

# Green Energy Usage Record Phase -3

Phase 3: Data Modeling & Relationships Goal: Build the data model to support energy monitoring, devices, and personnel-role tracking in Salesforce.

## 1. Standard & Custom Objects

- Standard Objects:
- Contact (used to represent Customers)
- Case (used to manage service issues)
- Custom Objects:
- Energy Device (represents devices like solar panels, wind turbines)
- Energy Usage Record (tracks energy data over time)
- Personnel (tracks roles including Technician, Solar Agent, Team Lead, etc.)

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED	
Energy Device	Energy_Device__c	Custom Object	"Tracks solar panels, wind turbines, etc."	9/19/2025	✓	▼
Energy Usage Record	Energy_Usage_Record__c	Custom Object		9/19/2025	✓	▼

## 2. Fields

- Energy Device:
- Device ID
- Device Type
- Installation Date
- Status
- Location
- Energy Usage Record:
- Record Date
- Energy Generated (kWh)
- Energy Consumed (kWh)
- Net Energy (calculated field)
- Device Lookup (relationship to Energy Device)
- Personnel:

- Role
- Employee ID
- Assigned Devices (lookup/junction)
- Contact Lookup (relationship to Contact)

Fields & Relationships

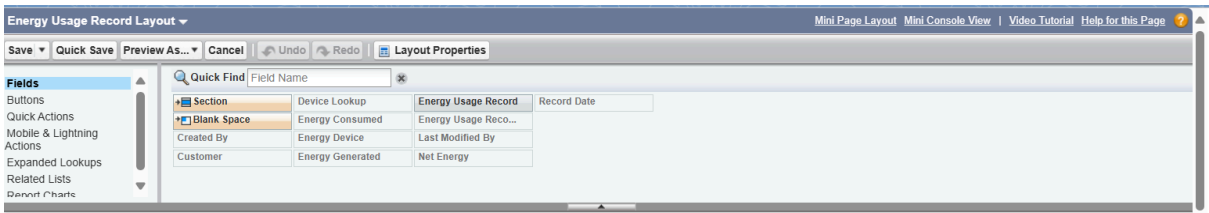
11 Items, Sorted by Field Label

Quick Find

FIELD LABEL	FIELD NAME	DATA TYPE
Created By	CreatedById	Lookup(User)
Customer	Customer__c	Lookup(Contact)
Device Lookup	Device_Lookup__c	Lookup(Energy Device)
Energy Consumed	Energy_Consumed__c	Number(16, 2)
Energy Device	Energy_Device__c	Master-Detail(Energy Device)
Energy Generated	Energy_Generated__c	Number(16, 2)
Energy Usage Record	Energy_Usage_Record__c	Lookup(Contact)
Energy Usage Record Name	Name	Text(80)
Last Modified By	LastModifiedById	Lookup(User)
Name	Name	Text(80)

3. Page Layouts

- Energy Device Layout:
- Shows device details, related usage records, and related personnel assigned device.
- Energy Usage Record Layout: to
- Displays energy analytics fields and shows the related energy device details.
- Personnel Layout:
- Shows assigned devices, cases handled, and contact information



## 4. Compact Layouts

- Energy Device (Mobile View):
- Device ID, Device Type, Status
- Energy Usage Record (Mobile View):
- Record Date, Energy Generated, Net Energy

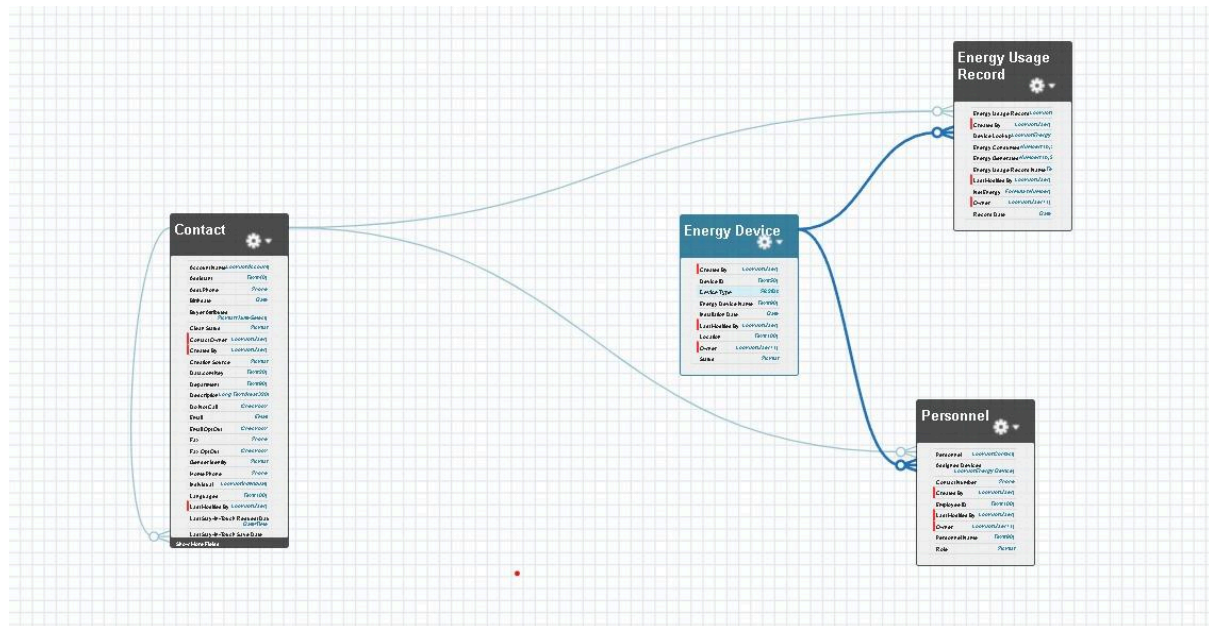
The screenshot shows a web interface for configuring a compact layout. The title is "Energy Usage Record Compact Layout" with a subtitle "Energy Usage Record Mobile Layout". A "Back to Energy Usage Record" link is present. The main section is titled "Compact Layout Detail" and contains a table with the following information:

Label	Energy Usage Record Mobile Layout	Object Name	Energy Usage Record
API Name	Energy_Usage_Record_Mobile_Layout		
Included Fields	Record Date Net Energy Energy Generated		
Created By	Tarini Verma, 9/19/2025, 11:23 AM	Modified By	Tarini Verma, 9/19/2025, 11:23 AM

At the top of the table, there are buttons: "Edit", "Clone", "Delete", and "Compact Layout Assignment". At the bottom of the table, there are also buttons: "Edit", "Clone", "Delete", and "Compact Layout Assignment".

## 5. Schema Builder

- Used to visually map and verify relationships for better understanding of data flow between
- Energy Device → Energy Usage Record → Personnel → Customer (Contact)



## 6.Relationships

- Energy Device → Energy Usage Record: Master-Detail relationship with Energy Device as the parent owning usage records.
- Energy Usage Record → Customer (Contact): Lookup relationship tying usage logs to customer accounts without ownership dependencies.
- Personnel → Energy Device: Lookup relationship linking technicians to devices they maintain or operate.
- Personnel → Personnel (Supervisor/Team Lead): Self-lookup relationship enabling hierarchical supervision within personnel records.

Customer	Customer__c	Lookup(Contact)
Device Lookup	Device_Lookup__c	Lookup(Energy Device)
Energy Consumed	Energy_Consumed__c	Number(16, 2)
Energy Device	Energy_Device__c	Master-Detail(Energy Device)
Energy Generated	Energy_Generated__c	Number(16, 2)
Energy Usage Record	Energy_Usage_Record__c	Lookup(Contact)

## 7. Junction Objects

- Created a Device Assignment junction object to handle many-to-many relationships where:

- One technician can manage multiple devices.
- One device can be maintained by multiple technicians.
- Fields include Technician Lookup, Device Lookup, and Assignment Date In conclusion, choosing the right Salesforce user license depends on the role's access needs:

- The Salesforce license is ideal for managers who require full CRM access and capability to use standard and custom Salesforce apps.
- The Salesforce Platform license fits users needing access mainly to custom apps without full CRM functionalities

SETUP > OBJECT MANAGER

Energy Usage Record

Details

**Fields & Relationships**

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Restriction Rules

Scoping Rules

Object Access

Triggers

Fields & Relationships

11 Items, Sorted by Field Label

Customer

Device Lookup

Energy Consumed

Energy Device

Energy Generated

Energy Usage Record

Energy Usage Record Name

Last Modified By

Net Energy

Record Date