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.

6. Email Alerts

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

7. Field Updates

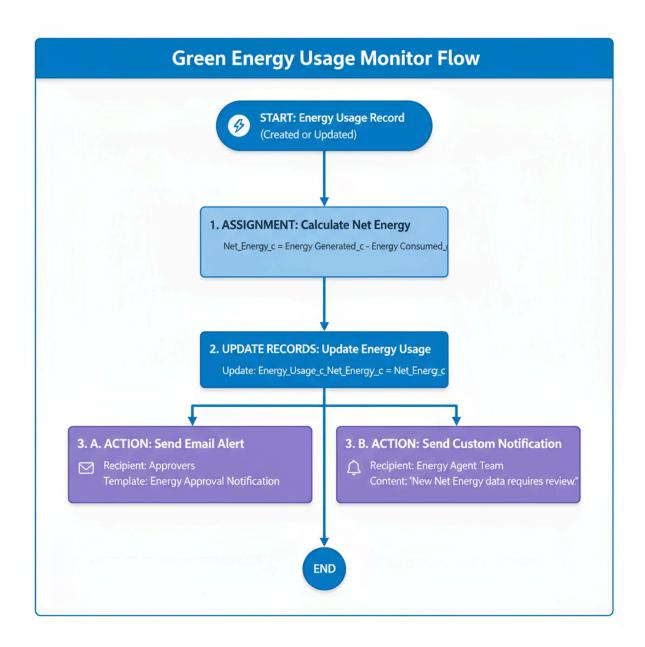
 Automated updates such as marking bookings as "Confirmed" after approval processes complete.

8. Task Creation

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

9. Custom Notifications

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



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.