

# Phase 6: User Interface Development – GreenFuture CRM

## 1. Lightning App Builder

**Purpose:**  
Create custom applications and user experiences for different stakeholders (Sustainability Managers, Auditors, Partners).

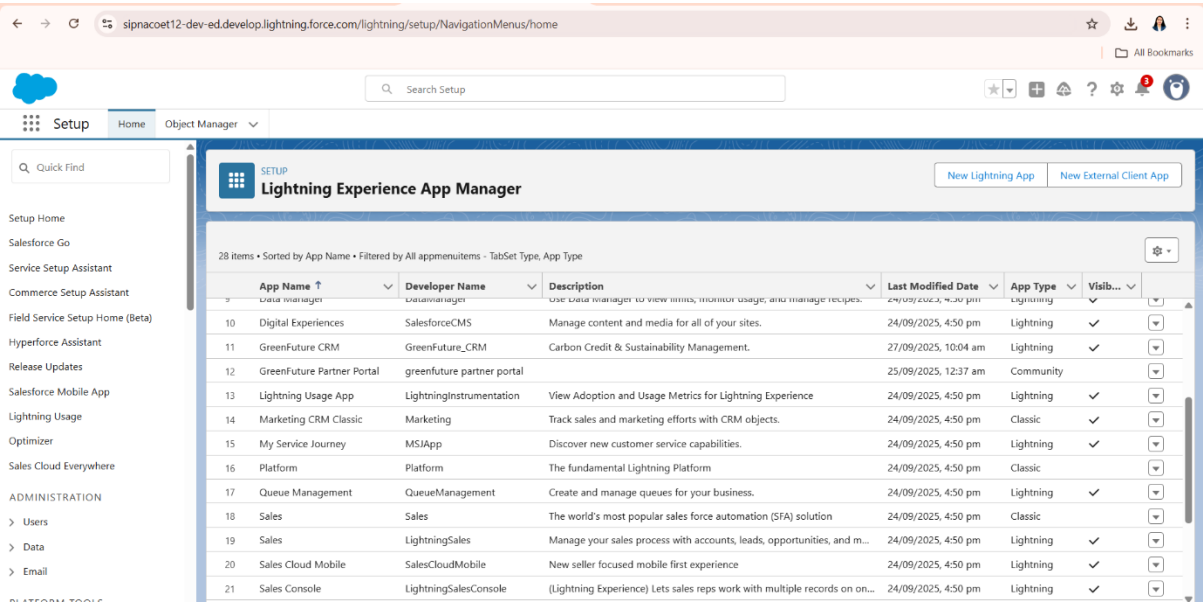


Fig 6.1. – App Manager showing “GreenFuture CRM”

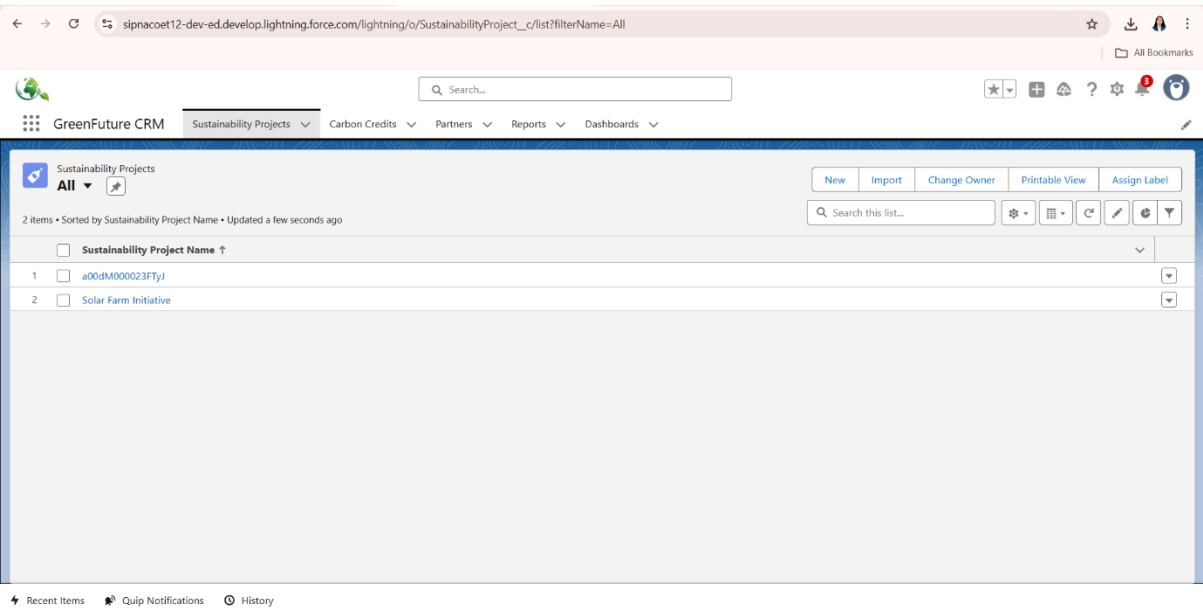


Fig 6.2. – Lightning App Setup Wizard

## 2. Record Pages

### Purpose:

Customize record views for **Projects, Credits, Partners** with related lists and key highlights. Each stakeholder gets a focused view with relevant fields, related lists, and components.

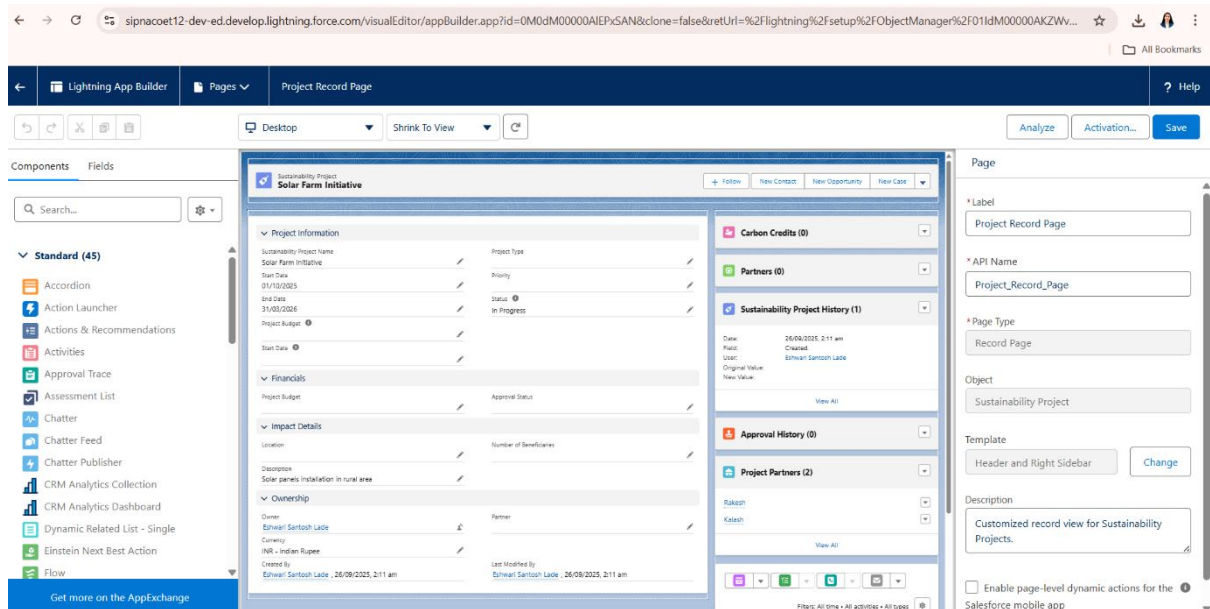


Fig.6.3. Project Record Page in Lightning App Builder

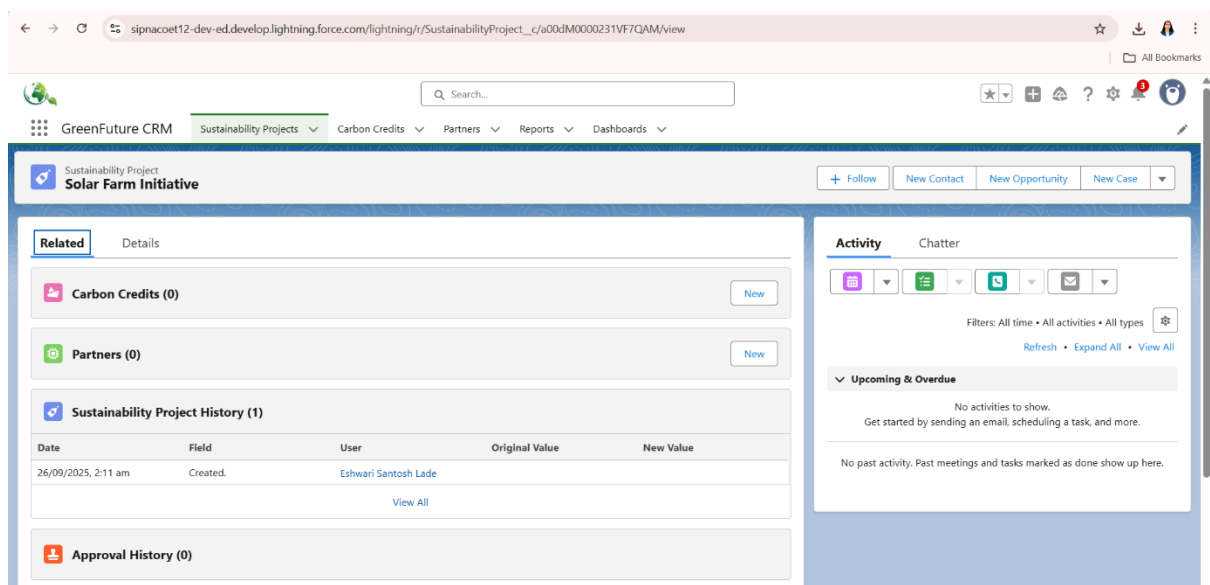


Fig.6.4. Project Record Page Review

## 3. Tabs

### Purpose:

Provide quick navigation for custom objects.

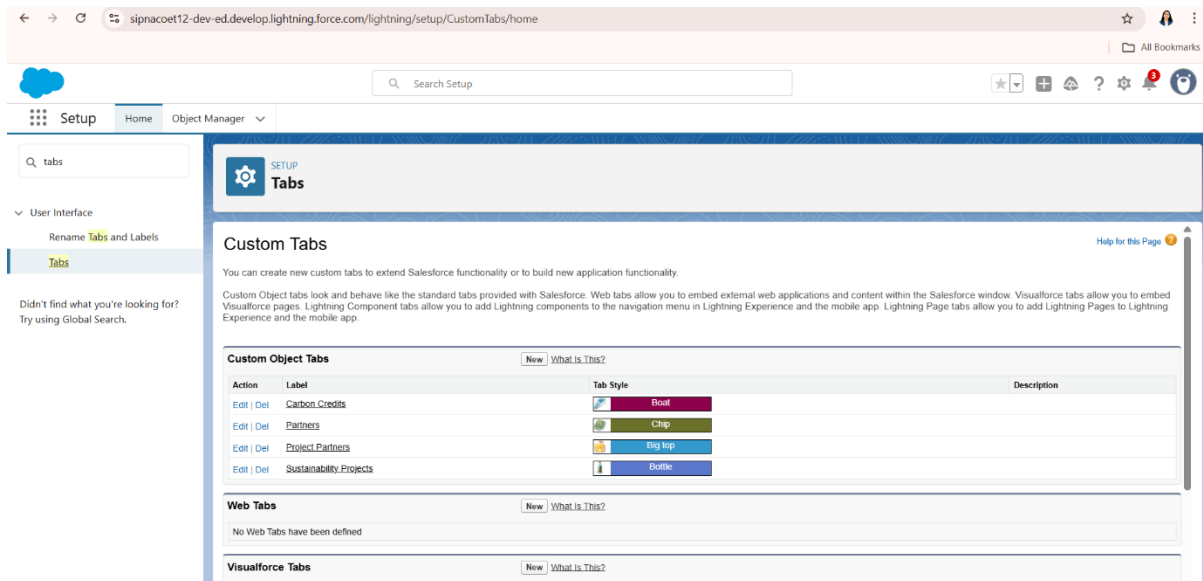


Fig.6.5. Tabs configuration page

## 4. Home Page Layouts

### Purpose:

Customize the home page with dashboards.  
Show key metrics on login.

### Scenario:

- **Sustainability Manager** should see: Total Projects, Active Credits, Expiring Credits.
- **Auditor** should see: Compliance Reports and Pending Approvals.

### Implementation Steps:

1. Go to **Setup** → **Lightning App Builder** → **New Home Page**.
2. Add:
  - **Report Chart:** Credits Issued vs Sold.
  - **Recent Projects list.**
3. • Save → Assign to **Sustainability Manager** profile.
4. • Clone and adjust for **Auditor** profile.

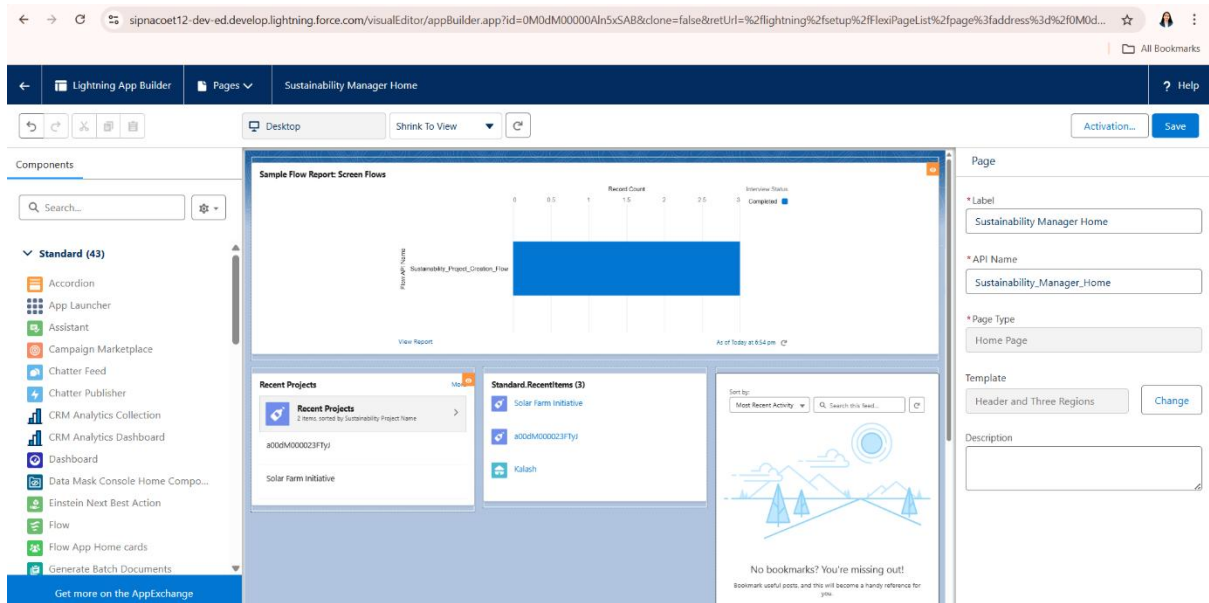


Fig 6.6 – Home Page

## 5. Utility Bar

### Purpose:

Provide quick access tools.

### Scenario:

- **Manager** wants to quickly take notes during project review.
- **Auditor** wants to check recent history while cross-verifying records.

### Implementation Steps:

1. Setup → App Manager → GreenFuture CRM → Edit → Utility Items.
2. Add:
  - Notes.
  - History.
  - Notifications.
3. Save and refresh app.

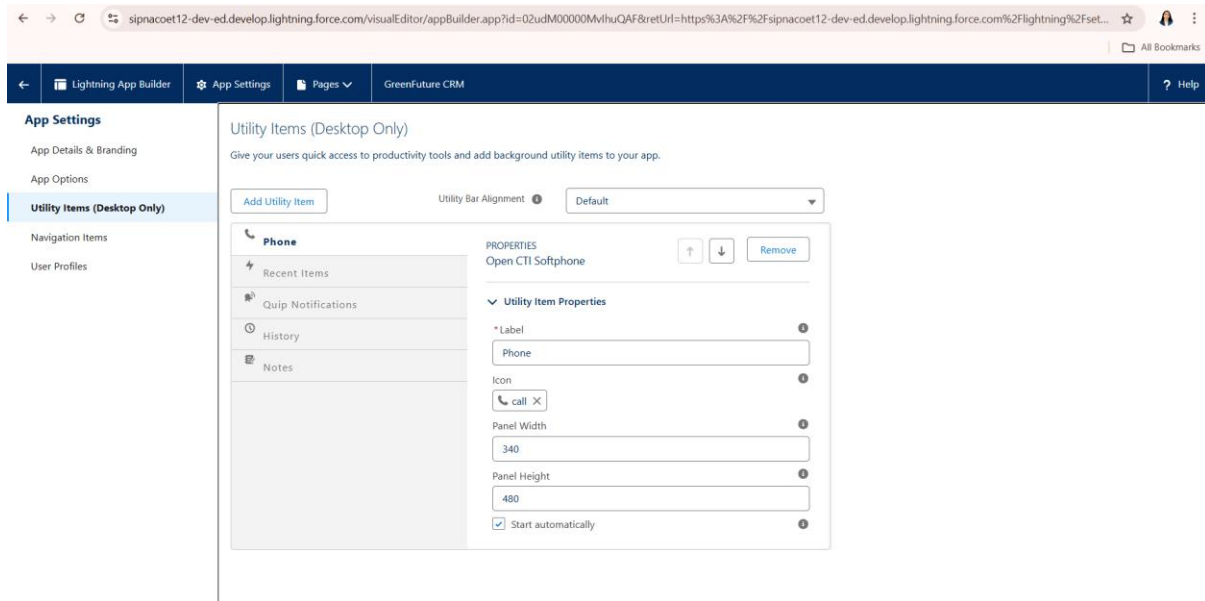


Fig 6.7 – Utility bar setup page.

## 6. Lightning Web Components (LWC)

### Purpose:

Custom dashboards & interactivity.

### Scenario:

- **Manager** should see a **Dashboard LWC** with project and credit stats.
- **Auditor** should see compliance-focused dashboards.

### Implementation Steps:

1. Open VS Code → Terminal.
2. Run:
3. `sfdx force:lightning:component:create --type lwc --componentname projectDashboard --outputdir force-app/main/default/lwc`
4. Create **DashboardController Apex** and connect via `@AuraEnabled`.
5. Add LWC to **Home Page** in App Builder.

### Context:

During the GreenFuture CRM project, a custom Lightning Web Component (LWC) `projectDashboard` was developed to display project and carbon credit statistics on the Home Page.

### Observation:

Attempts to add the `projectDashboard` LWC to the Home Page in the **DevHub org** were unsuccessful. The component did not appear in the **Lightning App Builder**, and deployment attempts resulted in connectivity or component errors.

### Reason:

- The **DevHub org** is designed exclusively for **creating and managing Scratch Orgs** and enabling source tracking.
- DevHub **does not support deploying custom Apex classes or Lightning Web Components to its Home Page.**
- Any attempt to use the DevHub as a production-like environment for app testing will fail because it lacks standard Lightning Page hosting capabilities.

**Resolution / Best Practice:**

- A **Scratch Org** (or Sandbox/Production org) must be used to deploy and test LWCs and Home Page customizations.