



United Nations  
Climate Change

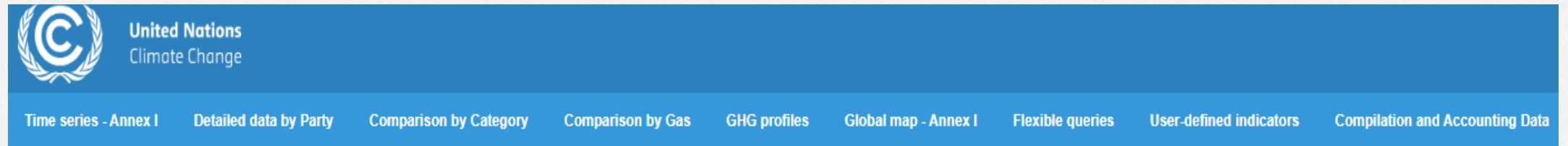
# Workplan for the further development of the GHG Data Interface

**SBSTA 62**  
June 2025

# Background

The **GHG Data Interface** is an online tool that allows users to access, search, and filter/sort greenhouse gas (GHG) data submitted by Annex I and non-Annex I Parties under the Convention and the Kyoto Protocol

It organizes information across **nine modules**, offering flexible and user-friendly access to GHG data in various formats



## Mandate and Objective

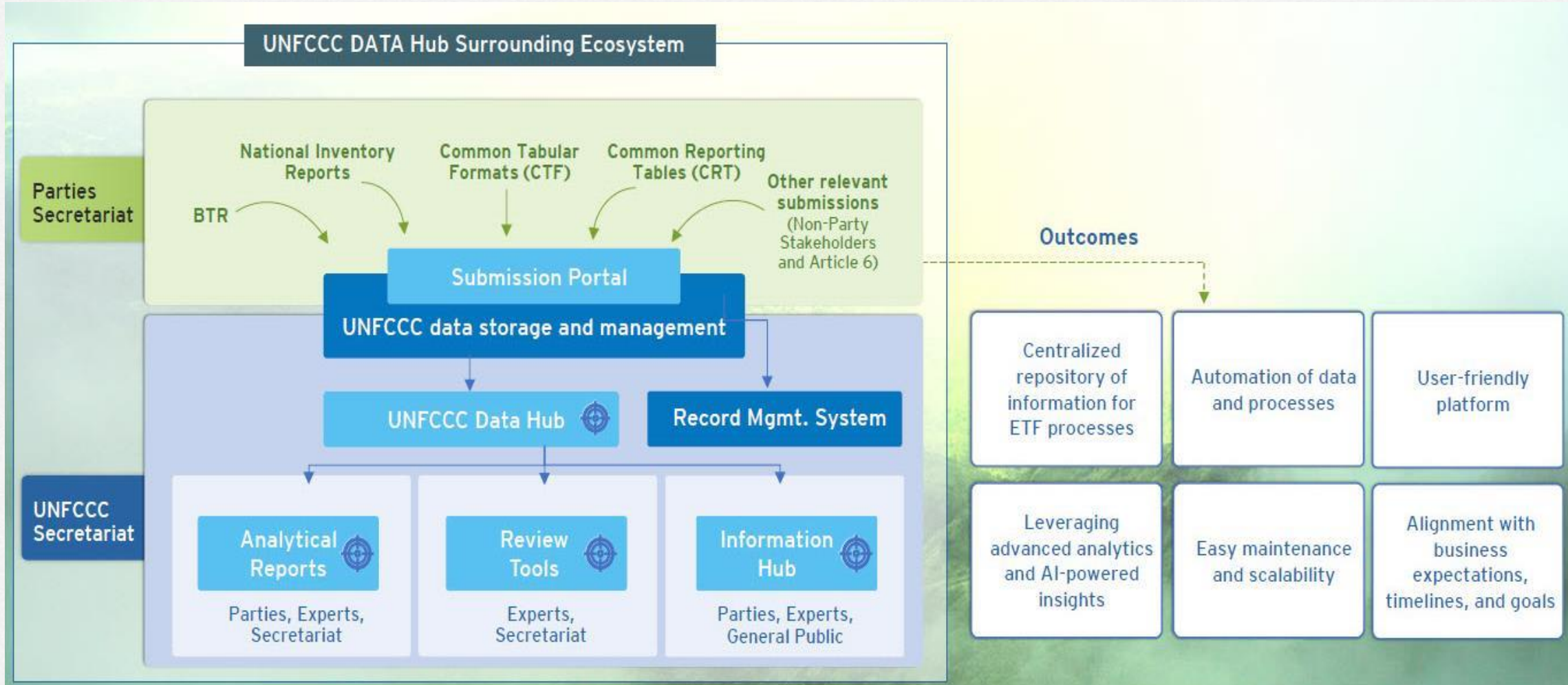
- SBSTA 61 requested the secretariat to **prepare a workplan for further development of the GHG data interface**, incorporating data reported under the Convention, the Kyoto Protocol and the Paris Agreement for consideration by SBSTA 62 (FCCC/SBSTA/2024/10, para. 84)
- Two workplans outlining following options:
  - Option 1 - Using the infrastructure of the Climate Data Hub (ongoing project)
  - Option 2 - Revising the existing GHG Data Interface
- The development will follow a phased and resource-efficient approach, re-using existing tools and frameworks where feasible



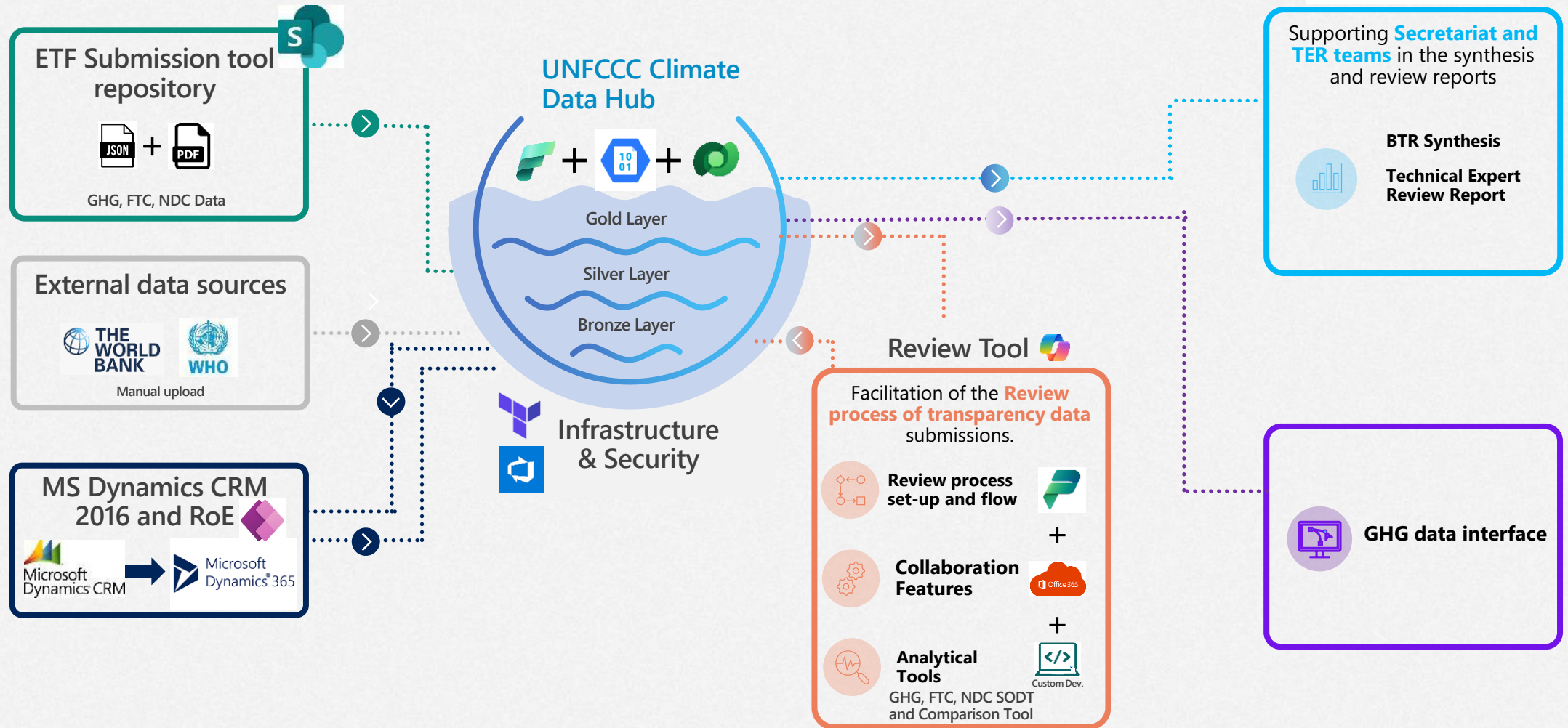


# Option 1 – Using the Climate Data Hub

# Climate Data Hub



# Climate Data Hub Phase I





# Assumptions

- Climate Data Hub infrastructure is in operation and accessible for integration
- Existing GHG data can be ingested into the Data Hub with minimal transformation
- The technical solutions supports all required dashboard functionalities and design
- UN-compliant map can be implemented
- New submissions are ingested into the data hub using the .json format
- No major changes are expected in the Data Hub schema during the implementation
- Availability of financial resources



# Development Phases and Timelines

Development Phases	Estimated Time	Projected Cost (in USD)
Phase I - Alignment & Planning	6 weeks	50,000
Phase II - Metadata Definition	8 weeks	84,000
Phase III - Dashboard Development	14 weeks	137,000
Phase IV - Map Widget Conversion	4 weeks	31,000
Phase V - Testing and Deployment	10 weeks	50,000
<b>Total</b>	<b>~11 months</b>	<b>352,000</b>





# Phase 1: Alignment and planning

## Tasks

- Infrastructure review, identify baseline and gaps
- Requirements gathering
- High-level design of technical solution

## Output

- Project plan with defined baseline and identified gaps
- User stories and acceptance criteria
- High-level design document

## Time/effort

- 6 weeks

## Cost estimate

- 50K USD





## Phase 2: Metadata Definition

### Tasks

- Define analytical metadata
- Review and validate metadata
- Metadata documentation and QA/QC process

### Output

- Metadata documentation and QA/QC process definition
- Metadata definitions
- Validated metadata

### Time/effort

- 8 weeks

### Cost estimate

- 84K USD





## Phase 3: Dashboard Development

### Tasks

- Develop dashboards
- Integrate dashboards with Data Hub
- Dashboard testing and validation

### Output

- Dashboards (DI modules, except Global map)

### Time/effort

- 14 weeks

### Cost estimate

- 137K USD





## Phase 4: Map Widget Conversion

### Tasks

- Convert existing map
- Integrate map with dashboards
- Map Widget testing and validation

### Output

- Global map module (aligned with UN map)

### Time/effort

- 4 weeks

### Cost estimate

- 31K USD





## Phase 5: Testing & Deployment

### Tasks

- System integration testing/bug fixing
- User Acceptance Testing and support (UAT)
- Deployment and go-live

### Output

- Production system

### Time/effort

- 10 weeks

### Cost estimate

- 50K USD





# Option 2 – Revising the Existing GHG DI



# Assumptions

- The existing data interface and database structure can be extended to accommodate CRT data
- Processes to ingest and update CRT data can be implemented
- UN-compliant map can be implemented
- Existing automated testing and deployment processes can be adapted
- Availability of financial resources



# Development Phases and Timelines

Development Phase	Estimated Time	Projected Cost (in USD)
Phase I - Planning & Analysis	6 weeks	50,000
Phase II - Schema Adjustment & ETL Setup	18 weeks	197,000
Phase III - Platform Upgrade	14 weeks	125,000
Phase IV - UI Duplication/Enhancement	14 weeks	145,000
Phase V - Map Replacement & Styling	4 weeks	40,000
Phase VI - Testing, UAT & Deployment	10 weeks	50,000
<b>Total</b>	<b>~17 months</b>	<b>607,000</b>





# Phase 1: Planning & Analysis

## Tasks

- Code base review, identify gaps and technical scope
- Requirements gathering
- Technical solution design

## Output

- Project plan with technical scope and identified gaps
- User stories and acceptance criteria
- Technical solution design document

## Time/effort

- 6 weeks

## Cost estimate

- 50K USD





## Phase 2: Schema Adjustment & ETL Setup

### Tasks

- Adjust Schema for CRT Data
- Develop ETLs for CRT Data
- Test and Validate ETLs

### Output

- Adjusted schema
- New ETL processes

### Time/effort

- 18 weeks

### Cost estimate

- 197K USD





## Phase 3: Platform Upgrade

### Tasks

- Plan platform upgrade
- Execute upgrade
- Post-upgrade testing

### Output

- Upgraded database
- Upgraded OS and application server

### Time/effort

- 14 weeks

### Cost estimate

- 125K USD





## Phase 4: UI Enhancement

### Tasks

- Enhance webpages
- Integrate new data
- UI testing and validation

### Output

- New modules for CRT data

### Time/effort

- 14 weeks

### Cost estimate

- 145K USD





## Phase 5: Map Replacement & Styling

### Tasks

- Replace map with UN-Compliant version
- Rework API services
- Map and API testing

### Output

- Global map module (aligned with UN map)

### Time/effort

- 4 weeks

### Cost estimate

- 40K USD





## Phase 6: Testing, UAT & Deployment

### Tasks

- System integration testing/bug fixing
- User Acceptance Testing (UAT)
- Deployment and go-live

### Output

- Production system

### Time/effort

- 10 weeks

### Cost estimate

- 50K USD



# Benefits of the Climate Data Hub Option

## ✓ Builds on a Modern Strategic Platform

- Leverages the Climate Data Hub, aligned with broader data modernization (vs. limitations and outdated components)

## ✓ Lower Cost & Shorter Timeline

- Estimated cost: \$352,000 (vs. \$607,000)
- Delivery in 11 months (vs. 17 months)

## ✓ Scalable & Aligned with Future Developments

- Integrated with the ETF and future data workflows, ensuring long-term compatibility and avoiding duplication of efforts

## ✓ Streamlined Data Integration

- Brings all data into a central, consistent system with standardized structure and clear metadata definitions

## ✓ Simplified and Stable Solution

- No need for major upgrades, no downtime and transition risks, ensures sustainable system operation over time
- Unified dataset ensures a cleaner and more intuitive user interface and minimizes long-term maintenance demands



Thank you!

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