

Company Footprint Wizard Guide

For the Replit Development Agent

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1. Objective

This document provides a detailed technical guide for the Replit Agent to build the **'Company Footprint Wizard'**. This feature will be a new, guided, multi-step flow located within the "Company" tab of the application. Its purpose is to collect all necessary data to calculate a company's carbon footprint across Scopes 1, 2, and 3 in a user-friendly and educational manner.

2. Part 1: Backend & Database Enhancements

2.1. Data Storage (company_data table)

The existing company_data table will be used to store all submitted data. The data_type field will be used to categorize each entry. No schema changes are required, but the backend must be programmed to handle the following new data_type values:

- **Scope 1:** natural_gas, heating_oil, lpg, petrol, diesel, refrigerant_gas
- **Scope 2:** electricity
- **Scope 3:** waste_landfill, waste_recycling, waste_composting, travel_flights, travel_rail_spend, travel_vehicle_spend, travel_hotel_spend, employee_commuting, downstream_distribution_spend

2.2. New API Endpoints

- Create a new set of API endpoints, likely under /api/company/footprint, to handle saving data from each step of the wizard. For example, POST /api/company/footprint/scope1-fuel. These endpoints will create new records in the company_data table.

3. Part 2: Frontend Implementation (The 'Footprint Wizard')

This wizard will be the primary feature on the "Company" tab.

3.1. Main Wizard Component

- **UI Component:** FootprintWizard. This component will manage the state for the entire flow, including the current step.

- **Features:**

- A persistent progress bar at the top (e.g., "Step 1 of 3: Direct Emissions (Scope 1)").
- "Next" and "Back" buttons for navigation.
- Progress is saved automatically as the user moves between steps.

3.2. Flow 1: Measuring Scope 1 - Your Direct Footprint

- **Step 1.1: On-site Fuel Consumption**

- **UI:** A page titled "Fuel Used at Your Facilities." with an "Add Fuel Source" button.
- **Form:** A repeatable form with fields for Fuel Type (Dropdown), Consumption (Numeric), and an optional Data Source (File Upload).
- **Guidance:** Implement the specified tooltip.

- **Step 1.2: Company Vehicle Fuel**

- **UI:** A page titled "Fuel Used by Your Company Vehicles." with two distinct options.
- **Option A ("Detailed Records"):** A form with fields for Litres of Petrol and Litres of Diesel.
- **Option B ("Track Mileage or Spend"):** A form with fields for Total spend (£) or Total business miles.
- **Guidance:** Implement the specified tooltip.

- **Step 1.3: Fugitive Emissions (Refrigerants)**

- **UI:** A page titled "Refrigerant Gas Usage." starting with a [Yes/No] question.
- **Conditional Form:** If "Yes" is selected, a repeatable form appears with fields for Refrigerant Type (Dropdown) and Amount Added (kg).
- **Guidance:** Implement the specified tooltip.

3.3. Flow 2: Measuring Scope 2 - Your Purchased Energy

- **Step 2.1: Purchased Electricity**

- **UI:** A page titled "Your Electricity Consumption." with an "Add Electricity Supply" button.
- **Form:** A repeatable form with fields for Site/Meter Name, Total Consumption (kWh), Energy Supplier, Tariff Name, and a prominent Is this a certified renewable/green tariff? checkbox.
- **Guidance:** Implement the critical tooltip for the renewable tariff checkbox.

3.4. Flow 3: Measuring Scope 3 - Your Value Chain Footprint

- **Step 3.1: Purchased Goods & Services (Automated)**

- **UI:** A display-only page titled "The Footprint of Your Ingredients & Packaging."
- **Logic:** This page will make a backend call to fetch the pre-calculated Scope 3

emissions from the user's completed product LCAs.

- **Content:** Display the message: "Good news! We have automatically calculated this for you... total footprint... is [X] tCO₂e."
- **Step 3.2: Waste from Operations**
 - **UI:** A page titled "Waste Management." with an "Add a Waste Stream" button.
 - **Form:** A repeatable form/table with fields for Disposal Route (Dropdown) and Total Weight (kg).
 - **Guidance:** Implement the specified tooltip.
- **Step 3.3: Business Travel**
 - **UI:** A page titled "Business Travel" with a tabbed interface (Flights, Rail, Vehicles, Hotels).
 - **Flights Tab:** A repeatable form to add legs with Departure Airport, Arrival Airport, Class of Travel.
 - **Other Tabs:** Simple numeric input fields for Total annual spend (£).
- **Step 3.4: Employee Commuting**
 - **UI:** A page titled "How Your Team Gets to Work." with two options.
 - **Option A ("Use an estimate"):** A form with fields for Total number of employees and Average one-way commute distance (miles).
 - **Option B ("Launch a survey"):** A button that, when clicked, calls a backend endpoint to generate a unique survey URL. The UI displays this link for the user to copy and share. A separate, simple public page must be created for the survey itself.
- **Step 3.5: Downstream Activities**
 - **UI:** A final summary page titled "Distribution & Product End-of-Life."
 - **Distribution:** A single numeric input for Total annual spend (£) on third-party logistics.
 - **End-of-Life:** A display-only message stating that this has been calculated automatically from their product packaging data.