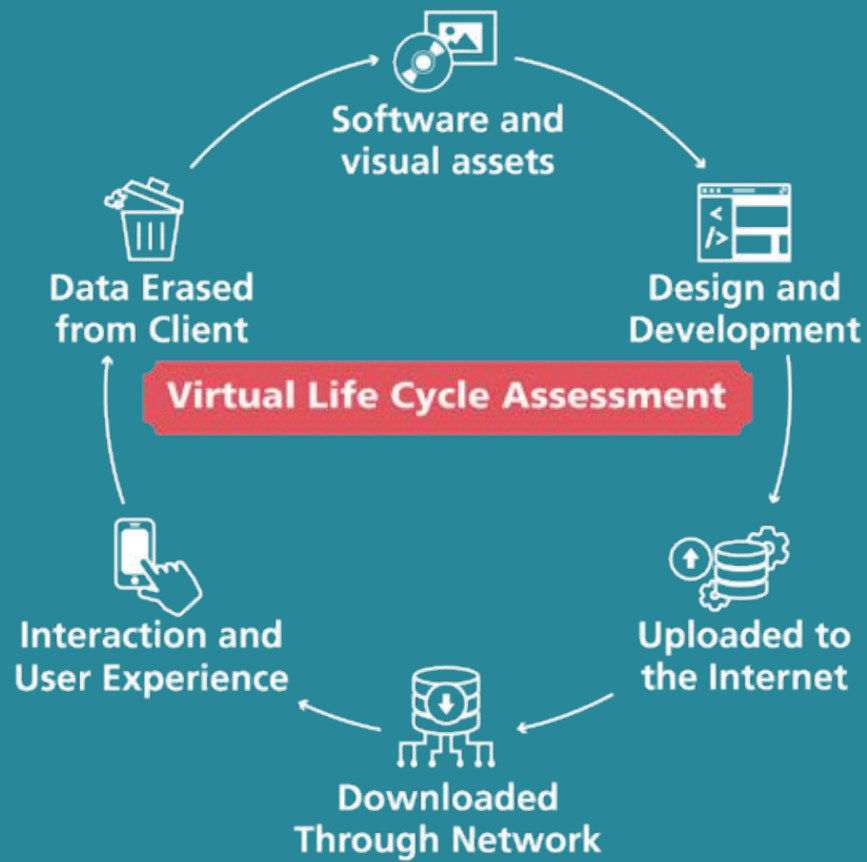
**The B Impact Assessment serves as our roadmap for building a better business.**



- **Environment**
- **Workers**
- **Governance**
- **Community**
- **Customers**

This led us to the question:

**How can we build  
sustainability principles into  
our company's DNA?**



Result:

**Our clients were completely bewildered  
(or worse, didn't care).**

Ecograder

## How green is your website?

Enter your web address below to find out now!

Your Website URL (required)

Your Email Address (required)

  
  
 Send me occasional tips on web sustainability. [Learn more.](#)

**GRADE ME** 

PST@MPANY CHICAGO SUN-TIMES SB THE STRONG BRANDS

Built by the team at  Mightybytes

**At 5 Years, 1.7M sites crawled**



RESULTS FOR: <http://ideactioncorps.com>

← Test Another Site

YOUR SCORE

**93**  
OUT OF 100

🐦 tweet your score  
🔗 get link to this report

Calculate your website's carbon footprint

UPGRADE

## Page Speed

Google Page Speed Insight Score

LEARN MORE →

HTTP Requests

LEARN MORE →

Shared Resources

LEARN MORE →

## Findability

MozRank

LEARN MORE →

## Design and User Experience

Mobile Optimization

LEARN MORE →

Avoids Flash

LEARN MORE →

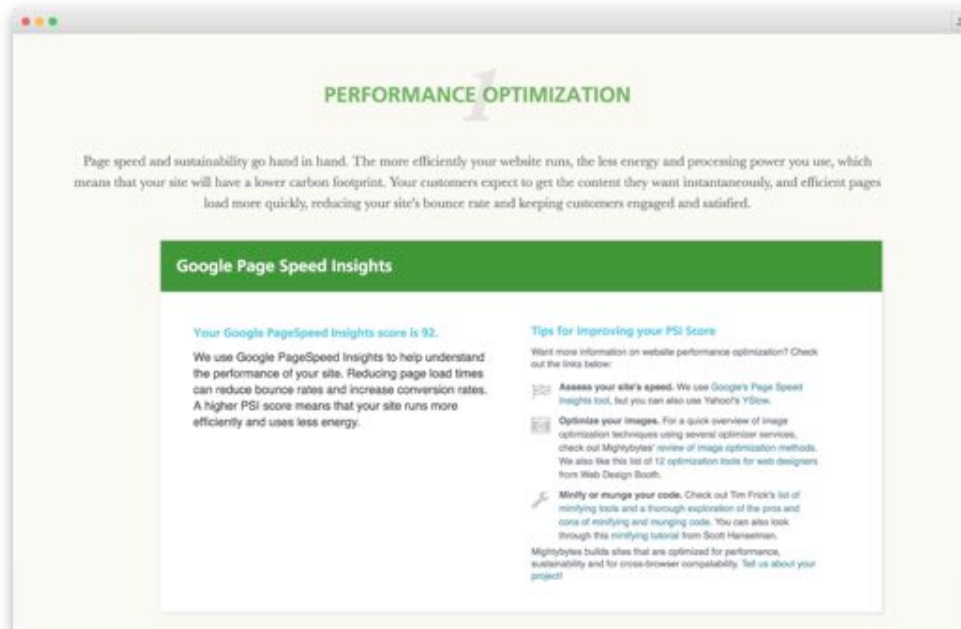
## Green Hosting

Green Hosting

LEARN MORE →

Ecograder reports

# Ecograder Reports



**PERFORMANCE OPTIMIZATION**

Page speed and sustainability go hand in hand. The more efficiently your website runs, the less energy and processing power you use, which means that your site will have a lower carbon footprint. Your customers expect to get the content they want instantaneously, and efficient pages load more quickly, reducing your site's bounce rate and keeping customers engaged and satisfied.

### Google Page Speed Insights

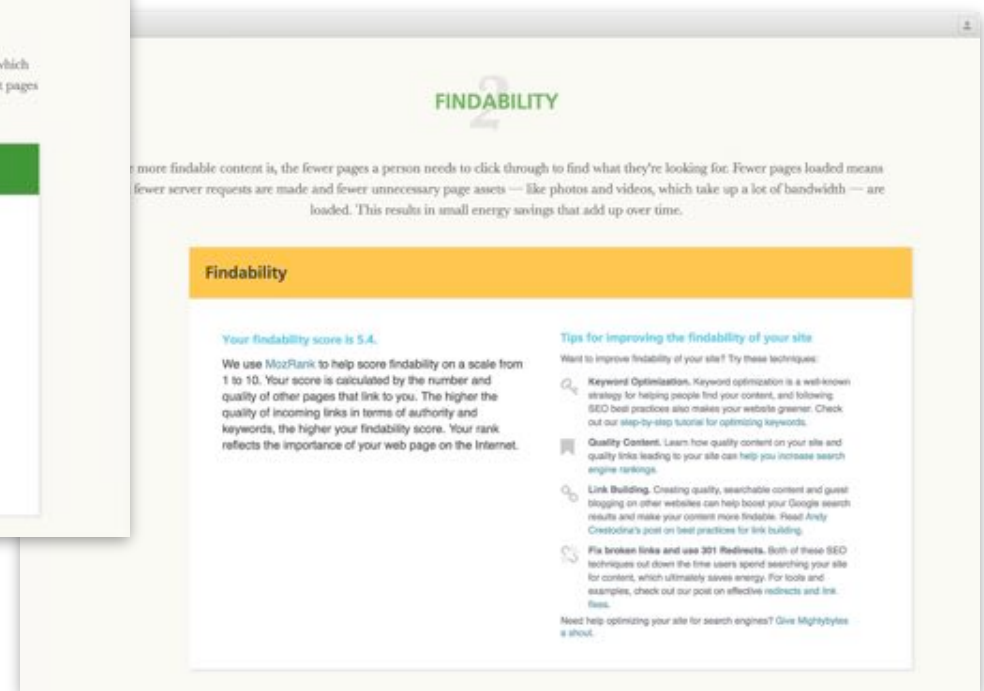
Your Google PageSpeed Insights score is 92.

We use Google PageSpeed Insights to help understand the performance of your site. Reducing page load times can reduce bounce rates and increase conversion rates. A higher PSI score means that your site runs more efficiently and uses less energy.

#### Tips for improving your PSI Score

Want more information on website performance optimization? Check out the links below:

- Assess your site's speed.** We use Google's Page Speed Insights tool, but you can also use Yahoo's YSlow.
- Optimize your images.** For a quick overview of image optimization techniques using several optimizer services, check out Mightybytes' review of image optimization methods. We also like this list of 12 optimization tools for web designers from Web Design Booth.
- Minify or munge your code.** Check out Tim Frick's list of minifying tools and a thorough exploration of the pros and cons of minifying and munging code. You can also look through this minifying tutorial from Scott Hanselman. Mightybytes builds sites that are optimized for performance, sustainability and for cross-browser compatibility. Tell us about your project.



**FINDABILITY**

More findable content is, the fewer pages a person needs to click through to find what they're looking for. Fewer pages loaded means fewer server requests are made and fewer unnecessary page assets — like photos and videos, which take up a lot of bandwidth — are loaded. This results in small energy savings that add up over time.

### Findability

Your findability score is 5.4.

We use MozRank to help score findability on a scale from 1 to 10. Your score is calculated by the number and quality of other pages that link to you. The higher the quality of incoming links in terms of authority and keywords, the higher your findability score. Your rank reflects the importance of your web page on the Internet.

#### Tips for improving the findability of your site

Want to improve findability of your site? Try these techniques:

- Keyword Optimization.** Keyword optimization is a well-known strategy for helping people find your content, and following SEO best practices also makes your website greener. Check out our step-by-step tutorial for optimizing keywords.
- Quality Content.** Learn how quality content on your site and quality links leading to your site can help you increase search engine rankings.
- Link Building.** Creating quality, searchable content and guest blogging on other websites can help boost your Google search results and make your content more findable. Read Andy Crestodina's post on best practices for link building.
- Fix broken links and use 301 Redirects.** Both of these SEO techniques cut down the time users spend searching your site for content, which ultimately saves energy. For tools and examples, check out our post on effective redirects and link fixes.

Need help optimizing your site for search engines? Give Mightybytes a shout.

# 5 Years of Ecograder Crawls

1.7M URLs Crawled:

1,682,202

Average Score:





**Findability**



**Usability**



**Performance Optimization**



**Green Hosting**



**Findability**



**Usability**



**Performance Optimization**



**Green Hosting**



United States



Worldwide

# Building a Practitioner Community

Lime Red

MAD\*POW

WEB  
NEUTRAL  
PROJECT



Exygy

OLIVER  
RUSSELL

MANOVERBOARD

exponent  
partners



Cloud for Good

Cause Labs

Bridging Gaps

# **(Practitioner) Resources**



# Sustainable Web Design

Resources for building a cleaner, greener internet

6<sup>th</sup>

If the internet was a country, it would rank sixth for electricity usage

[Source](#)

13%

13% of energy in the US comes from renewable sources

[Source](#)

830M

830 M tons is the current size of the internet's annual carbon footprint

[Source](#)



Building a web or mobile app? Read *Designing for Sustainability: A Guide to Building Greener Digital Products and Services* now available from O'Reilly Media.

**Sustainable Web Design – [sustainablewebdesign.org](http://sustainablewebdesign.org)**

## The B Impact Assessment



The screenshot shows the homepage of the B Impact Assessment website. At the top left is the logo for B Impact Assessment, followed by navigation links for "Learn More", "Case Studies", and "About". On the right side of the header, there are "Log In" and "Start Assessment" buttons. The main banner features the headline "Measure What Matters" and the subtext "Your company's social and environmental impact." Below this is a "Get Started" button. The background of the banner is a colorful illustration of a sustainable community with mountains, a sun, a wind turbine, and various buildings. At the bottom of the banner, it states "Join 40,000+ businesses using this free, confidential tool". Below this text are logos for partner companies: Benetton, Etsy, Patagonia, Natura, and Kickstarter.

Try it out:  
[bimpactassessment.net](https://bimpactassessment.net)

View the metrics:  
[b-analytics.net](https://b-analytics.net)

# SUSTAINABLE UX

DESIGN IN A WARMING WORLD

A free online conference

02/16/2017

[Get Tickets](#)

#sustainableux

Sustainable UX – [sustainableux.com](http://sustainableux.com)

The screenshot shows a web browser window displaying the W3C Sustainable Web Design Community Group page. The browser's address bar shows the URL <https://www.w3.org/commu...>. The page features a header with the W3C logo and the text "COMMUNITY & BUSINESS GROUPS". Navigation links for "CURRENT GROUPS", "REPORTS", and "ABOUT" are visible. The main content area includes a breadcrumb trail "Home / Sustainable Web Design...", a section titled "SUSTAINABLE WEB DESIGN COMMUNITY GROUP" with a description and a note, a "No Reports Yet Published" section with a "PUBLISH REPORTS" button, and a post titled "Bringing the Green Web to WordPress" by Jack Lenox. A right-hand sidebar contains "Tools for this group" (Mailing List, Wiki, IRC, RSS, Contact This Group), "Pages" (About, Frameworks, Polls Archive, Resources), and "Get involved" information.

Sustainable Web Design Comm x  
Secure https://www.w3.org/commu...  
Skip Log in My W3C Account

W3C COMMUNITY & BUSINESS GROUPS  
CURRENT GROUPS REPORTS ABOUT

Home / Sustainable Web Design...

### SUSTAINABLE WEB DESIGN COMMUNITY GROUP

A community group dedicated to creating sustainable websites. This group will not publish specifications.

*Note: Community Groups are proposed and run by the community. Although W3C hosts these conversations, the groups do not necessarily represent the views of the W3C Membership or staff.*

#### No Reports Yet Published

Chairs, when logged in, may publish draft and final reports. Please see [report requirements](#).

**PUBLISH REPORTS**

#### Bringing the Green Web to WordPress

Jack Lenox | Posted on: May 4, 2018

With Mozilla's 2018 [Internet Health Report](#) finally shining a light on sustainability, and thanks to Chris Adams' presentation at Mozfest last year, I've been inspired to seriously up my game in terms of helping wherever I can in this field.

#### Tools for this group

- Mailing List
- Wiki
- IRC
- RSS
- Contact This Group

#### Pages

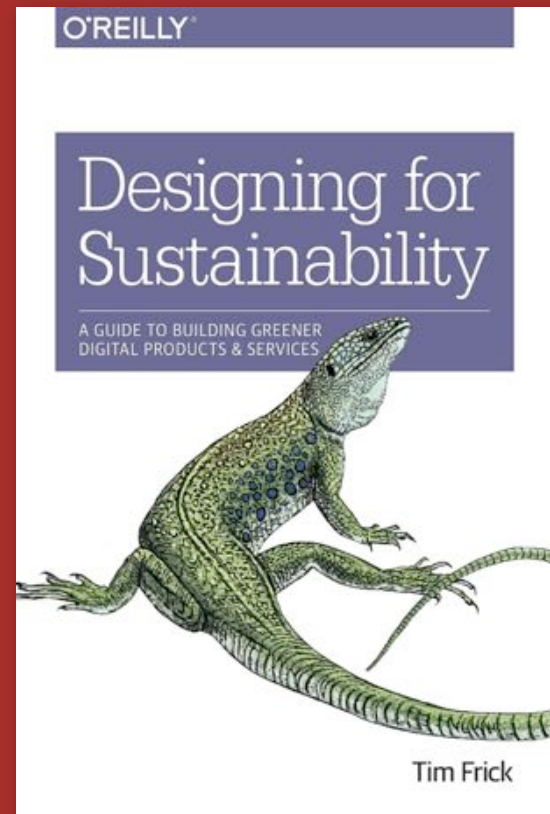
- About
- Frameworks
- Polls Archive
- Resources

#### Get involved

Anyone may join this Community Group. All participants in this group have signed the [W3C Community Contributor License Agreement](#).

# W3C Community Group

# Designing for Sustainability



# Thanks!



*“Better digital solutions  
for people and planet.”*



[Mightybytes.com](http://Mightybytes.com)

[Ecograder.com](http://Ecograder.com)

[SustainableWebDesign.org](http://SustainableWebDesign.org)