Phase 3: Data Modeling & Relationships

Introduction

Phase 3 focuses on designing the data model for the GreenForce sustainability platform on Salesforce. This includes creating custom objects, defining fields, and establishing relationships that enable structured and scalable management of sustainability data.

Custom Objects

- Initiatives → Stores sustainability projects and campaigns.

- Carbon Emissions → Tracks emissions data (scope 1, 2, 3).

- Energy Usage → Records renewable and non-renewable energy consumption.

- Waste Management → Tracks recycling, landfill, and hazardous waste data.

- Travel & Commute → Captures business travel and employee commute records.

- Stakeholder Engagement → Stores employee/supplier participation data.

Fields & Relationships

Initiatives

Fields: Name, Start Date, End Date, Owner, Status, Impact Score. Relationships: Lookup to Sustainability Manager, Related to Emissions & Energy.

Carbon Emissions

Fields: Source, Scope, Value (tons CO2e), Reporting Period. Relationships: Lookup to Supplier, Master-Detail with Initiative.

Energy Usage

Fields: Type (Renewable/Non-renewable), Unit, kWh, Reporting Period. Relationships: Lookup to Initiative.

Waste Management

Fields: Type, Disposal Method, Quantity, Reporting Period. Relationships: Lookup to Initiative.

Travel & Commute

Fields: Mode (Air, Rail, EV, Carpool), Distance, Emissions, Reporting Period. Relationships: Lookup to Employee.

Stakeholder Engagement

Fields: Activity Type, Points Earned, Comments. Relationships: Lookup to Employee/Supplier.

Deliverables

- Defined sustainability-related custom objects in Salesforce.
- Established fields to capture emissions, energy, waste, travel, and initiatives data.
- Created relationships between objects to ensure data connectivity.
- Scalable and reusable data model for GreenForce platform.

Business Value

- Centralized sustainability data management.
- Improved accuracy in carbon footprint reporting.
- Strong foundation for automation and analytics in later phases.
- Supports compliance with global ESG frameworks.