

CarbonQuest

Uncover your carbon footprint and join a community committed to creating a sustainable future.



Team

Avinash

Kr. Ankur

Full Stack Developer

University Roll No:
2300911530036

Aviral

Yadav

ML Analyst

University Roll No:
2300911530037

Bodh

Ratan

Strategy Lead

University Roll No:
2300911530038

Chirag

Goel

Front-end Developer

University Roll No:
2300911530039

Table of contents

- 01 | Introduction
- 02 | Features
- 03 | Expected Impact
- 04 | User Flow and Glimpse
- 05 | Conclusion



01 |

Introduction

Introduction of CarbonQuest as a solution to track and reduce individual carbon footprints.



Objectives



Our aim

The objective is to help to reduce greenhouse gas emissions by identifying the biggest contributors, to help identify opportunities to reduce emission which will lead to sustainable future

The goal



Promote awareness about carbon emissions and help individuals make informed decisions to reduce their footprint.



Resources



Tools

Next.js Provides server-side rendering (SSR) and static site generation (SSG) for better performance.

React Core library used for building reusable UI components.

Tailwind CSS framework for styling

Git & GitHub for version control

Vercel for deployment

Node.js & Express.js for backend



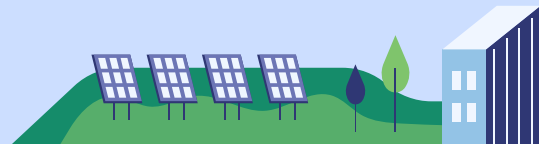
Research Sources

UN Climate Change Reports: Insights into global carbon emissions and their impact.

IPCC (Intergovernmental Panel on Climate Change): Data on climate trends and solutions.

Existing tools (e.g., *CoolClimate Network*, *CarbonFootprint.com*) to identify gaps and unique features.

SDG 13 (Climate Action) for alignment with global sustainability objectives.



Solutions



Tracking and Monitoring

Enable individuals to track their daily carbon footprint through intuitive tools and apps.



Community Building

Developing a new product or service to diversify the business and increase revenue streams



Actionable Recommendations

Provide practical, personalized suggestions to reduce emissions in areas like energy, transportation, and lifestyle choices.



Awareness and Education

Increase awareness about individual contributions to carbon emissions and their global impact.



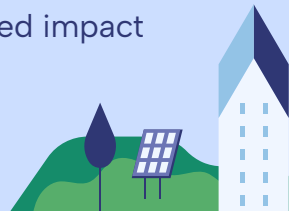
Reward-Based Motivation

Encourage sustainable behavior through reward systems, such as badges or incentives for eco-friendly actions.



Policy Support and Integration

Align personal efforts with broader government and organizational initiatives for a unified impact on carbon reduction.



| 02

Features

Exploring What Makes CarbonQuest Unique



Immersive UI/UX



Mobile responsive UI

Seamless Experience on Smartphones: The platform is fully optimized to provide a smooth and intuitive user experience on mobile devices.

Track Carbon Footprint On-The-Go: Users can input their daily activities and track their carbon footprint directly from their smartphones, making it easy to stay engaged with their sustainability goals anywhere.

Quick Access to Analytics and Badges: Mobile users can instantly view their carbon footprint trends, progress towards reduction, and gamified badges earned.

Enhanced Accessibility: The design ensures that all essential features are accessible with one hand, offering easy navigation and interaction for users with various screen sizes.

Responsive Layout: The design adapts to different mobile screen resolutions and orientations, providing a consistent and optimized experience across various devices.

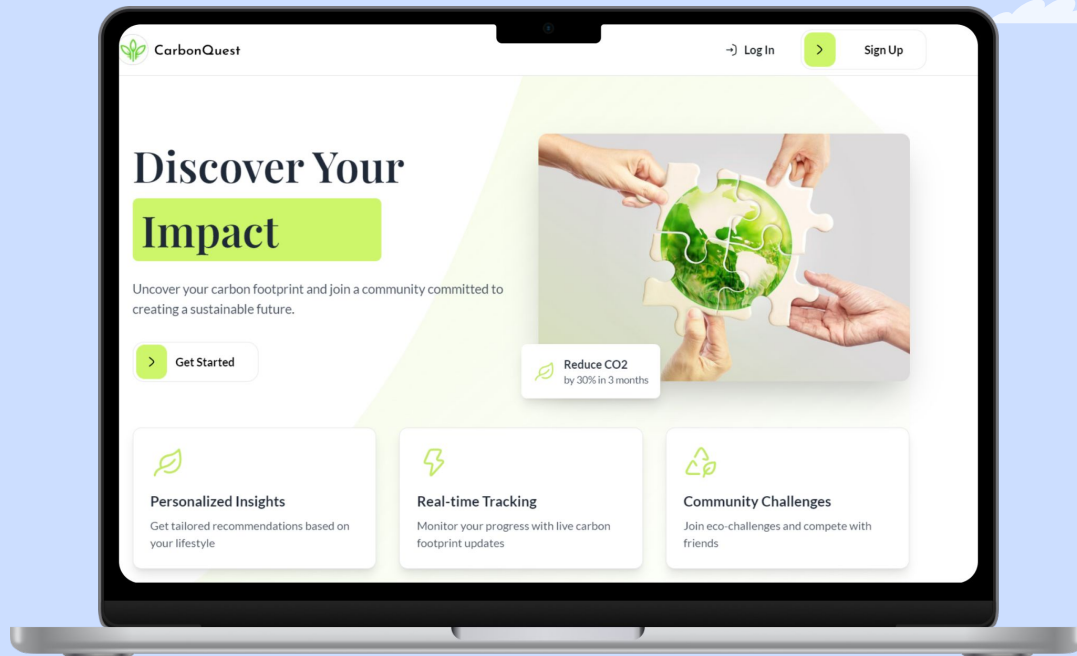


Immersive UI/UX

Optimized for Larger Screens: The desktop version offers a more expansive layout, making use of larger screen real estate to present detailed and complex information effectively.

Comprehensive Analytics and Visuals: Users can explore detailed charts, graphs, and data visualizations of their carbon footprint trends, offering a deeper understanding of their environmental impact.

Intuitive Navigation and Interaction: The layout is designed with user-friendly navigation, making it easy to access different sections, input data, and interact with features like badges and analytics.



Easy, Enjoyable, and Efficient UX

Daily Tracking

S	M	T	W	Th	F	S
	1 (6.15 kg)	2 (8.20 kg)	3 (16.15 kg)	4 (11.16 kg)	5 (13.02 kg)	6 (6.72 kg)
7 (5.09 kg)	8 (29.8 kg)	9 (7.77 kg)	10 Add footprint	11	12	13

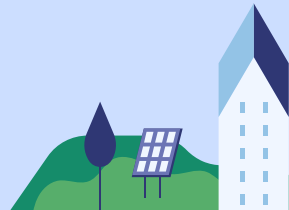
Optimal Carbon
Emission

Elevated Carbon
Emission

Excess Carbon Emission

Daily Tracking

- **Track Daily Carbon Footprint:** Tracks used to calculate user's carbon footprint for the day.
- **Categorized Input:** Categorized activities into transport, food, home energy, etc., allowing users to get detailed insights
- **Real-Time Data Processing:** The platform processes it in real-time, providing instant feedback on their emissions
- **Visual Representation:** Users can view their carbon footprint data in visual formats like pie charts or bar graphs
- **Daily Target and Goal Setting:** Users can set daily carbon reduction goals
- **Notifications and Reminders:** Reminders are sent to users to log their daily activities



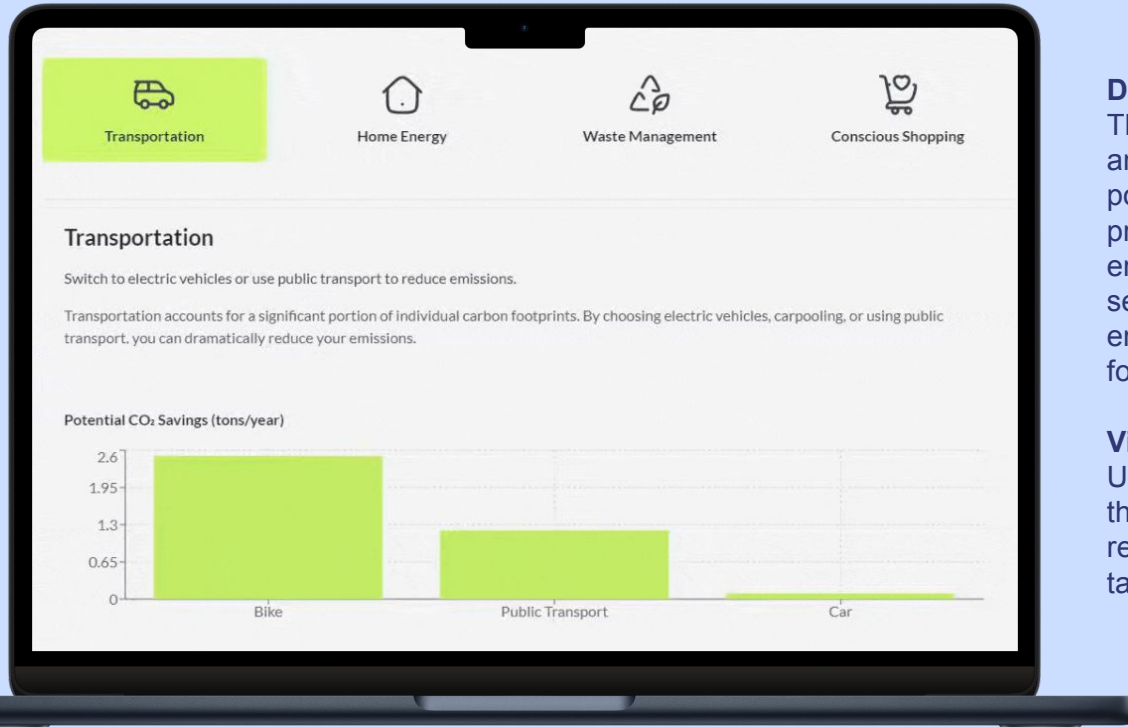
Interactive Visualizations

Engaging and Informative

The dynamic charts and graphs allow users to explore their personal contributions to carbon emissions in a visually appealing way.

Interactive Experience

With just a few clicks, users can see how different actions or lifestyle changes affect their carbon footprint.



Data-Driven Insights

Through real-time updates and customizable data points, users can track their progress in reducing emissions across various sectors like transportation, energy consumption, and food choices.

Visual Impact

Users can visually compare their current emissions with recommended sustainable targets.

Badges

For completing your first carbon footprint entry and starting your journey.



Reserved for those who reduce emissions by 75% or more. True inspiration!

Badges are motivational and reward users for achieving significant milestones in their eco-friendly journey.



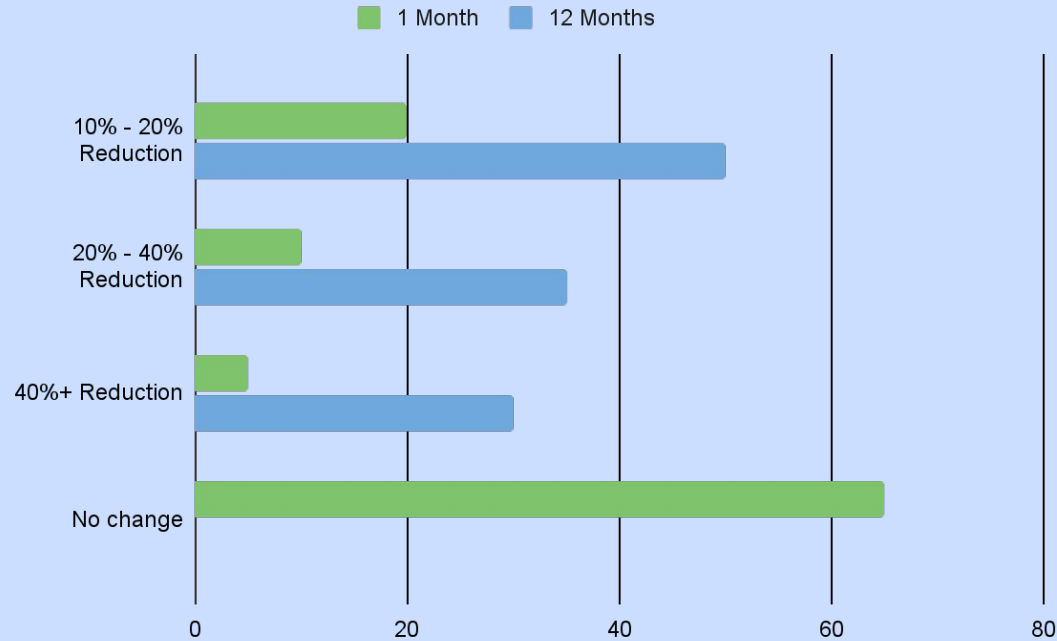
03 |

Expected Impact

Tracking Progress: How CarbonQuest Aims to Transform Carbon Footprint Reduction



Expected User Emissions Reduction



This graph represents the progression of user behavior in reducing carbon emissions over time using CarbonQuest.



Increased Awareness

We aim to help users understand their carbon footprints and the impact of their daily choices on the environment.



Adoption of Sustainable Practices

Users are expected to begin adopting eco-friendly practices, such as reducing energy consumption, using sustainable transportation, and recycling.



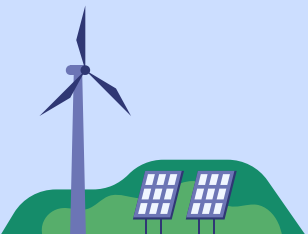
Strong Community

We hope to create a community of climate-conscious individuals who can share tips, track progress, and motivate each other to reduce their emissions.



Global Reach and Scalability

As CarbonQuest grows, we hope to extend its impact, allowing more users worldwide to track, reduce, and offset their carbon emissions effectively.





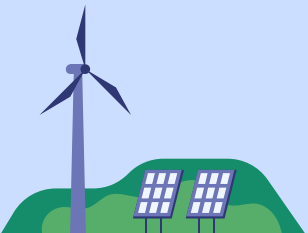
Encouraging Long-Term Behavioral Changes

Through gamification and rewards, we plan to inspire users to make lasting changes in their daily habits, leading to sustainable living.



Empowering Users to Track Progress

Our goal is for users to regularly track their emissions, giving them the insight and motivation to take meaningful action over time.



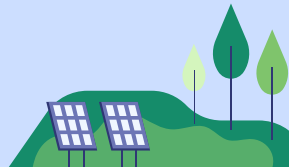
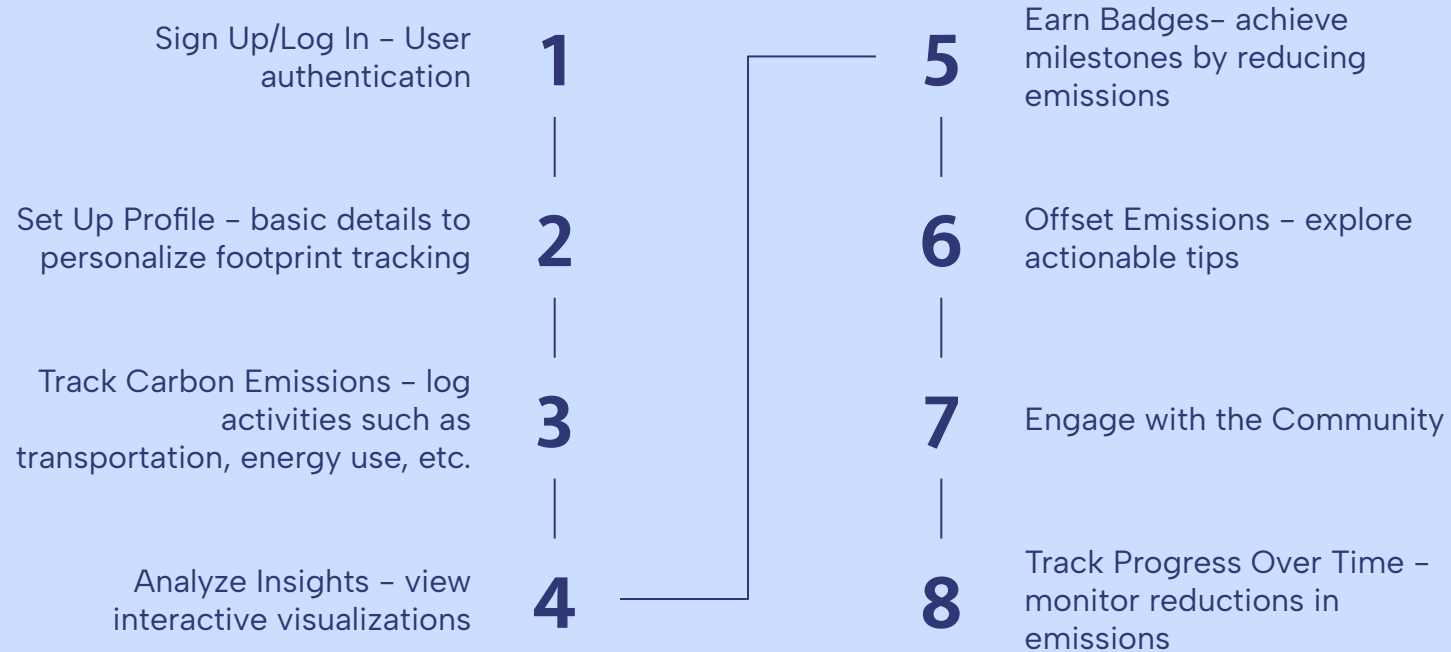
| 04

User Flow

Navigating the CarbonQuest Journey: A
Step-by-Step User Flow



User Flow



Simple • Track • Reduce

Mindful choices,
Lasting impact. Track,
Reduce and make a
difference!



Sign Up

Join Our Newsletter.

Name

Email

Submit

Glimpse

A quick look at the key
features and design
highlights of the
CarbonQuest webpage.



CarbonQuest

a quest to conquer carbon emission.

name

username

email

password

Sign Up

Already have an account? [Login here.](#)

Jan Feb Mar Apr May Jun

Your Carbon Footprint is decreasing, keep up the good work!

Carbon Impact Breakdown



3.2 tons CO2 saved this year

That's equivalent to planting 53 trees or taking 0.7 cars off the road for a year!

05 | Conclusion

A Step Towards Sustainability: Wrapping Up Our CarbonQuest Project and Its Contributions





CarbonQuest was built as a step toward addressing a global challenge—carbon emissions.



Through research, development, and innovation, we explored how technology can drive awareness and change.



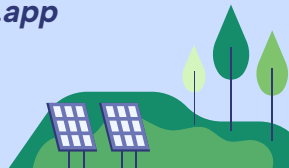
This project not only deepened our technical skills but also reinforced the importance of sustainability.



While this is a small step, it opens the door to future improvements and broader impact.



<https://carbonquestfr.vercel.app>



Thanks!

Thank you for your time and attention.

