Green Energy Usage Monitor : Phase - 4

Phase 4: Process Automation

Introduction

Phase 4 focuses on automating business processes within the Green Energy Usage Monitor system using Salesforce administration tools. The goal was to reduce manual work, enforce data integrity, and improve user experience by leveraging Salesforce automation capabilities.

Automation Components Implemented

1. Validation Rules

● Ensured data accuracy by enforcing business rules at the data entry stage.
● Example Rules:
● End Date must be after Start Date on relevant objects (e.g., Booking).
● Energy Consumed cannot exceed Energy Generated on Energy Usage Records.
● Personnel Role field is mandatory to maintain clarity on responsibilities.
● Installation Date on Energy Device cannot be set to a future date.
● These validations prevent incorrect data entry and improve data quality.
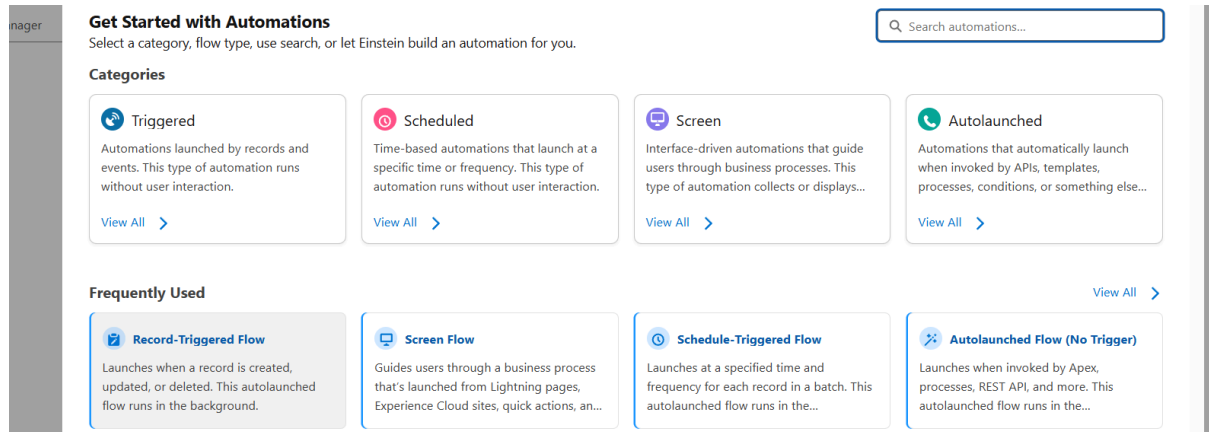

2. Workflow Rules

● Not implemented as standalone in Phase 4; replaced by more advanced Flow automations for better scalability and control,
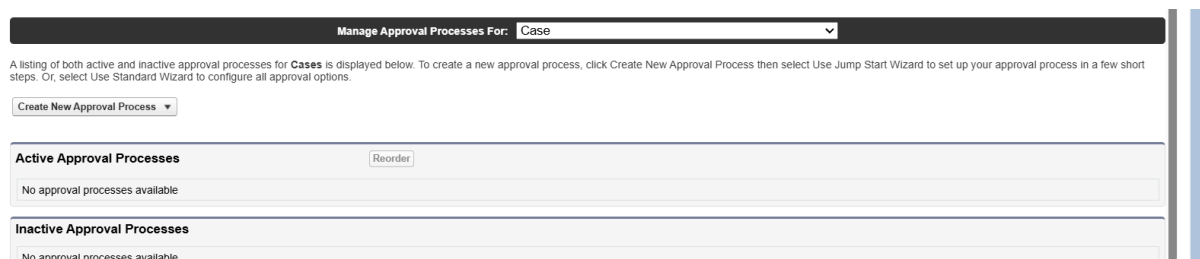
3. Process Builder

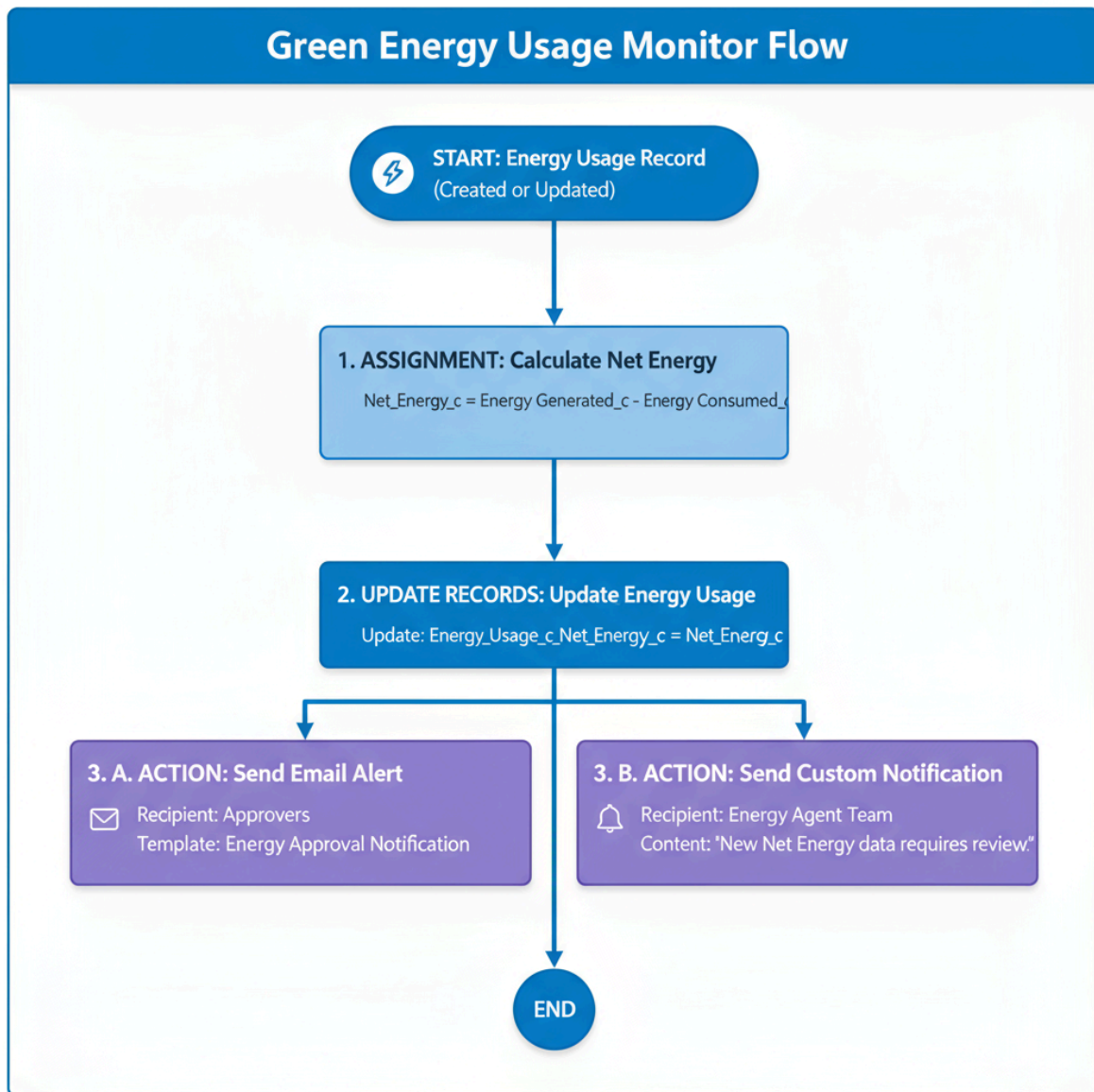● Existing use cases replaced with Flow Builder for automating field updates and sending notifications.

4. Approval Process

● Configured approval workflows for bookings exceeding ₹50,000.
● Automated sending of records for managerial approval, with defined actions on approval/rejection such as email alerts and field updates.

5. Flow Builder Automation

● Record-Triggered Flows:
● Automatically calculate total energy usage after record creation or update.
● Enforce business logic such as updating Booking Status post-approval.
● Screen Flows:
● Developed guided forms for creating or updating bookings and device inspections to improve user experience.
● Scheduled and Auto-launched Flows:
● Planned for future use in automation tasks like periodic reporting and device maintenance reminders.

Green Energy Usage Monitor Flow

START: Energy Usage Record
(Created or Updated)

1. ASSIGNMENT: Calculate Net Energy

Net_Energy_c = Energy Generated_c - Energy Consumed_c

2. UPDATE RECORDS: Update Energy Usage

Update: Energy_Usage_c Net_Energy_c = Net_Energ_c

3. A. ACTION: Send Email Alert

✉ Recipient: Approvers
Template: Energy Approval Notification

3. B. ACTION: Send Custom Notification

🔔 Recipient: Energy Agent Team
Content: "New Net Energy data requires review."

END

6. Email Alerts

● Automated emails sent to customers upon booking approval or status changes to keep customers informed.

SETUP
Email Alerts

Email Alert
Email Alert For Energy Usage Record

Rules Using This Email Alert [0] | Approval Processes Using This Email Alert [0] | Entitlement Processes Using This Email Alert [0]

Help for this Page

Email Alert Detail

[Edit] [Delete] [Clone]

Description	Email Alert For Energy Usage Record	Email Template	Approval Notification Email
Unique Name	Email_Alert_For_Energy_Usage_Record	Object	Energy Usage Record
From Email Address	Current User's email address		
Recipients	Role: Manager Role: Technician		
Additional Emails			
Created By	Siddhant Kushwaha, 9/22/2025, 12:36 AM	Modified By	Siddhant Kushwaha, 9/22/2025, 12:36 AM

[Edit] [Delete] [Clone]

7. Field Updates

● Automated updates such as marking bookings as "Confirmed" after approval processes complete.

8. Task Creation

● Tasks created automatically to notify agents or technicians to prepare equipment or perform maintenance, ensuring operational readiness.

9. Custom Notifications

Custom Notification Types

[New]

Send custom notifications using Flows or Process Builder

NOTIFICATION NAME	API NAME	NAMESPACE	DESKTOP	MOBILE	
Agent Task Notification	Agent_Task_Notification		✓		▼
enablement_coaching_feedback_ready	enablement_coaching_feedback_ready		✓		▼

● In-app notifications configured to alert relevant personnel immediately after booking approvals or significant record updates. Conclusion

Conclusion Phase 4 successfully implemented Salesforce's declarative automation tools to make the Green Energy Usage Monitor system more efficient and reliable. By replacing legacy workflow tools with versatile Flow Builder automations and integrating validation rules, the system now supports automated business processes that align with real-world operational requirements.