ClimateSage Data Dictionary: A Field-by-Field Guide (v3.3)

Welcome to the Team!

This document is your detailed guide to our app's "digital filing cabinet" (our database). Think of it as a glossary for every single piece of information we store. Don't worry about the technical terms; we'll explain everything in plain English.

Below, we break down each "filing cabinet" (Table) and explain every single "label" (Field/Column) inside it.

Table 1: organizations

Purpose: This is the main filing cabinet for our clients. Every company that signs up gets one main folder here.

Field Name	What it Stores	Plain English Explanation & Example
id	A unique ID	This is the company's permanent, unique serial number in our system. We use this so the computer never gets confused between two companies. Example: 8a7b6c5d-4e3f-2g1h-9i8j-k7l6m5n4o3p2
name	The company's name	The official name of the business that signs up. Example: "The Grand Hotel Group"
sector	The company's industry	The main industry the company works in, chosen from a dropdown list. This helps us customize their experience. Example: "Hospitality"
industry_description	Extra details about the industry	A space for the user to describe their business in more detail. This is crucial for personalizing their questions later. Example: "A 5-star luxury hotel"

country_code	A 3-letter country code	The country where the company is headquartered, in a standard 3-letter format. Example: "ARE" for United Arab Emirates
logo_url	A web link to a logo	A web address (URL) that points to the company's logo image, so we can display it in the app. Example: https://somecdn.com/logos/grandhotel.png
created_at	Date and time	A timestamp that is automatically recorded the very second the company is registered in our system.

Table 2: sites

Purpose: This cabinet stores the individual physical locations or properties that belong to a company. It can now handle main locations and sub-locations.

Field Name	What it Stores	Plain English Explanation & Example
id	A unique ID	The unique serial number for a specific physical location, like one hotel or one factory.
organization_id	The ID of the parent company	This links the site back to its main company folder in the organizations table. It answers the question, "Who owns this site?"
parent_site_id	A unique site ID (can be empty)	This is our sub-location feature. If it's empty, this is a main site. If it has an ID, it's a "sub-location." Example: The "Conference Center" site would have the ID of the main "Grand Hotel Downtown" site here.

name	The site's name	The friendly, everyday name of the location. Example: "Grand Hotel Downtown" or "Conference Center"
address	The site's physical address	The full street address of the location. Example: "123 Marina Walk, Dubai"
city	The site's city	The city where the site is located. Example: "Dubai"
country_code	The site's country code	The 3-letter code for the country where the specific site is located.
created_at	Date and time	A timestamp automatically recorded when this specific site was added to our system.

Table 3: profiles

Purpose: This cabinet stores app-specific information for every person who can log in.

Field Name	What it Stores	Plain English Explanation & Example
id	A unique user ID	The user's unique serial number. This ID must exactly match their ID in our secure login system.
full_name	The user's full name	The name of the person using the app, so we can address them personally. Example: "Fatima Al Mansoori"
avatar_url	A web link to a picture	A web address (URL) pointing to the user's profile picture. Example: https://somecdn.com/avatars/fatima.jpg

created_at	Date and time	A timestamp automatically recorded when the user's profile was first created.

Table 4: user_permissions (The Rulebook)

Purpose: This is a very important "rulebook." It defines who can do what, and where they can do it.

Field Name	What it Stores	Plain English Explanation & Example
user_id	A unique user ID	The ID of the person this rule applies to.
organization_id	A unique company ID	The ID of the company this rule applies to.
site_id	A unique site ID (can be empty)	This is the key to setting the rule's scope. If it's empty, the user's role applies to the entire company. If it has a site ID, their role applies only to that one site.
role	The user's role	The user's "job title" within our app, which determines their powers. Example: org_admin, site_admin, contributor
created_at	Date and time	A timestamp automatically recorded when this specific permission or rule was created.

Table 5: invitations

Purpose: This cabinet keeps a full history of every invitation sent to bring new people onto the platform.

Field Name	What it Stores	Plain English Explanation & Example

id	A unique ID	The unique serial number for this specific invitation.
organization_id	A unique company ID	The company the person is being invited to join.
invited_by_user_id	A unique user ID	The ID of the person who sent the invitation.
email	An email address	The email address of the person receiving the invitation. Example: david.chen@example.com
role	The role to be assigned	The "job title" (like 'contributor') the new user will automatically get when they accept the invite.
site_id	A unique site ID (can be empty)	If a site is specified here, the new user will only have access to that site.
token	A secure code	A long, random, secret code included in the invitation link to make it secure and one-time-use.
status	The status of the invite	Tells us if the invitation is still waiting ('pending'), has been used ('accepted'), or is no longer valid ('expired').
expires_at	Date and time	The exact date and time when the invitation link will stop working.

created_at	Date and time	A timestamp automatically recorded the moment the invitation was sent.

Table 6: frameworks (The Library of Rules)

Purpose: This is a master list of all the different sustainability and compliance "rulebooks" (frameworks) our app knows about.

Field Name	What it Stores	Plain English Explanation & Example
id	A unique ID	A unique serial number for the framework.
framework_name	The framework's name	The official name of the framework. Example: "Dubai Sustainable Tourism", "Green Key"
description	A short description	A brief explanation of what the framework is for.

Table 7: organization_frameworks (The Switchboard)

Purpose: This acts as a switchboard, activating specific frameworks for each company. It tells our app which "rulebooks" a company needs to follow.

Field Name	What it Stores	Plain English Explanation & Example
organization_id	A unique company ID	The company this rule applies to.
framework_id	A unique framework ID	The framework that is "switched on" for that company.
is_active	Yes or No	A simple switch to turn a framework on or off for a client.

activated_at	Date and time	When the framework was turned on for this company.

Table 8: questions (The Wizard's Brain)

Purpose: This is the master library for every single question the Data Wizard can possibly ask a user.

Field Name	What it Stores	Plain English Explanation & Example
id	A unique question code	A unique, computer-friendly code for the question. This is how we link answers back to the right question. Example: electricity_consumption_kwh
question_text	The question text	The exact, plain-English question the user will see on their screen. Example: "What was your total electricity consumption in kilowatt-hours (kWh)?"
question_type	The type of answer	Tells the app if the answer should be a number, text, or a yes/no. This ensures the user sees the right kind of input box. Example: "numeric"
helper_text	Helpful hint	A small tip shown to the user (like under a ? icon) to help them answer correctly. Example: "You can find this on your monthly utility bill."

Table 9: question_tags (The Wizard's Intelligence)

Purpose: This table holds the "smart tags" that connect questions to industries and frameworks. This is what powers the intelligent wizard, making sure we only ask relevant questions.

Field Name	What it Stores	Plain English Explanation & Example

question_id	A unique question code	The question this tag applies to.
tag_type	The category of the tag	The type of tag being applied. Example: "framework", "industry", "topic"
tag_value	The tag's value	The specific value of the tag. Example: "DST", "Hospitality", "Energy"

Table 10: data_records (The Most Important Filing Cabinet)

Purpose: This is where every single piece of sustainability data gets stored. Every number, every answer, every metric lives here.

Field Name	What it Stores	Plain English Explanation & Example
id	A unique ID	The unique serial number for this single piece of data.
organization_id	A unique company ID	The company this piece of data belongs to.
site_id	A unique site ID	The specific site this data is about (e.g., the electricity bill for the Downtown hotel).
entered_by_user_id	A unique user ID	The ID of the person who entered this data, so we always know the source.
metric_id	The unique code for the question	The code that links this answer back to a specific question in the questions table.

value_numeric	A number	If the answer is a number, it's stored here. Example: 150000.75
value_text	Text	If the answer is text, it's stored here. Example: "All lightbulbs are LED"
value_boolean	Yes or No	If the answer is a simple yes/no, it's stored here (as True/False). Example: True
period_start	A date	The start date of the period this data covers. Example: 2025-05-01
period_end	A date	The end date of the period this data covers. Example: 2025-05-31
created_at	Date and time	A timestamp automatically recorded when this piece of data was entered.

Table 11: evidence_files

Purpose: This cabinet stores information about every file uploaded as proof (like PDFs of bills or images), and links it directly to the data it supports.

Field Name	What it Stores	Plain English Explanation & Example
id	A unique ID	The unique serial number for this specific file record.
data_record_id	A unique data ID	This links the uploaded file directly to the piece of data it is proving. This is how we know a specific bill is for a specific month's electricity usage.

organization_id	A unique company ID	The company that owns this file.
uploaded_by_user_id	A unique user ID	The person who uploaded the file.
file_name	The file's original name	The name of the file as it appeared on the user's computer. Example: May_Bill.pdf
storage_path	A secure web link	The unique, secret address where we've stored the actual file in our secure cloud storage.
file_hash	A "digital fingerprint"	A unique code generated from the file's contents. It helps us detect if the same file has been uploaded before.
created_at	Date and time	A timestamp automatically recorded the moment the file was successfully uploaded.

Table 12: audit_log (The Security Logbook)

Purpose: Our permanent, un-editable logbook that records every important action for security and accountability. This is our safety net.

Field Name	What it Stores	Plain English Explanation & Example
id	A log number	A simple, auto-incrementing number for each log entry (1, 2, 3...).
organization_id	A unique company ID	The company where the action took place.

user_id	A unique user ID	The person who performed the action. Can be empty if the system did something automatically.
action	The type of action	What the user did. Example: 'UPDATE', 'LOGIN', 'INVITE_USER'
table_name	The name of the table affected	The "filing cabinet" that was changed. Example: data_records
record_id	The ID of the record affected	The specific "folder" or piece of data that was changed.
diff_json	A "before and after" snapshot	For any changes, this stores exactly what the data looked like before and after the update, providing a perfect record.
created_at	Date and time	The exact moment the action occurred.