

Phase 4:

Process Automation (Admin)

1) Why Automation?

Without automation, users would have to manually calculate CO₂ saved, assign badges, and send notifications. That's error-prone and boring. Automation ensures **consistency, efficiency, and engagement**.

2) Validation Rules

Purpose: Prevent bad data entry.

 Example: **Trees must be > 0 for Tree Plantation**

- Go to: **Setup** → **Object Manager** → **Eco Activity** → **Validation Rules** → **New**
- Rule Name: `Validate_Trees_Planted`

Formula:

```
AND(  
  ISPICKVAL(Activity_Type__c, "Tree Plantation"),  
  OR(ISBLANK(Trees_Planted__c), Trees_Planted__c <= 0)  
)
```

- Error Message: *"Please enter a valid number of trees planted."*

👉 Similarly, create for Waste Recycled: must be > 0 when Activity Type = Recycling.

SETUP > OBJECT MANAGER

Eco Activity

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Validation Rules
3 Items, Sorted by Rule Name

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Validate_Awareness_Description	Description	Please provide a description for the Awareness Drive.	✓	Jatin Awankar, 9/19/2025, 5:37 AM
Validate_Trees_Planted	Trees Planted	Please enter a valid number of trees planted.	✓	Jatin Awankar, 9/18/2025, 2:44 AM
Validate_Waste_Recycled	Waste Recycled	Please enter a valid Waste Recycled amount (must be greater than 0).	✓	Jatin Awankar, 9/19/2025, 5:28 AM

3) Flow Builder – CO₂ Calculation

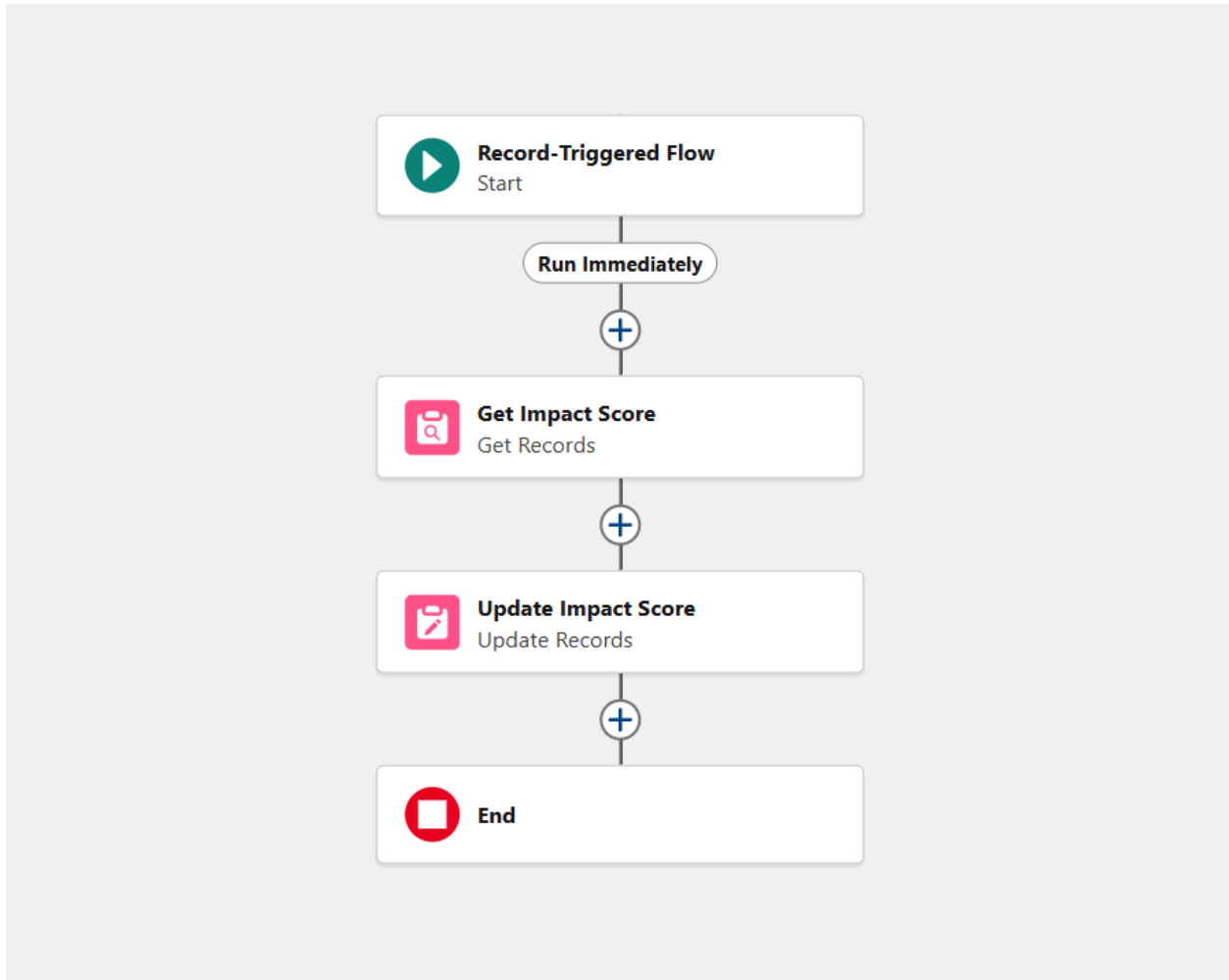
Purpose: Auto-calculate CO₂ saved when an Eco Activity is created.

- Go to: **Setup** → **Flow** → **New Flow** → **Record-Triggered Flow**
- Object: **Eco Activity**
- Trigger: *When record is created or updated*
- Logic:

Formula for CO₂ saved =

$(\text{Trees_Planted_c} * 21) + (\text{Waste_Recycled_c} * 1.5)$

- Update field **CO2_Saved__c** in **Impact Score**.

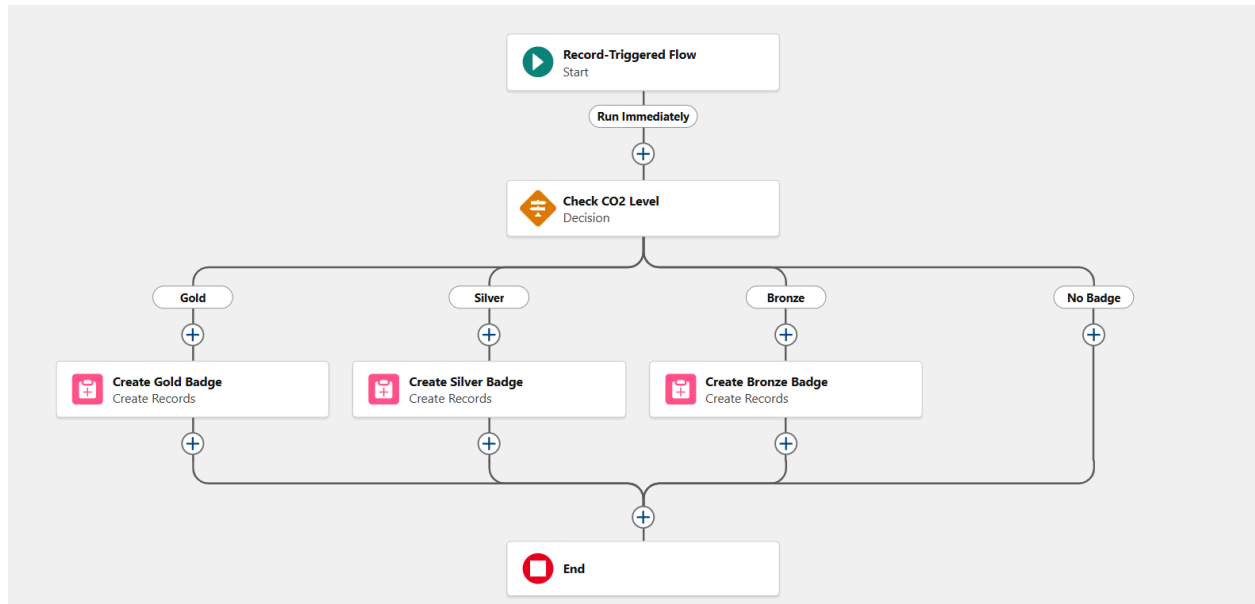


4) Flow Builder – Badge Assignment

Purpose: Award badges automatically when thresholds are met.

- Go to: **Flow** → **New Flow** → **Record-Triggered Flow**
- Object: **Impact Score**
- Trigger: *When record updated*
- Logic:
 - IF CO₂ Saved ≥ 1000 → Create Badge (Gold)

- IF CO₂ Saved ≥ 500 → Create Badge (Silver)
- ELSE IF CO₂ Saved ≥ 100 → Create Badge (Bronze)
- Assign the Badge to related User.




5) Email Alerts & Custom Notifications

Purpose: Motivate users.

1. Email Alert:

- Setup → Email Alerts → New.
- Example: Send email “Congrats! You earned a badge 🎉” to the Participant when a Badge record is created.


SETUP
Classic Email Templates

Text Email Template
Badge Earned
Help for this Page ?

Preview your email template below.

Email Template Detail
Edit Delete Clone

Email Templates from Salesforce	Unfiled Public Classic Email Templates	
Email Template Name	Badge Earned	Available For Use <input type="checkbox"/>
Template Unique Name	Badge_Earned	Last Used Date
Encoding	Unicode (UTF-8)	Times Used
Author	Manager_GIT [Change]	
Description		
Created By	Jatin Awankar, 9/19/2025, 6:54 AM	Modified By Jatin Awankar, 9/19/2025, 6:55 AM

Email Template
Send Test and Verify Merge Fields

Subject 🎉 Congrats! You earned a badge


Plain Text Preview

Hi {!Recipient_Name},
Congratulations! You just earned the {!Badge__c.Badge_Name__c} badge for your contribution to GreenTrack 🌱
Keep up the great work!

2. Custom Notification (Lightning):


- Setup → Notification Builder → Custom Notifications.
- Create “GreenTrack Milestone Reached.”
- Trigger via Flow → When a new Badge is assigned, send notification.

6) Workflow Rules / Process Builder


 **Note:** Salesforce is moving away from Workflow Rules & Process Builder in favor of Flows.

Still, for academic completeness:

- Workflow Rule Example: Send email to NGO Manager when an Eco Activity > 500 Trees is logged.


Workflow Rules

Workflow Rule
Gold Bagger
Help for this Page ?


Go with the flow! With Flow Builder, the future of low-code automation, you can do everything you do with workflow rules — and more! Salesforce plans to retire workflow rules and recommends building automation in Flow Builder.
[Tell Me More](#) | [Migrate your workflow rules to flows](#)

Workflow Rule Detail
Edit Clone Deactivate

Rule Name	Gold Bagger	Object	Eco Activity
Active	<input checked="" type="checkbox"/>	Evaluation Criteria	Evaluate the rule when a record is created, and any time it's edited to subsequently meet criteria
Description			
Rule Criteria	Eco Activity: Trees Planted GREATER OR EQUAL 500		
Created By	Jatin Awankar, 9/19/2025, 7:01 AM	Modified By	Jatin Awankar, 9/19/2025, 7:02 AM

7) Approval Process (Optional)

- Example: Big activities (e.g., more than 1000 trees logged) → Require Manager approval before Impact Score updates.
- Setup → Approval Processes → New Approval Process.

8) Deliverables for Phase 4

1. **Validation Rules:** Tree Plantation, Recycling, etc.
2. **Flows:**
 - CO₂ Calculation Flow.
 - Badge Assignment Flow.
 - Notification Flow.
3. **Email Alerts & Custom Notifications.**
4. **Optional Workflow Rule / Approval Process.**
5. **GitHub Commit:** `phase4: flows, validation rules, automation.`

9) Testing Checklist

- Log in as a Participant → Create Activity (Tree Plantation, 10 trees).
 - Verify CO₂ saved auto-calculated = 210kg.
- Log activity with 600 trees → Verify Silver Badge auto-assigned + email sent.
- Try entering invalid values → Validation Rule blocks.
- NGO Manager receives notification for large activity.