

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.

The screenshot shows the Salesforce 'Validation Rule Detail' page for a rule named 'EndDate_After_StartDate'. The rule is active, as indicated by a checkmark in the 'Active' column. The error condition formula is 'Energy_Consumed__c > Energy_Generated__c', and the error message is 'End Date must be later than Start Date.'. The error location is set to 'Top of Page'. The rule was created by 'Tanvi Verma' on 9/20/2025 at 9:57 AM and was last modified by 'Tanvi Verma' on 9/20/2025 at 9:58 AM. There are 'Edit' and 'Clone' buttons for both the rule detail and the error message.

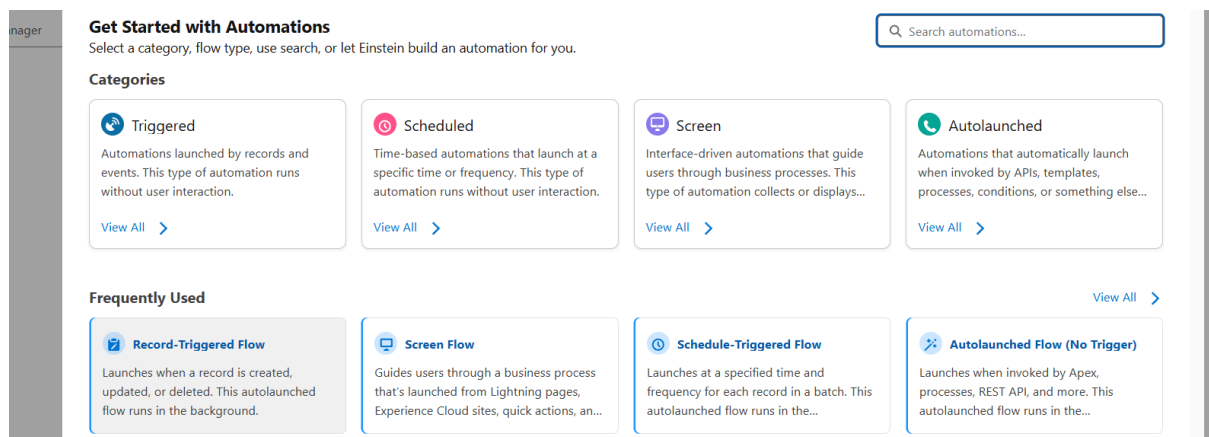
Validation Rule Detail		Active
Rule Name	EndDate_After_StartDate	✓
Error Condition Formula	Energy_Consumed__c > Energy_Generated__c	
Error Message	End Date must be later than Start Date.	Error Location: Top of Page
Description		
Created By	Tanvi Verma, 9/20/2025, 9:57 AM	Modified By: Tanvi Verma, 9/20/2025, 9:58 AM

2. Workflow Rules

- Not implemented as standalone in Phase 4; replaced by more advanced Flow automations for better scalability and control,

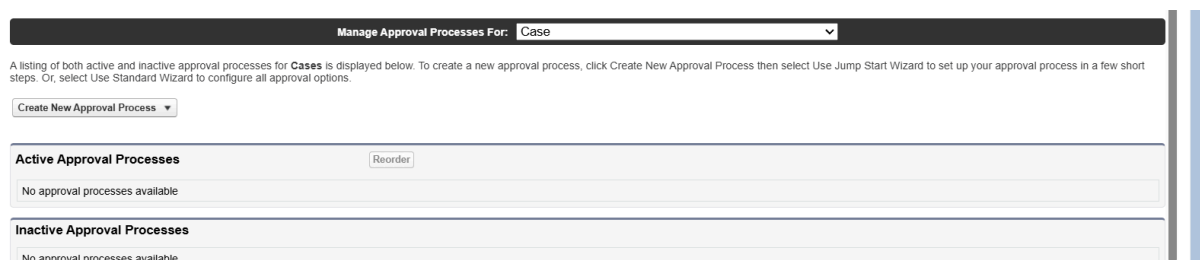
3. Process Builder

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



4. Approval Process

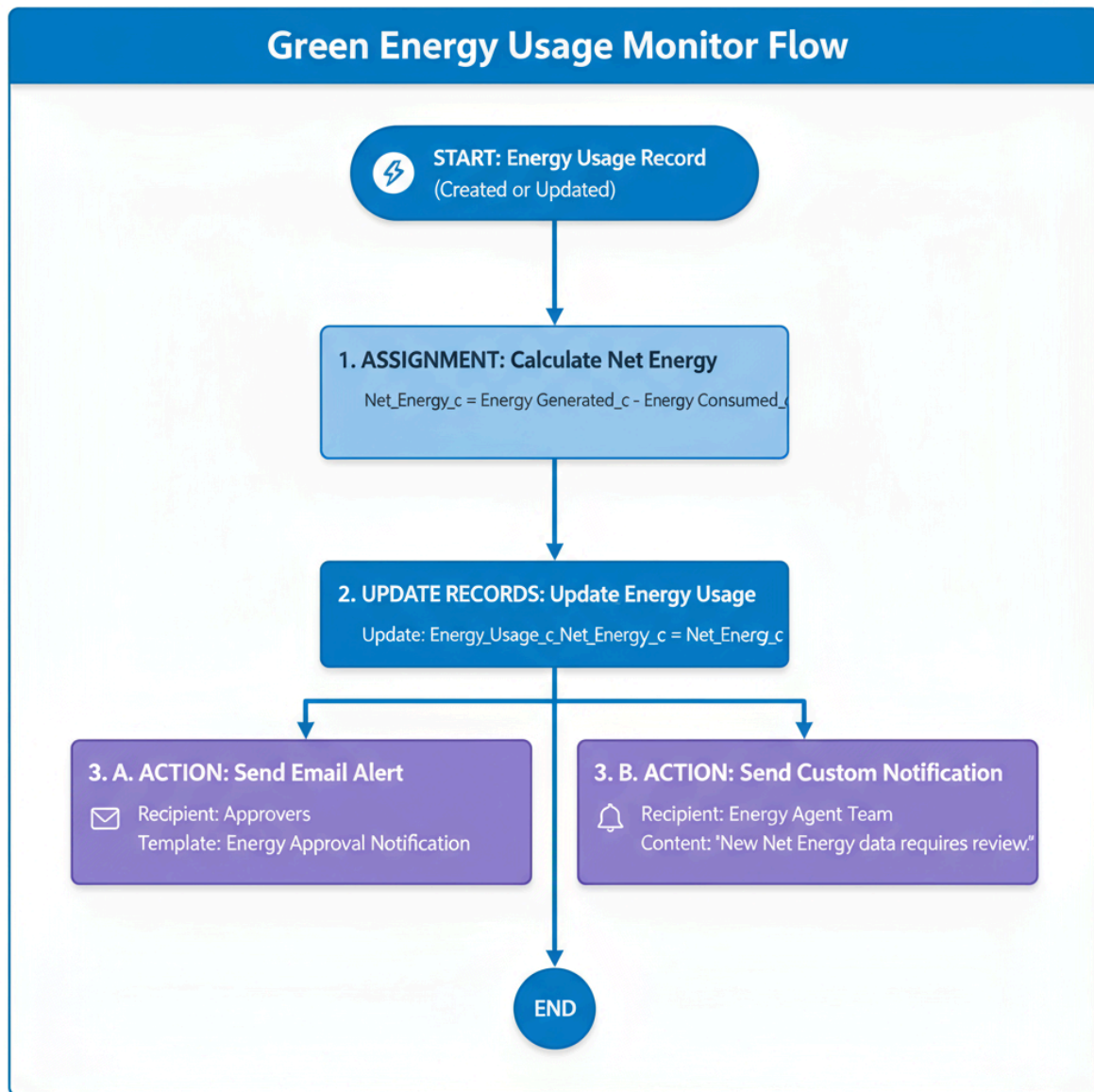
- Configured approval workflows for bookings exceeding ₹50,000.
- Automated sending of records for managerial approval, with defined actions on approval/rejection such as email alerts and field updates.



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

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

Description

Email Alert For Energy Usage Record

Email Template

Approval Notification Email

Unique Name

Email_Alert_for_energy_usa

Object

Energy Usage Record

From Email Address

Current User's email address

Recipients

Role: Manager

Role: Technician

Additional Emails

Created By

Tarvi Verma, 9/22/2025, 12:38 AM

Modified By

Tarvi Verma, 9/22/2025, 12:38 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

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.

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		✓		▼