

NDC Scorecard Technical Guide: For Users

Introduction

The NDC Scorecard is a web-based assessment tool designed to evaluate and track Nationally Determined Contributions (NDCs) across countries. It provides a structured framework for analyzing climate action efforts by measuring capacities in key sectors, including Financial Capacity, Governance Capacity, Technical Capacity, and Monitoring & Evaluation (M&E) Capacity. The system offers comprehensive insights through standardized scoring mechanisms, detailed analytics, and visualized reports.

This document serves as a Technical Guide to explain the backend processes used in data analysis and scoring. It outlines how user inputs are transformed into actionable insights through question-level scoring, sectoral aggregation, and final composite score calculations. The guide is designed to provide clarity on the methodology, ensure transparency, and empower users to interpret their results effectively.

Get Information:

Q1: How is the data analyzed in the backend?

The NDC Scorecard backend follows a structured process to analyze user-provided data and calculate scores. Here's the step-by-step breakdown:

Data Collection:

Users answer predefined questions, each with multiple-choice options. Choices are associated with scores ranging from 0 to a maximum value (2.0 or 2.5 depending on the number of options).

Score Assignment:

For questions with 5 choices, scores range from 0.0 to 2.0 (increment of 0.5).
For questions with 3 choices, scores range from 0.0 to 2.0 (increment of 1.0).

Category Assignment:

Questions are tagged to one of the two main categories:

- Development Category
- Implementation Category

Analysts at AGNES predefined the tags during the system design phase.

Sector Mapping:

Each question is linked to one of the four key sectors:

- Financial Capacity
- Governance Capacity
- Technical Capacity
- Monitoring & Evaluation (M&E) Capacity

Weighted Aggregation:

Scores are calculated for each question based on user responses.

The total score for each sector is obtained by summing the scores of all tagged questions.

Visualization and Reporting:

Final scores are visualized as bar graphs and line graphs.

Reports are generated in CSV or PDF formats, showing sector-specific and overall performance.

Q2: What are the sectors and how are ratings calculated?

The NDC Scorecard evaluates performance across four sectors, each with a unique scoring scale. The scores fall into three performance tiers: Poor, Average, and Good.

Sector	Highest Possible Rating	Poor	Average	Good
Financial Capacity	36	Below 10	10–20	Above 20
Governance Capacity	60	Below 20	20–40	Above 40
Technical Capacity	22	Below 7	7–14	Above 14
M&E Capacity	18	Below 9	9–18	Above 18

Q3: How are questions categorized into Development and Implementation?

Question Tagging:

Analysts at AGNES developed and tagged each question to one of the two categories:

Development: Focuses on design, planning, and strategy formulation.

Implementation: Assesses execution, progress, and results.

Sector Assignment:

Each question is also tagged to a specific sector (e.g., Financial Capacity, Governance Capacity).

Tracking Questions Across Categories and Sectors:

The tagging system allows the backend to aggregate responses by category and sector. This ensures clear alignment of each question to its relevant domain.

Q4: How are scores calculated for individual questions?

Scoring Rules:

Each question is a multiple-choice question, with each choice assigned a score:

For 3-choice questions: Scores are 0.0, 1.0, 2.0.

For 5-choice questions: Scores are 0.0, 0.5, 1.0, 1.5, 2.0.

Question-Level Scoring:

The user's selected choice determines the score for that question.

Example:

A 3-choice question answered with the second option would receive a score of 1.0.

A 5-choice question answered with the fourth option would receive a score of 1.5.

Sector and Category Aggregation:

Scores from all questions tagged to a specific sector and category are summed to calculate the total scores.

Q5: How is the total score for each sector and the overall score calculated?

Sector Scores:

The total score for each sector is the sum of all scores from questions tagged to that sector.

Composite Score:

The composite score is an aggregate of all sector scores, normalized to a scale of 0–100.

Q6: How are results presented to users?

Visualization:

Results are displayed using bar graphs and line graphs to make data interpretation user-friendly.

Graphs compare sector scores, highlight trends, and benchmark performance.

Reports:

Reports include:

- ✧ Sector-specific scores
- ✧ Comparative benchmarks
- ✧ Overall performance ratings

Q7: How are users guided through their results?

Performance Ratings:

Each sector score is categorized into Poor, Average, or Good tiers based on predefined thresholds.

Actionable Insights:

Reports include recommendations for improvement based on sector performance.

Q8: What are the security and data integrity measures in the backend?

Data Validation:

Inputs are validated to prevent errors or manipulation.

Data Encryption:

Sensitive user data eg: passwords is encrypted to ensure confidentiality.

Secure APIs:

All data transactions between the frontend and backend are safeguarded through user authentication. Access to APIs is restricted to logged-in users only, ensuring that all interactions are tied to authenticated accounts. This approach provides an additional layer of security by:

- ✓ **User Identification:** Each API request is associated with a logged-in user, enabling the system to track and verify who is accessing the data.
- ✓ **Access Control:** Unauthorized users are denied access, preventing misuse or accidental exposure of sensitive data.
- ✓ **Accountability:** By linking API usage to authenticated accounts, the system ensures transparency and accountability for all actions performed through the APIs.

This method enhances security and trust, as it allows for robust monitoring and control of API interactions.

Q9: How are bar graphs and line graphs utilized in reporting?

Bar Graphs:

Compare sector scores across multiple assessments or countries.

Line Graphs:

Track progress over time for a specific sector or composite score.

Q10: How does the NDC Scorecard ensure alignment with international standards?

Scoring Framework:

Questions and scoring increments are standardized across all sectors.

Transparency:

Reports clearly explain how scores are calculated and interpreted.

Accessibility:

Visualizations and reports are designed to be user-friendly and informative.

Conclusion

The NDC Scorecard is a powerful tool for monitoring and evaluating NDC commitments, designed to align with international standards for transparency, accuracy, and accessibility. By leveraging a robust backend system, it provides detailed insights into sectoral capacities and climate action performance.

This guide has outlined the systematic processes used to analyze data, assign scores, and generate comprehensive reports. With its user-friendly visualizations, actionable insights, and secure data handling, the NDC Scorecard empowers stakeholders to make informed decisions, track progress, and identify areas for improvement. Together, these features enable meaningful contributions towards achieving climate resilience and sustainability.