



PROJECT FLUX
TRAVEL LIKE THE GOOD OL' DAYS

Greenie Web

Overview



Greenie Web, a Google Chrome extension

Minimizes Digital Carbon Footprints (**DCF**) emitted from websites by reducing its data transfer & usage values

Some visible features of Greenie Web that we have tapped on, but are not limited to:

- Blacking out images (restored with reduced color variation)
- Stopping of animations when a website is loaded with the extension turned on
- & many more ...

Full end user autonomy to apply or reject minute changes accordingly as they navigate through the different views of the website

Overview

The methodology used to calculate digital carbon emissions would be a **three step process**

- Calculating data transfer & usage
- Converting the values to estimated amount of energy consumed
- Relating the energy consumed to the energy production process - creating the link between energy produced and the carbon dioxide emissions

Unable to assign a number for cost savings due to the lack of research studies to base on

Foresee great potential in the reduction of carbon taxes & electricity expenses when adopted on a large scale in the long run

Background and Motivation

Project Flux is a **sector agnostic tech -startup**

- Seeks to utilize technology to solve the world's most pressing issues
- Key product relates directly to environmental sustainability - in particular the reduction of digital carbon emissions and energy consumption

Carbon Reduction Project is to work on and contribute to **Greenie Web Google Chrome Extension**

- first of four products present in the Greenie Web brand

In this project, the member will be taking part in the technological development of the Google Chrome Extension while also providing support in market research, where required

Carbon Reductions and Cost Savings

- 1) Calculating data transfer & usage
- 2) Converting the values to estimated amount of energy consumed
- 3) Relating the energy consumed to the energy production process - creating the link between energy produced and the carbon dioxide emissions

Digital Carbon Emissions reduction is an indirect process

- At present, there is still **little information** regarding the industry standards of measuring digital carbon emissions - **let alone its reduction**

3 step methodology in calculating digital carbon emissions (as mentioned before)

All three steps are immensely complex and **several assumptions** are required for step

In the **First Step**,

- Assumption made: Size of the webpage = amount of data required for data transfer
- Use of caching - whereby data is saved locally and re-used at a later time should an individual revisit the same website - is excluded

In the **Third Step**,

- Assumption: standard energy mix is used for the data center powering the website
- Excludes any weather dependent renewable energy supply (solar during the day time, wind power when there is wind)
- Standard energy mix refers exclusively to natural gas power plants

Co-benefits

Gain eligibility for **preferential interest rates & green finance policies** in the long run

Company investing its efforts in a green initiative = **more recognition** amongst its customers (Corporate Social Responsibility)

Green trend emerging these days

- “green stocks” foreseen to rise 8% while energy shares will slump 10% by the end of 2025

Adopting greenie web with its highly convenient & seamless execution will also help companies take their first step in going green & thus possibly paving the way for more green initiatives for the company in the future

Next steps

Greenie Web is a conglomeration of four different pieces of software **targeting four verticals in the software industry** , namely: websites, mobile applications, web 3.0 (augmented reality / virtual reality), and industrial software

- As the launch vertical for the Greenie Web brand, the Greenie Web (for websites) has seen the most progress, a Minimum Viable Product has been created and tested
- More research and development is currently being dedicated for this product
- The first paid pilot has been signed with a Singaporean client with a further Letter of Intent by an international client

Much more research and development would be put into adapting the base product for mobile applications, web 3.0 and industrial software