PetroEnergy Data Catalog

This Data Catalog serves as a centralized repository of metadata that describes the structure, purpose, and context of all datasets used and maintained within the company.

Scope of the Catalog

The catalog includes detailed documentation on datasets related to:

- Company Name Identifies the legal and operational entity to which data records belong. This ensures clarity in multi-entity organizations or partnerships.
- Corporate Social Responsibility (CSR) -Tracks initiatives and metrics related to social and ethical responsibilities. This includes data on community engagement, volunteer programs, donations, and compliance with social standards.
- Environment (Envi) -Contains environmental performance data such as carbon emissions, energy usage, waste disposal, and sustainability efforts. This supports environmental auditing and green reporting.
- Creating Shared Value (CSV) Focuses on strategies that align business growth with societal benefits. Data here may include partnerships, community investments, and initiatives that generate both economic value and social progress.
- Human Resources (HR) Documents workforce-related information including employee demographics, training, performance, retention, diversity, and compensation. This helps ensure ethical and equitable HR practices.
- Economics (Econ) Covers internal and external economic indicators that affect the company, including market analysis, revenue, cost structures, and financial forecasts.

PUBLIC SCHEMAS

Table name	account	
Datatype & Length	• account_id	• VARCHAR(20)
	• email	• VARCHAR(254)
	account_role	• VARCHAR(3)
	power_plant_id	• VARCHAR(10)
	• company_id	• VARCHAR(10)
	account_status	• VARCHAR(10)
	 date_created 	 TIMESTAMP
	date_updated	• TIMESTAMP
Description	Stores information related to user accounts, including access	
	roles, account statuses, and associations with power plants or	
	companies.	

Table name	status	
Datatype & Length	• status_id	• VARCHAR(3)
	• status_name	• VARCHAR(10)
Description	Defines the different statuses that can be applied to accounts,	
	processes, or records in the system.	

Table name	roles	
Datatype & Length	• role_id	• VARCHAR(3)
	role_name	• VARCHAR(15)
Description	Holds a list of user roles for defining access levels and	
	permissions within the system.	

Table name	audit_trail	
Datatype & Length	• audit_id	• VARCHAR(20)
	account_id	• VARCHAR(20)
	target_table	• VARCHAR(20)
	record_id	• VARCHAR(20)
	action_type	• VARCHAR(10)
	old_value	• TEXT
	new_value	• TEXT
	audit_timestamp	 TIMESTAMP
	 description 	• TEXT
Description	Tracks user activities across the system for accountability,	
_	monitoring changes made to data records.	

Table name	checker_status_log	
Datatype & Length	• cs_id	• VARCHAR(20)
	checker_id	• VARCHAR(20)
	• record_id	• VARCHAR(20)
	• status_id	• VARCHAR(3)

	status_timestamp	• TIMESTAMP
Description	Logs the status changes made be specific records, ensuring traces	

Table name	attachment	
Datatype & Length	• record id • VARCHAR(20)	
	attachment_file	• TEXT
Description	Logs the status changes made by checkers or reviewers on	
	specific records, ensuring traceability in validation workflows.	

REFERENCE SCHEMAS

Table name	company_main	
Datatype & Length	• company_id	• VARCHAR(10)
	company_name	• VARCHAR(255)
	parent_company_id	• VARCHAR(10)
	 address 	• TEXT
	• zip	• VARCHAR(4)
	• color_code	• VARCHAR(7)
Description	Stores fundamental information about each company,	
	including identifiers, hierarchical relationships, and location	
	details.	

Table name	csv_power_plants	
Datatype & Length	 power_plant_id company_id site_name site_address city_town province country zip ef_id create_at updated at 	 VARCHAR(10) VARCHAR(10) VARCHAR(50) TEXT VARCHAR(30) VARCHAR(30) VARCHAR(40) VARCHAR(10) TIMESTAMP TIMESTAMP
Description	Details power plant information, including locations and associated emission factors.	

Table name	csv_emission_factors	
Datatype & Length	• ef_id	• VARCHAR(10)
	generation_source	• TEXT
	kg_co2_per_kwh	• DECIMAL(10,5)
	• create at	 TIMESTAMP
	updated_at	 TIMESTAMP
Description	Provides emission factors related to various generation	
	sources, aiding in environmental impact assessments.	

Table name	csv_fa_factors	
Datatype & Length	• ff_id	• VARCHAR(10)
	• ff_name	• TEXT
	 ff_percentage 	• DECIMAL(5,4)
	• create_at	 TIMESTAMP
	updated_at	 TIMESTAMP
Description	Lists factors related to funds allocation, including names and	
	percentage values.	_

Table name	csv_hec_factors	
Datatype & Length	• hec_id	• VARCHAR(10)
	hec_value	• DECIMAL(10,4)
	hec_year	• SMALLINT
	• source_name	• TEXT
	• source_link	• TEXT
	• create_at	 TIMESTAMP
	updated_at	 TIMESTAMP
Description	Contains high-efficiency combustion factors, detailing values	
	and sources.	

Table name	expenditure_type	
Datatype & Length	• type_id	• VARCHAR(4)
	 type_description 	• TEXT
Description	Defines types of expenditures, providing descriptions for each	
	category.	

SILVER SCHEMAS

Corporate Social Responsibility (CSR):

Table name	csr_activity	
Datatype & Length	• csr_id	• VARCHAR(10)
	company_id	• VARCHAR(10)
	project_id	• VARCHAR(20)
	project_year	• VARCHAR(6)
	• csr_report	 NUMERIC
	project_expenses	 NUMERIC
Description	Details the specific CSR activities undertaken by companies,	
	linking them to projects and reporting metrics.	

Table name	csr_projects	
Datatype & Length	• project_id	• VARCHAR(20)
	program_id	• VARCHAR(20)
	project_name	• VARCHAR(50)
	project_metrics	• VARCHAR(100)
Description	Contains information about CSR projects, including their	
	names and associated metrics.	

Table name	csr_programs	
Datatype & Length	program_id	• VARCHAR(20)
	program_name	• VARCHAR(20)
Description	Lists CSR programs, providing names and associated	
_	identifiers.	

Environment (Envi):

Table name	envi_natural_sources	
Datatype & Length	• ns_id	• VARCHAR(20)
	company_id	• VARCHAR(10)
	• ns_name	• VARCHAR(30)
	created_at	 TIMESTAMP
	updated_at	 TIMESTAMP
Description	Catalogs natural resources utilized by companies, including	
	names and timestamps for tracking.	

Table name	envi_water_withdrawal	
Datatype & Length	• ww_id	• VARCHAR(20)
	company_id	• VARCHAR(10)
	• ns_id	• VARCHAR(20)
	volume	 DOUBLE PRECISION
	unit_of_measurement	• VARCHAR(15)
	 year smallint 	• SMALLINT
	month	• VARCHAR(10)

	quartercreated_atupdated_at	VARCHAR(2)TIMESTAMPTIMESTAMP
Description	Records data on water withdrawal volumes by companies, including measurement units and timeframes.	

Table name	envi_company_property	
Datatype & Length	• cp_id	• VARCHAR(20)
	• company_id	• VARCHAR(10)
	• cp_name	• VARCHAR(30)
	• cp_type	• VARCHAR(15)
	• created_at	 TIMESTAMP
	updated_at	 TIMESTAMP
Description	Details properties owned by companies, specifying types and	
	relevant timestamps.	

Table name	envi_diesel_consumption	
Datatype & Length	 dc_id company_id cp_id unit_of_measurement Consumption Month Year Quarter Date 	 VARCHAR(20) VARCHAR(10) VARCHAR(20) VARCHAR(15) DOUBLE PRECISION VARCHAR(10) SMALLINT VARCHAR(2) DATE
	created_atupdated at	TIMESTAMPTIMESTAMP
Description	Tracks diesel consumption metrics for company properties, including consumption volumes and dates.	

Table name	envi_electric_consumption	
Datatype & Length	ec_idcompany_idunit of measurement	VARCHAR(20)VARCHAR(10)VARCHAR(15)
	consumptionQuarteryear	DOUBLE PRECISIONVARCHAR(2)SMALLINT
	created_atupdated_at	TIMESTAMPTIMESTAMP
Description	Monitors electric consumption data for companies, capturing usage metrics over time.	

Table name	envi_non_hazard_waste	
Datatype & Length	• nhw_id	• VARCHAR(20)
	 company id 	• VARCHAR(10)

	waste_source	• VARCHAR(20)
	• metrics	• VARCHAR(20)
	unit_of_measurement	• VARCHAR(20)
	• waste	 DOUBLE PRECISION
	• month	• VARCHAR(10)
	• year	• SMALLINT
	quarter	• VARCHAR(2)
	• created_at	 TIMESTAMP
	updated_at	 TIMESTAMP
Description	Documents non-hazardous waste generated by companies,	
	detailing sources and quantities.	

Table name	envi_hazard_waste_generated	
Datatype & Length	hwg_idcompany id	VARCHAR(20)VARCHAR(10)
	• Metrics	• VARCHAR(20)
	unit_of_measurement	• VARCHAR(15)
	waste_generated	 DOUBLE PRECISION
	quarter	• VARCHAR(2)
	• Year	• SMALLINT
	created_at	 TIMESTAMP
	updated_at	 TIMESTAMP
Description	Captures data on hazardous waste generated by companies,	
	including metrics and timeframes.	

Table name	envi_hazard_waste_disposed	
Datatype & Length	 hwd_id company_id metrics unit_of_measurement waste_disposed year created_at 	 VARCHAR(20) VARCHAR(10) VARCHAR(20) VARCHAR(15) DOUBLE PRECISION SMALLINT TIMESTAMP TIMESTAMP
Description	• updated_at Decords information on the disc	
Description	Records information on the disposal of hazardous waste by companies, tracking quantities and dates.	
	companies, tracking quantities	and dates.

Creating Shared Value (CSV):

Creating Sharea value (CSV)		
Table name	csv_energy_records	
Datatype & Length	• energy_id	• VARCHAR(20)
	power_plant_id	• VARCHAR(10)
	 date_generated 	 TIMESTAMP
	 energy_generated_kwh 	• NUMERIC(15, 4)
	 co2_avoidance_kg 	• NUMERIC(15, 4)
	• create_at	 TIMESTAMP

	• updated_at	TIMESTAMP
Description	Logs energy generation records CO ₂ avoidance metrics.	s for power plants, including

Table name	csv_funds_allocation	
Datatype & Length	 month_generated 	• VARCHAR(20)
	power_plant_id	• VARCHAR(10)
	• ff_id	• VARCHAR(10)
	power_generated_peso	• NUMERIC (10,4)
	 funds_allocated_peso 	• NUMERIC (10,4)
	• create_at	 TIMESTAMP
	updated_at	 TIMESTAMP
Description	Tracks the allocation of funds generated from power plants,	
	including amounts and associated factors.	

Human Resources (HR):

Table name	hr_demographics	
Datatype & Length	 employee_id gender birthdate position_id p_np company_id employment_status date_created date_updated 	 VARCHAR(20) VARCHAR(1) TIMESTAMP VARCHAR(2) VARCHAR(2) VARCHAR(10) VARCHAR(20) TIMESTAMP TIMESTAMP
Description	Stores demographic information of employees, including gender, birthdate, and employment status.	

Table name	hr_safety	
Datatype & Length	 employee_id company_id date type_of_accident safety_man_hours 	 VARCHAR(20) VARCHAR(10) TIMESTAMP VARCHAR(50) INT
	date_createddate_updated	TIMESTAMPTIMESTAMP
Description	Records safety incidents involvaccident types and man-hours.	ving employees, detailing

Table name	hr_position	
Datatype & Length	position_id	• VARCHAR(2)
	• position_name	• VARCHAR(20)
Description	Lists job positions within the company, providing identifiers	
	and names.	

Table name	hr_training	
Datatype & Length	 employee_id hours date position_id date created 	 VARCHAR(20) INT TIMESTAMP VARCHAR(2) TIMESTAMP
Description	date_updated	• TIMESTAMP by employees, including hours

Table name	hr_tenure	
Datatype & Length	employee_id	• VARCHAR(20)
	start_date	 TIMESTAMP
	end_date	 TIMESTAMP
	tenure_length	• NUMERIC(5,2)
	date_created	 TIMESTAMP
	date_updated	 TIMESTAMP
Description	Tracks the tenure of employees, recording start and end dates	
	along with tenure lengths.	

Table name	hr_parental_leave	
Datatype & Length	• employee_id	• VARCHAR(20)
	• date	 TIMESTAMP
	type_of_leave	• VARCHAR(12)
	• days	• INT
	• end_date	 TIMESTAMP
	months_availed	• INT
	 date_created 	 TIMESTAMP
	date_updated	 TIMESTAMP
Description	Documents parental leave taken by employees, including	
	types and durations.	

Economics (Econ):

Table name	econ_expenditures	
Datatype & Length	• company_id	• VARCHAR(10)
	• year	• SMALLINT
	• type_id	• VARCHAR(4)
	government_payments	 NUMERIC
	supplier_spending_local	 NUMERIC
	supplier_spending_abroad	 NUMERIC
	employee_wages_benefits	 NUMERIC
	 community_investments 	 NUMERIC
	 depreciation 	 NUMERIC
	• depletion	 NUMERIC
	• others	 NUMERIC
	 total_supplier_spending 	 NUMERIC

	• created_at	• TIMESTAMP
	updated_at	 TIMESTAMP
Description	Details company expenditures across various categories, including	
	government payments and community investments.	

Table name	econ_value	
Datatype & Length	• year	 SMALLINT
	electricity_sales	 NUMERIC
	• oil_revenues	 NUMERIC
	other_revenues	 NUMERIC
	• interest_income	 NUMERIC
	 share_in_net_income_of_associate 	 NUMERIC
	 miscellaneous_income 	 NUMERIC
	• total_revenue	 NUMERIC
	• created_at	 TIMESTAMP
	updated_at	 TIMESTAMP
Description	Captures economic values such as revenues from different sources	
	and total revenue figures.	

Table name	econ_capital_provider_payment	
Datatype & Length	• year	• SMALLINT
	interest	 NUMERIC
	dividends_to_nci	 NUMERIC
	dividends_to_parent	 NUMERIC
	 total_dividends_interest 	 NUMERIC
	created_at	 TIMESTAMP
	updated_at	 TIMESTAMP
Description	Records payments made to capital providers, including interest	
	and dividends.	