## A Sustainable Life Advisor

Helping users understand and reduce their carbon footprint

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# Motivation

Why We Need a Sustainable Life Advisor?



## Why Build a Sustainable Life Advisor?

#### Problem Statement:

- Complex carbon footprint calculations hinder public engagement.
- Growing environmental awareness lacks actionable guidance.

#### Target Users:

- Eco-conscious individuals/families
- Users seeking to quantify their environmental impact

#### • Value Proposition:

- Simplify complex data into intuitive insights
- Encourage sustainable habits through gentle, personalized nudges

->This reflects TUM's vision of using technology and innovation to drive sustainable change.



# 02

# Data Structure

How Data Drives Our System



## Data-Driven System Architecture

#### Data Sources:

- Our World in Data: Activity-specific emission factors (e.g., transport, diet).
- EPA Standards: Energy consumption metrics (e.g., electricity, gas).

#### Database Design:

- **User Table**: ID, registration date, basic info.
- Activity Log: Daily inputs (transport distance, diet type, energy usage).
- **Emission Factors Table**: Dynamically updated coefficients (e.g., "1km driving = 250g CO<sub>2</sub>").
- Simplified ER diagram (visualize table relationships).





# **Features**

Key Functionality of the Advisor



## **Core Feature Overview**



#### **User Input Module**

Interactive forms for transport, diet, and energy inputs (Figma mockup screenshot).



#### **Real-Time Calculation**

Rule-based weighted scoring (e.g., formula:  $Total\ CO_2 = \Sigma(Activity \times Emission\ Factor)$ ).



### **Visual Output**

Total footprint value + tiered rating (Low/Medium/High Impact).

Pie chart (activity-wise breakdown), bar chart (historical trends).



## **Personalized Suggestions**

Contextual tips (e.g., "Try biking twice a week!").







# **MVP**

Minimum Viable Product Scope



## Minimum Viable Product Scope

#### Priority Features:

- Basic footprint calculator (transport + diet).
- Tiered impact rating + simple suggestions.
- Static data visualizations.

#### Technical Simplifications:

- SQLite for local database storage.
- Rule-based engine instead of complex AI models.

#### • Optional AI Extension:

 LLM-powered personalized suggestions using GitHub Models API (e.g., based on user input pattern)

#### MVP Mockup:

Figma screenshots of core pages (input form, results dashboard).

# 05 Figma Mockup

User Interface Design



Sustainable Life Advisor

About us

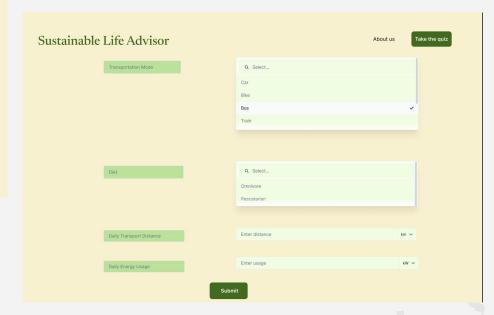
Take the quiz

Calculate your daily *carbon footprint* and *get tips for a greener life*.

Start now

The homepage introduces our tool and invites users to get started.

The input page collects daily activity data for carbon calculation.













#### Sustainable Life Advisor

About u

Take the quiz

#### About us



#### Track Your Impact

Monitor your daily habits and lifestyle choices as our intelligent system calculates your real-time carbon footprint. From transportation and energy use and dietary choices, we provide a comprehensive view of your environmental impact with precision and clarity.



#### Personalised Guidance

Receive tailored recommendations powered by advanced AI that understands your unique lifestyle and circumstances. Our smart advisor analyzes your habits and suggests practical, achievable changes that fit seamlessly into your routine while maximizing your positive environmental impact.



#### Meaningful Change

Transform small daily actions into significant environmental progress. Our platform helps you build sustainable habits that compound over time, creating lasting change for both your lifestyle and the planet.

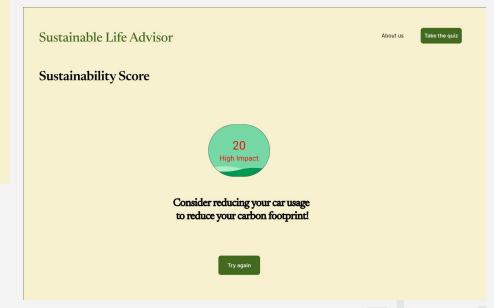


#### Community Impact

Join a growing community of environmentally conscious individuals committed to reducing their carbon footprint. Contribute to collective environmental goals that create ripple effects for positive change worldwide.

The About page explains our mission.

The result page shows the user's sustainability score and gives Al-generated tips.













# Thanks!









