**ESG Framework and Matrix Selection**

* **List Frameworks**
  + **GET /api/frameworks**
    - Lists all available ESG frameworks(id and name).

**Response Format**:

{

"frameworks": [

{

"id": "framework\_id1",

"name": "Framework Name 1"

},

{

"id": "framework\_id2",

"name": "Framework Name 2"

}

]

}

* **Framework Details**
  + **GET /api/frameworks/{framework\_id}**
    - Retrieves (name and description) of a specific framework.

**Response Format**:

{

"id": "framework\_id",

"name": "Framework Name",

"description": "Framework Description"

}

* **List Framework Metrics**
  + **GET /api/frameworks/{framework\_id}/metrics**
    - Lists metrics associated with a specific framework(predefined weight included), with options to filter by ESG categories (Environmental, Social, Governance), and indicators(predefined weight included) associated with each metric.
* **Request Parameters**:
  + **framework\_id** (path parameter).
  + Optional query parameters for filtering by ESG categories: **pillar=E|S|G**.
* **Response Format**:

{

"metrics": [

{

"id": "metric\_id1",

"name": "Metric Name 1",

"pillar": "E",

"predefined\_weight": predefined\_weight,

"indicators": [

{

"id": "indicator\_id1",

"name": "Indicator Name 1",

"predefined\_weight": predefined\_weight

}

]

}

]

}

* **List Custom Framework Metrics**
  + **GET /api/frameworks/{framework\_id}/metrics/custom**
    - Lists metrics associated with a specific framework (predefined weight included), with options to filter by ESG categories (Environmental, Social, Governance), and indicators (predefined weight included) associated with each metric. (user\_id required)
  + **Request Parameters**:
    - **framework\_id** (path parameter).
    - **user\_id** (required query parameter).
  + **Response Format**: Similar to "List Framework Metrics" but specific to custom metrics added by the user.

**Custom ESG Metrics Management**

* **~~Add Custom Metric~~**
  + **~~POST /api/metrics/custom~~**
    - ~~Adds a custom metric to the system, requiring name, description, and pillar.~~
* **Save Metric Settings**
  + **POST /api/metrics/settings**
    - Saves a user's metric weight settings, requiring userid, framework id, metric id(array) and value(array) of custom weight.
  + **Request Body**:

{

"user\_id": "user\_id",

"framework\_id": "framework\_id",

"metrics": [

{

"id": "metric\_id1",

"custom\_weight": 0.7

}

]

}

* **~~Retrieve Saved Settings~~**
  + **~~GET /api/metrics/settings~~**
    - ~~Retrieves a user's saved metric settings, requiring userid.~~

**ESG Performance Visualization**

**Retrieve ESG Performance Data**

* **POST /api/esg-performance**
  + This endpoint allows the frontend to send a request containing the selected companies, the chosen ESG framework, and the metrics of interest. The backend will then aggregate and return the corresponding scores for each metric for each company.
* Request Body Example:

{

"companies": ["company\_id1", "company\_id2"],

"framework": "framework\_id",

"metrics": ["metric\_id1", "metric\_id2", "metric\_id3"]

}

* Response Example:

{

"data": [

{

"company\_id": "company\_id1",

"company\_name": "company\_name1",

"metrics\_scores": [

{

"metric\_id": "metric\_id1",

"metric\_name": "metric\_name1"

"score": 75

},

{

"metric\_id": "metric\_id2",

"metric\_name": "metric\_name2",

"score": 85

},

{

"metric\_id": "metric\_id3",

"metric\_name": "metric\_name3"

"score": 90

}

]

},

{

"company\_id": "company\_id2",

"company\_name": "company\_name2",

"metrics\_scores": [

{

"metric\_id": "metric\_id1",

"metric\_name": "metric\_name1"

"score": 80

},

{

"metric\_id": "metric\_id2",

"metric\_name": "metric\_name2"

"score": 82

},

{

"metric\_id": "metric\_id3",

"metric\_name": "metric\_name3"

"score": 88

}

]

}

]

}

**Data Source Verification**

* **Metric Source Details**
  + **GET /api/source/{indicator\_id}**
    - Provides source information for a metric, requiring indicator id.
  + **Request Parameters**:
    - **indicator\_id** (required query parameter).
  + **Response Format**:

{

"indicator\_id": " indicator \_id",

"source": "Source Description",

}