

Guided Report Builder 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 new **Guided Report Builder**. This feature will replace the previous dynamic report builder with a structured, step-by-step wizard. The goal is to guide the user through the creation of a comprehensive sustainability report, combining automated data visualization with AI-assisted narrative writing at each stage.

2. Part 1: Backend & Database Enhancements

The existing database tables (company_story, initiatives, custom_reports) are still relevant, but the structure of the custom_reports table needs to be updated to support this new, linear flow.

2.1. Modification to custom_reports Table

The report_layout field will now store a JSON object with a key for each step of the wizard, holding the user's written narrative.

Column Name	Data Type	Constraints	Description
... (existing columns)			
report_content	JSONB	NOT NULL	Stores the narrative content for each section of the report. See structure below.

New report_content JSONB Structure:

```
{  
  "introduction": "This is our first sustainability report...",  
  "company_info_narrative": "Founded in 2020, our mission is..."
```

```

"key_metrics_narrative": "This year, we focused on tracking...",
"carbon_footprint_narrative": "Our total carbon footprint was...",
"initiatives_narrative": "To reduce our impact, we launched several key initiatives...",
"kpi_tracking_narrative": "We are making steady progress towards our goals...",
"summary": "In conclusion, our journey is just beginning..."
}

```

2.2. New API Endpoints

- **POST /api/reports/create:** A new endpoint to initialize a report, creating a new entry in the `custom_reports` table.
- **PUT /api/reports/<report_id>/save-step:** An endpoint to save the narrative content for a specific step of the wizard as the user progresses.

3. Part 2: Frontend Implementation (The Guided Report Wizard)

This new wizard will be a full-page, multi-step interface, likely at `/app/reports/new`.

3.1. Main Wizard Component

- **Trigger:** A "Create New Report" button on the main reports page.
- **UI:** A clean, full-screen interface with a persistent sidebar or header showing the steps of the wizard (e.g., "1. Introduction", "2. Company Info", etc.). The user can navigate between completed steps.

3.2. Wizard Steps

- **Step 1: Introduction**
 - **Headline:** "Report Introduction"
 - **UI:** A large text editor component.
 - **AI Support:** An "AI Assist" button is prominently displayed, which can help the user draft an impactful opening statement.
- **Step 2: Company Info & Strategic Pillars**
 - **Headline:** "Our Company & Our Strategy"
 - **UI:** A two-panel layout.
 - **Left Panel (Data):** Automatically displays the `mission_statement` and `strategic_pillars` from the `company_story` table for reference.
 - **Right Panel (Narrative):** A text editor for the user to write the narrative for this section, with AI support.
- **Step 3: Key Metrics**
 - **Headline:** "Our Key Performance Indicators"
 - **UI:** A two-panel layout.
 - **Left Panel (Data):** Displays the main KPI cards from the user's dashboard (e.g., Total Carbon Footprint, Water Intensity).
 - **Right Panel (Narrative):** A text editor for the user to explain the importance of

these metrics.

- **Step 4: Carbon Footprint Analysis**
 - **Headline:** "Our Carbon Footprint"
 - **UI:** A two-panel layout.
 - **Left Panel (Data):** Displays the main GHG Footprint chart (breakdown of Scopes 1, 2, and 3).
 - **Right Panel (Narrative):** A text editor for the user to provide context and analysis of their emissions.
- **Step 5: Sustainability Initiatives**
 - **Headline:** "Our Sustainability Initiatives"
 - **UI:** A two-panel layout.
 - **Left Panel (Data):** The user is presented with a list of their saved initiatives from the initiatives table. They can select which ones to include in the report.
 - **Right Panel (Narrative):** A text editor for the user to describe their key projects and actions.
- **Step 6: KPI Tracking**
 - **Headline:** "Our Progress Against Goals"
 - **UI:** A two-panel layout.
 - **Left Panel (Data):** Displays the KpiProgressCard components for all the user's active goals.
 - **Right Panel (Narrative):** A text editor for the user to discuss their progress and future plans.
- **Step 7: Summary**
 - **Headline:** "Report Summary & Conclusion"
 - **UI:** A final text editor for the user to write their concluding remarks, with AI support.

3.3. Final Step: Preview & Export

- **UI:** After the final step, the user is taken to a "Preview & Export" page.
- **Functionality:**
 - A live, scrollable preview of the entire report, assembling all the data visuals and the user's written narrative in a professional layout.
 - "Export as PDF" and "Generate Web Page" buttons that trigger the final report generation.