

CarbonWise

AI-Powered Carbon Footprint Calculator

Team D:

Abhimanyu Bhadauria

Saptarshi Banerjee

Aditi Agrawal

Nithin Alfred

Jibei Ma



Global Carbon Footprint & Climate Targets



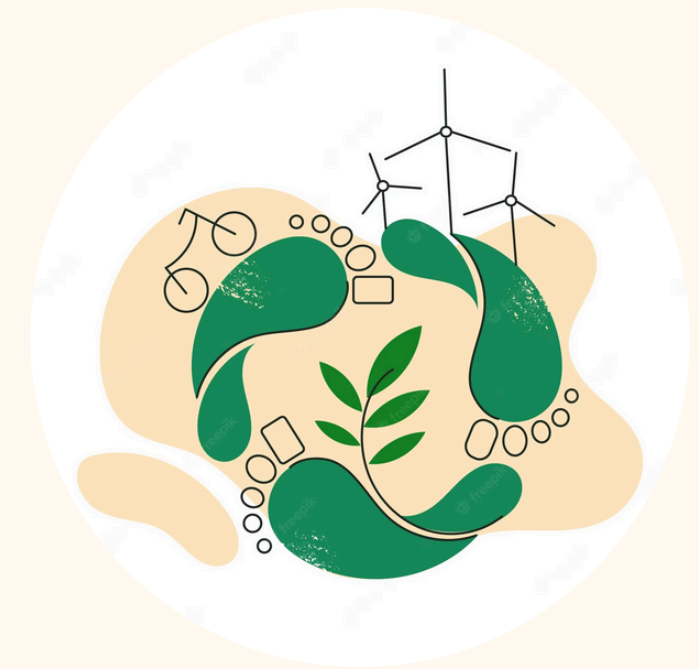
Current Global Average

Each person globally emits about **4.7 tonnes of CO₂** annually



Paris Agreement Targets

To avoid a critical **2°C** rise in global temperatures, average emissions per person need to **reduce to below 2 tonnes CO₂ by 2050**



Required Reduction

This entails a reduction of more than **50% from current levels** over the next few decades

Why CarbonWise?

This is an AI system designed to assist companies and individuals in calculating and reducing their carbon footprint.

This tool leverages predictive analytics to optimize energy use, transportation contribution, and resource allocation and provides a user-friendly interface for interactive guidance and reporting.

Why does our Product matter?

1. Saving the world
2. Improving individuals' contribution to the environment
3. Sustainability and Regulatory Compliance
4. Standardization of Carbon Footprint Calculation



Problem Statement

Market Needs:

1. Accessibility and Real-time Response for carbon footprint calculations
2. Standardization Across different features on an enterprise level
3. Individual awareness and motivation to make it a daily practice
4. User-Friendly Solutions for companies and individuals



Existing Challenges:

1. Compliance with Regulations
2. Operational Costs
3. Consumer Demand for Sustainability
4. Corporate Social Responsibility (CSR)

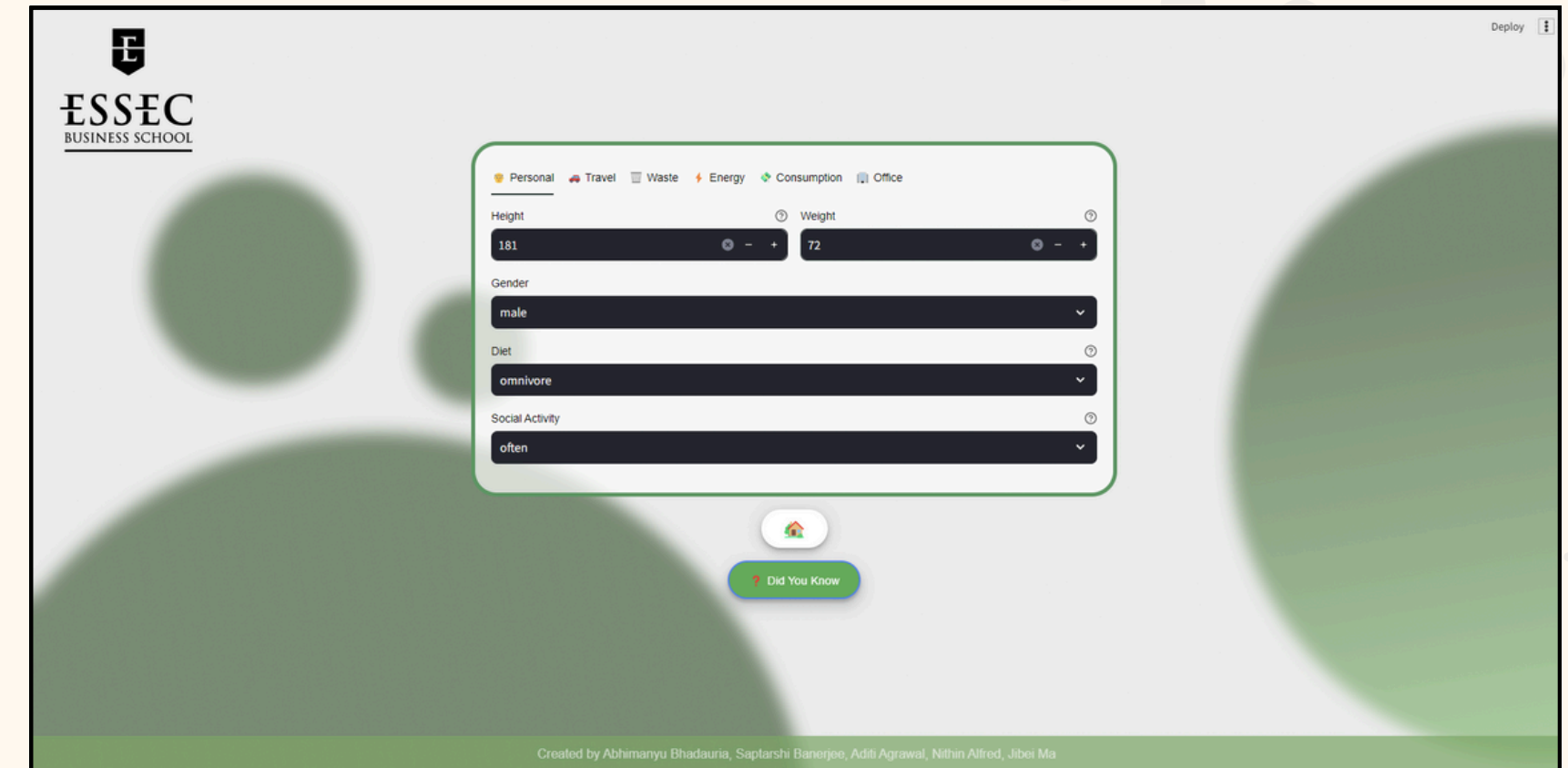
Our Solution

Unique Value Proposition:

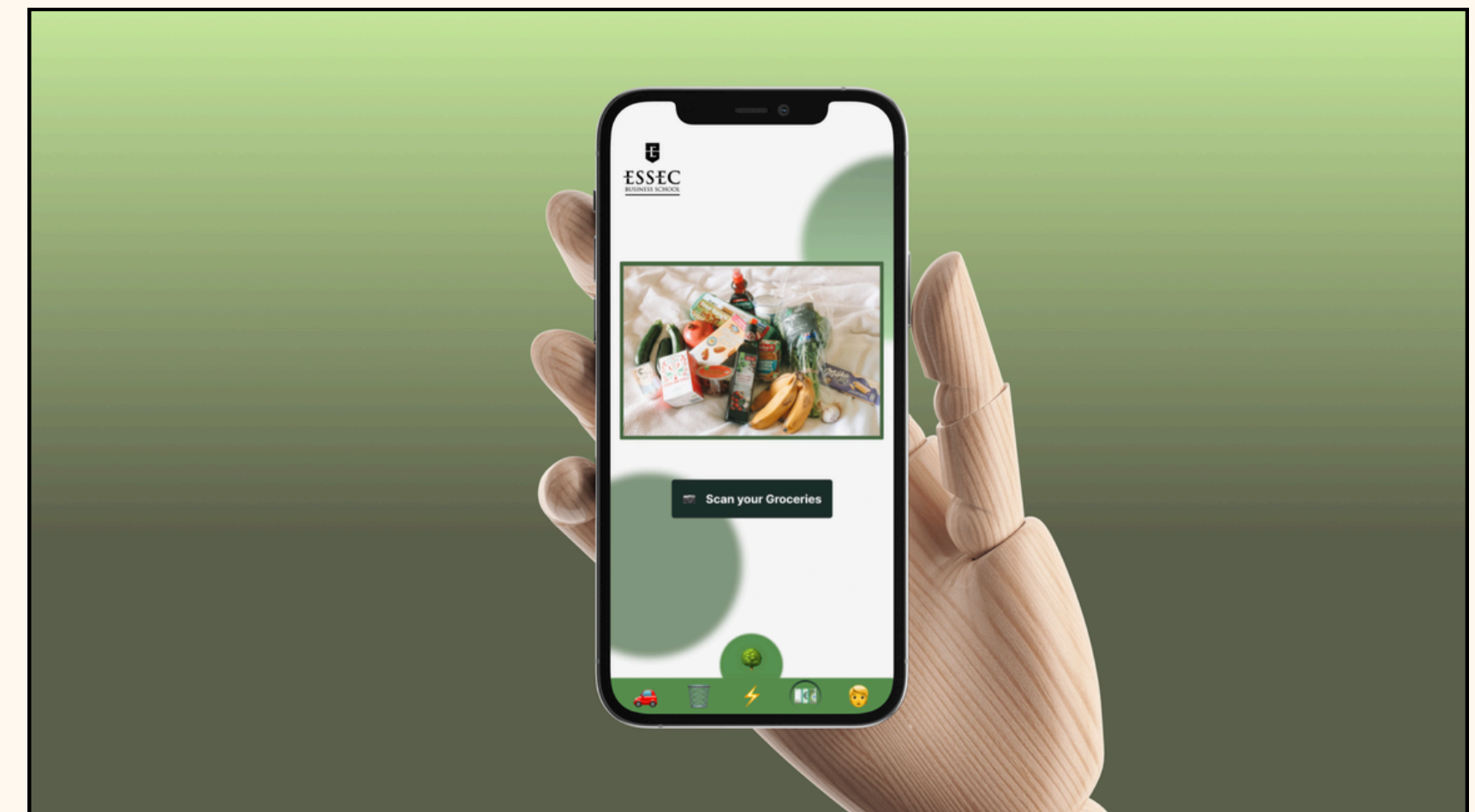
A **standardized one-stop tool** to calculate an individual's carbon footprint at an enterprise level.

A **gamified app** to increase interaction & participation

Unlike static calculators, it **continuously monitors** emissions, provides **actionable insights**, and simplifies **data handling**



The screenshot shows a web application for ESSEC Business School. The header includes the ESSEC logo and a 'Deploy' button. The main content area features a form with tabs for 'Personal', 'Travel', 'Waste', 'Energy', 'Consumption', and 'Office'. The 'Personal' tab is active, showing input fields for Height (181), Weight (72), Gender (male), Diet (omnivore), and Social Activity (often). Below the form is a 'Did You Know' button. The footer credits the creators: Abhimanyu Bhaduria, Saparshi Banerjee, Aditi Agrawal, Nithin Alfred, and Jibei Ma.



Technical Solution

Advanced Technology Integration

- Ensemble Learning Methods
- XGBoost model

Robust Development Process


- Data integration
- Scalability
- User interface optimization










Comprehensive Variable Analysis



- Diet
- Body type
- Transportation habits
- Energy sources
- Waste management practices
- Technology usage
- Power sources
- Internet Usage


Demo




Deploy 


Personal  Travel  Waste  Energy  Consumption  Office 


Height  Weight 


181  - +


75 


Gender


female 


Diet 

omnivore 

Social Activity 

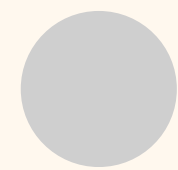
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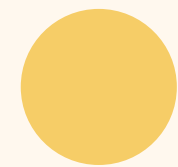
Created by Abhimanyu Bhaduria, Saptarshi Banerjee, Aditi Agrawal, Nilhan Alfred, Jibei Ma

Customer Segments



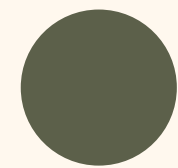
Manufacturing Companies

Industries with significant environmental impacts and regulatory compliance needs.



Tech Companies

Companies looking to enhance their CSR initiatives & reduce operational emissions.



Small and Medium Enterprises

SMEs seeking cost-effective solutions to manage their environmental responsibilities.



Individuals

Individuals looking to track their carbon footprint daily

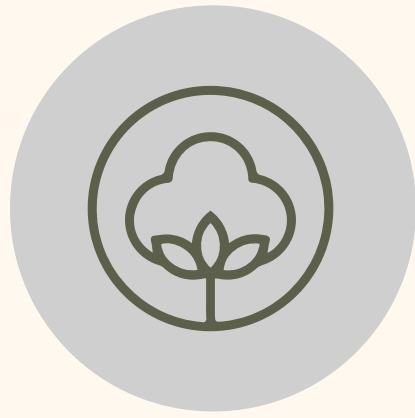
Revenue Model

The global carbon management market size was valued at approximately **€10 billion in 2020** & is projected to grow to around **€15 billion by 2025**

France accounts for about 3% of the global market, the target market size in France could be around **€450 million by 2025**
Paris accounts for around 30% of the national market, the target market size in Paris would be approximately **€135 million**.

Component	Cost (EUR)	Component	Revenue (EUR)
Development Costs	€150,000	Subscription Revenue	€250,000
Maintenance Costs	€30,000	Consulting Revenue	€100,000
Marketing Costs	€50,000	Partnership Revenue	€40,000
Client Acquisition Costs	€40,000	Advertisement Revenue	€30,000
Total Costs	€270,000	Total Revenue	€420,000

Market Impact



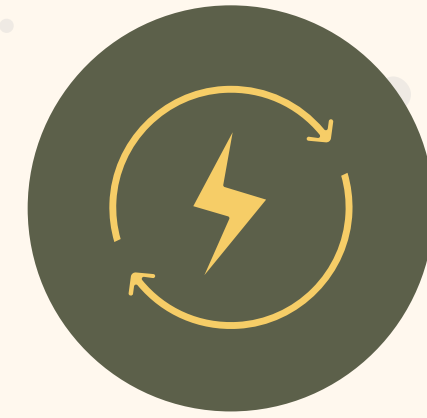
Enhanced Regulatory Compliance and Avoidance of Penalties

Our AI tool facilitates real-time carbon emissions tracking and compliance reporting, enabling companies to meet regulatory standards effortlessly.



Cost Savings through Efficient Resource Management

By leveraging predictive analytics and optimization algorithms, our tool helps individuals & companies reduce their carbon footprint and operational costs.



Strengthened Brand Reputation and Customer Loyalty

By integrating CSR into their core strategies and providing transparent carbon output data, businesses can enhance their brand reputation and build stronger customer loyalty.

Future Directions

- Expansion to Consumer Markets with Mobile Integration
 - Gamification elements
 - Earning badges for reducing energy
 - Social Sharing Features to encourage Behavior Changes
 - Suggesting eco-friendly transportation options
 - Integration with smart home devices, vehicles and wearables
- Enhance the tool's predictive capabilities using advanced machine learning algorithms
- Extend the tool's functionality to include comprehensive supply chain carbon footprint analysis
- Collaboration with sustainable travel companies, hotels, etc



Thank you!
We are open to your questions.