



ESG Data Strategy

The Data Ecosystem for ESG Reporting
& Analytics

September 2023

EY

Building a better
working world

Agenda

1. Evolution of ESG reporting and key challenges
2. ESG data strategy approach for ESG reporting requirements



Evolution of ESG Reporting

The ripple effect of ESG Reporting are more impactful than many are realizing

ESG reporting is an annual exercise for many institutions. This is **EVOLVING**.

1. External context is evolving - ESG Frameworks & Regulations are evolving
2. Internal needs are evolving - Operational Implications to Embed into Daily Processes
3. The implication is to embed ESG data into Operational Systems



Four Data challenges for ESG

1. New Data sources to Integrate

2. Alignment of multiple Taxonomies

3. Counterparty data: Inconsistencies and data gaps

4. Governance and lineage

ESG Data Sourcing

why it's hard

ESG data sourcing presents a unique challenge: the obligation to report to stakeholders (including shareholders) across multiple jurisdictions, legal entities, business and products using data from multiple sources, in a very short timeframe

▶ Obligations & Regulations

(49) Sustainability reporting standards should specify the information that undertakings should disclose on social factors, including working conditions, social partner involvement, collective bargaining, equality, non-discrimination, diversity and inclusion, and human rights. Such information should cover the impacts of the undertaking on people, including workers, and on human health. The information that undertakings disclose about human rights should include information about forced labour and child labour in their value chains where relevant. Sustainability reporting requirements concerning forced labour should not free public authorities of their responsibility to address, through trade policy and diplomatic means, the import of goods produced as a result of human rights abuses, including forced labour. Undertakings should also be able to report on possible risks and trends regarding employment and incomes.

▶ Reporting Interpretation

IRL 1.1 [Client Organisation] has comprehensive controls to ensure compliance with non-discrimination, diversity, and inclusion policies.

▶ Data Requirements

Excessive_CEO_Pay_Ratio_Value	Metric: Average ratio within investee companies of the annual total compensation for the highest compensated individual to the median annual total compensation for all employees (excluding the highest-compensated individual)	$\sum \text{highest wage} / \text{median wage in the investee} / \text{total number of investees}$
Fund_Average_Income_Inequality_Scope_Value	The distribution of income and economic inequality among the participants in a particular economy including a quantitative indicator	$\sum \text{income inequality} * \text{weight of sovereign position in the fund}$ Calculation

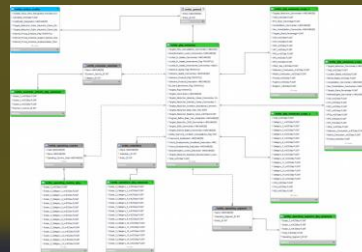
▶ Data Sourcing Specifications

+operational considerations

Expense Management Systems, Travel Management Systems
Human Resources and Payroll Systems

▶ Data Sourcing Accelerators

▶ Data Models



```

import requests

# Set up the API endpoint URL
url = "https://api.example.com/v1/employees"

# Set up the request headers with the required authentication credentials
headers = {
    "Authorization": "Bearer token",
    "Content-Type": "application/json",
    "Accept": "application/json"
}

# Send a GET request to the API endpoint
response = requests.get(url, headers=headers)

# Check if the request was successful (status code 200)
if response.status_code == 200:
    # Extract the response data as JSON
    response_data = response.json()

    # Extract the relevant information from the response data
    annual_pay_values = []

    # Assuming the annual pay amounts are stored in a field called 'AnnualPay'
    # in the entity in response_data['employees']:
    for employee in response_data['employees']:
        annual_pay = employee['AnnualPay']
        annual_pay_values.append(annual_pay)

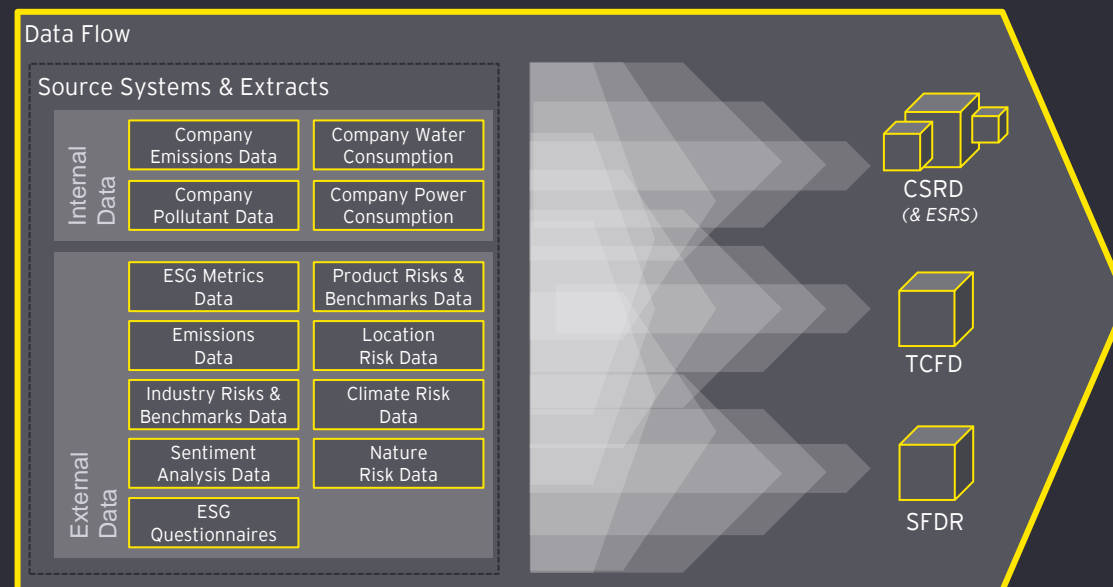
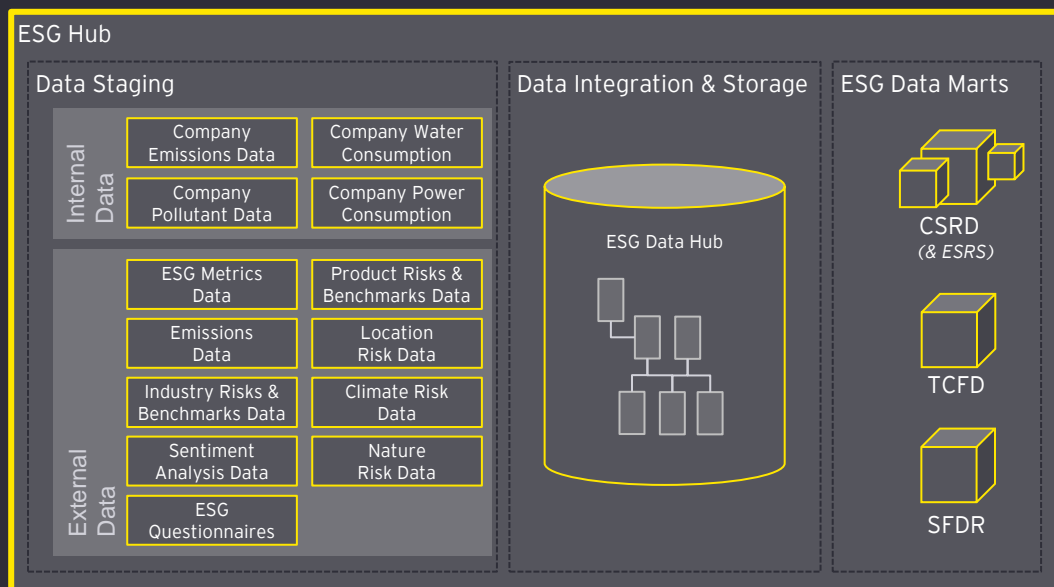
    # Calculate the maximum, minimum, and average annual pay
    max_pay = max(annual_pay_values)
    min_pay = min(annual_pay_values)
    avg_pay = sum(annual_pay_values) / len(annual_pay_values)

    # Print the results
    print("Maximum Annual Pay:", max_pay)
    print("Minimum Annual Pay:", min_pay)
    print("Average Annual Pay:", avg_pay)
else:
    # Print an error message if the request was unsuccessful
    print("Error: ", response.status_code)
    
```

Current ESG Architecture Models

ESG Reporting & Disclosures solutions can be with, or without, a centralised data hub...

Data Hubs and Warehouses are being abandoned in favour of data flows and data mesh architectures due to “speed-to-market” for ESG solutions, with the excuse that the regulations are “optional” and infrequent.

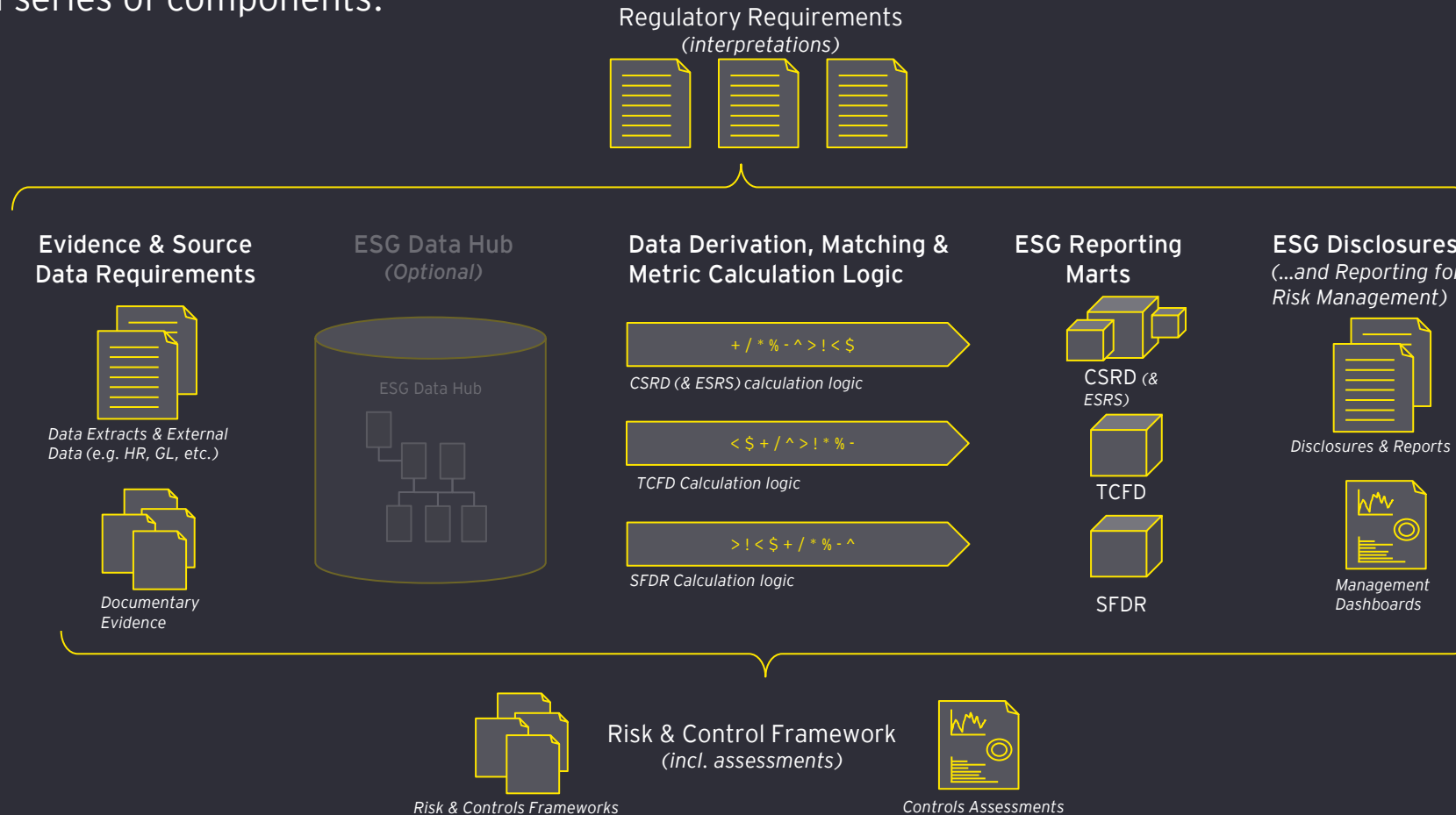


Data Flows that do not establish a Hub for Analytics, will undermine the ability for organisations to build ESG Risk models

Evolution of ESG Data Solution

...it's more than just a data model...

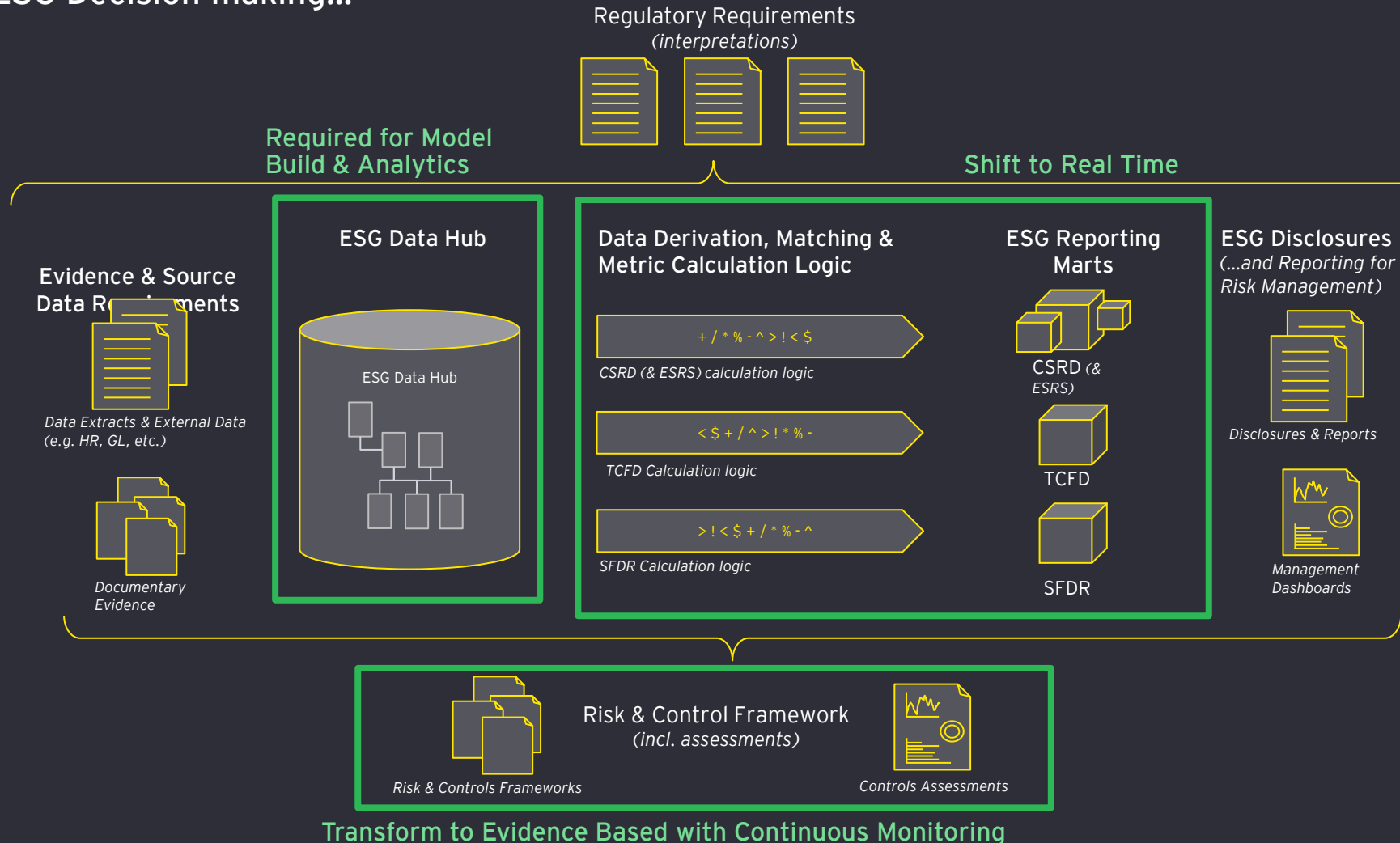
There are multiple core components to any current ESG Reporting solution, depending upon the architectural approach taken. Each has a specific purpose, and whilst many clients are requesting a “data model” the reality is that they are usually after a series of components:



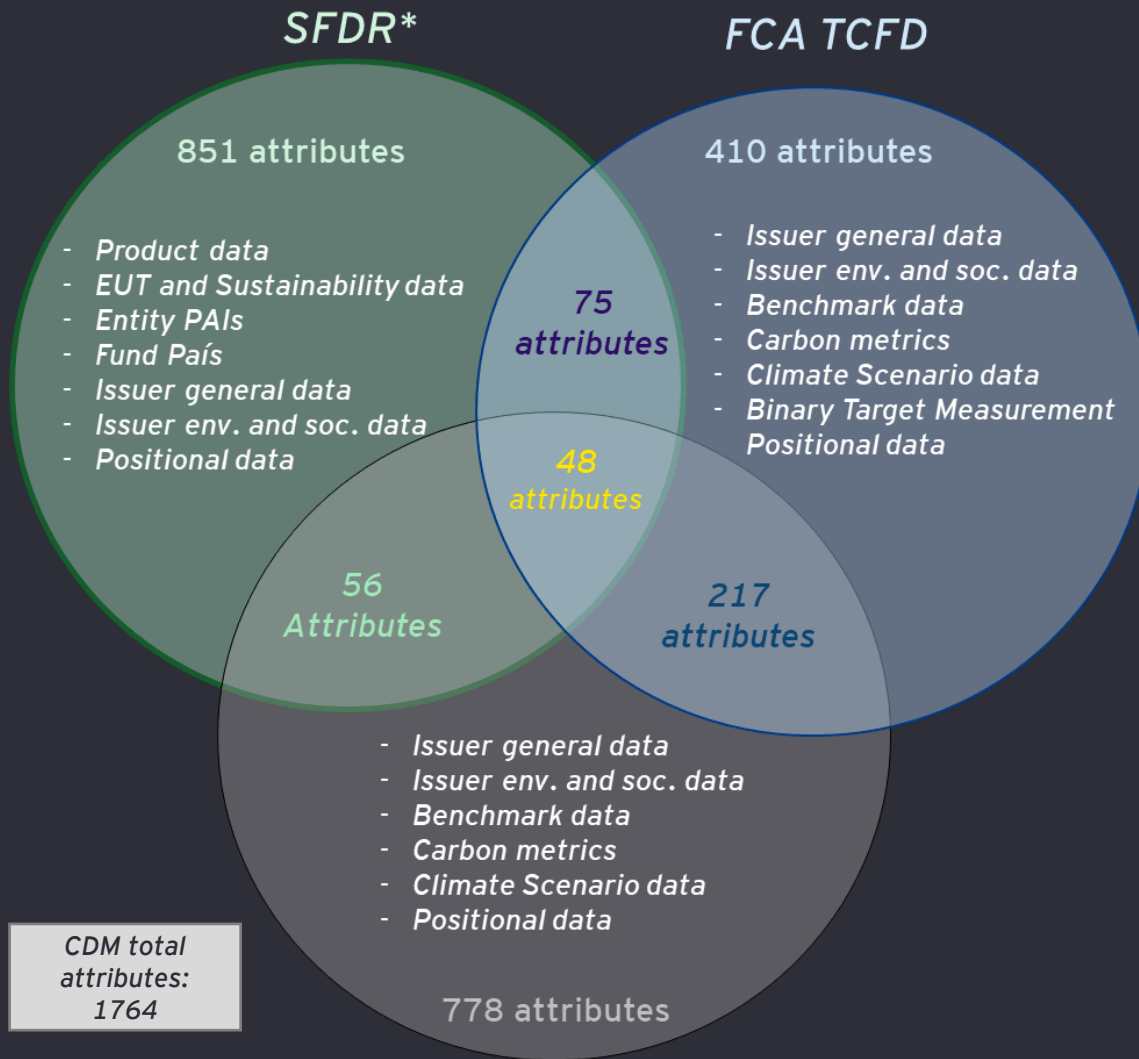
Future ESG Solution Options

...Analytics and predictive models play a greater role than historic reporting...

Common data definitions, effective controls & good Data Management are the cornerstone for future, interconnected Real-Time ESG Decision making...



Current look at the ESG CDM and observed overlaps across use cases

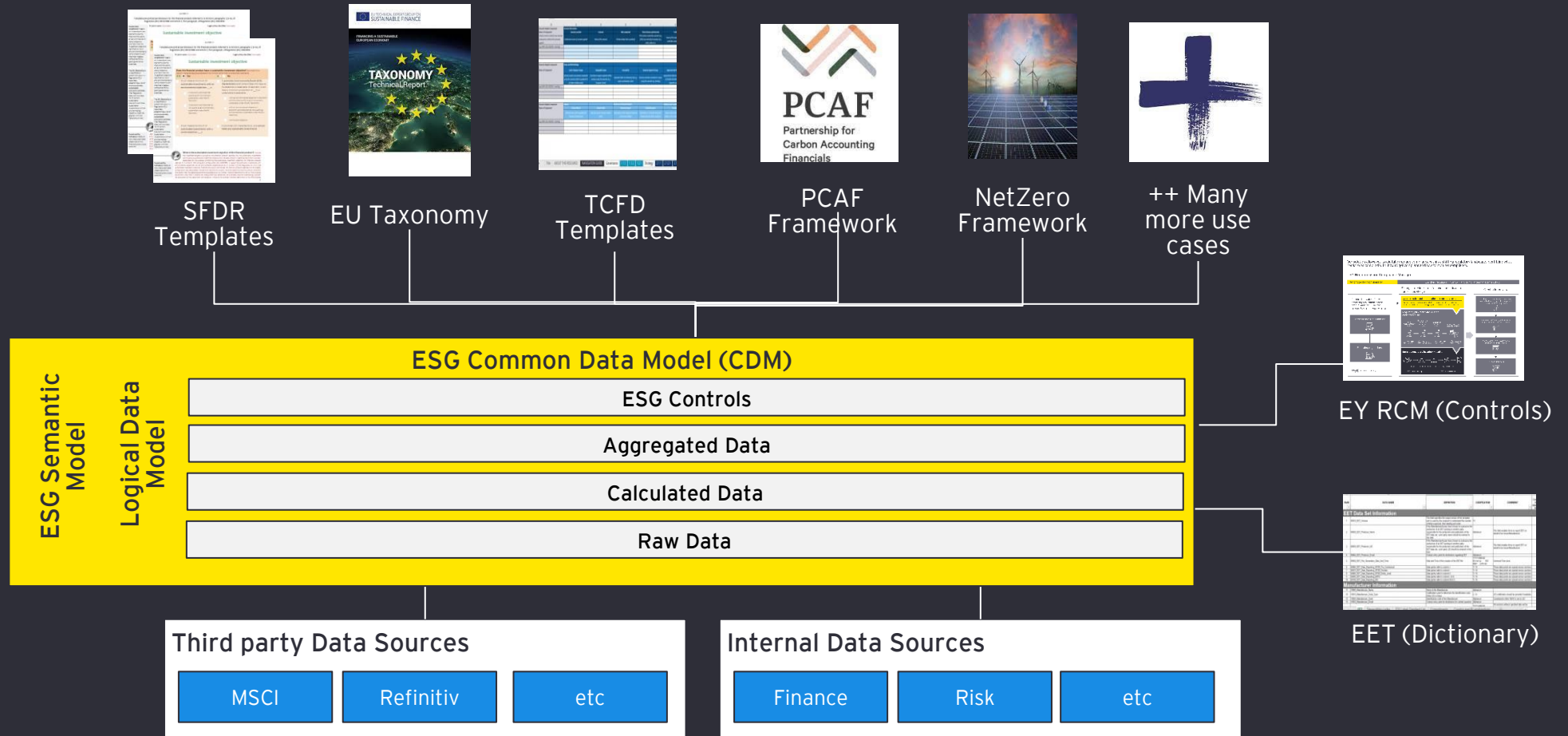


Overlap overviews		
Use case	# att	Description
ALL	48 (3%)	<ul style="list-style-type: none"> • Fund level carbon metrics • Issuer general data • Issuer carbon data • Positional data
SFDR/TCFD	75 (5%)	<ul style="list-style-type: none"> • Fund level carbon metrics • Issuer general data • Issuer GR and carbon data • Positional data
SFDR/C&C	56 (4%)	<ul style="list-style-type: none"> • Entity level carbon metrics • Fund level carbon metrics • Issuer carbon data • Positional data
TCFD/C&C	778 (34%)	<ul style="list-style-type: none"> • Fund carbon metrics • Benchmark carbon metrics • Benchmark data • Issuer general data • Issuer carbon data • Climate scenario data • Positional data

*EET exclusive attributes included as part of SFDR

ESG Common Data Strategy

Must support multiple evolving disclosure requirements in a controlled way



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