



مبادرة أبوظبي العالمية للبيانات البيئية
Abu Dhabi Global Environmental Data Initiative

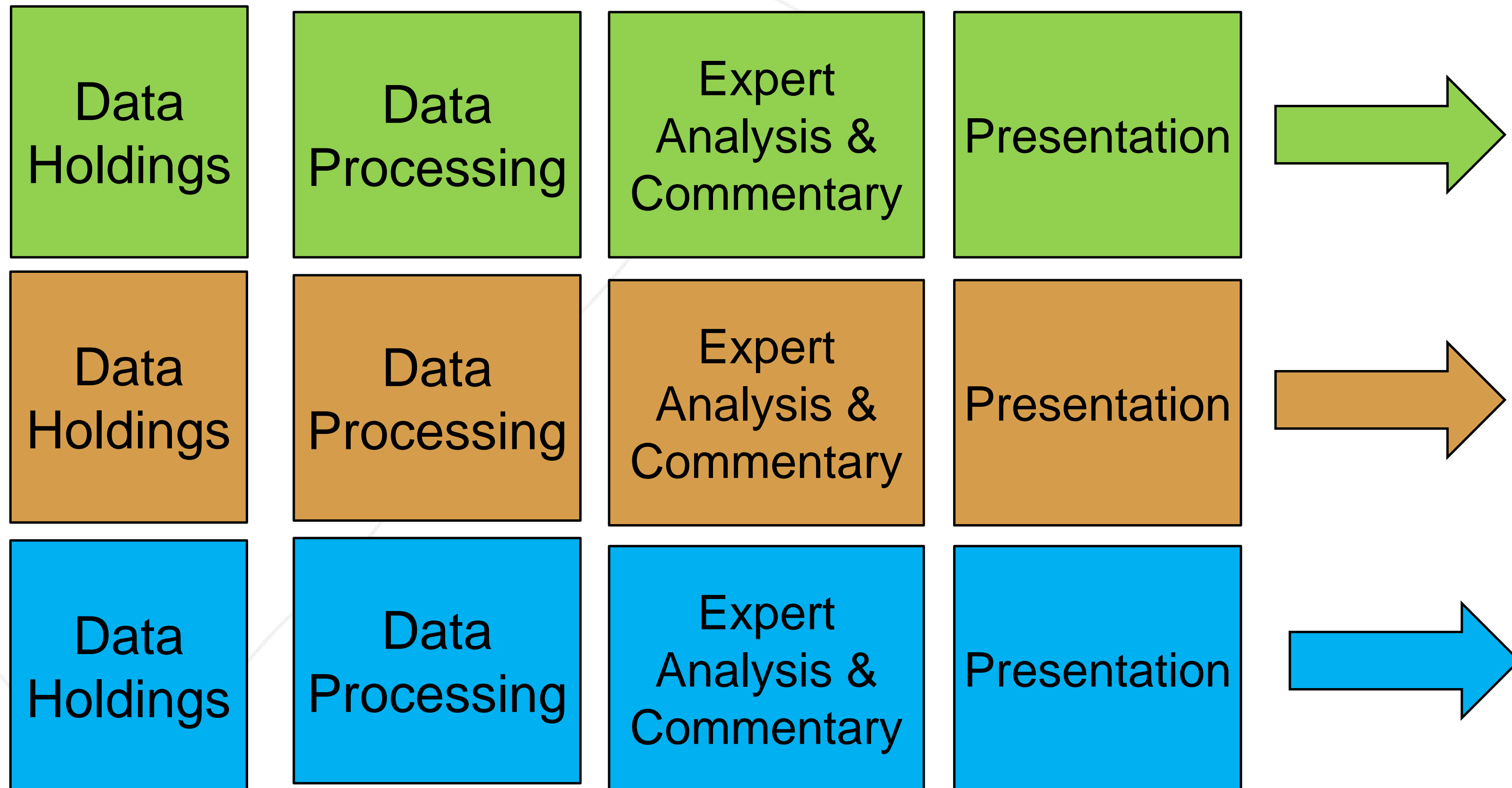


The Indicator Reporting Information System (IRIS)

Formerly the National Reporting Toolkit (NRT)

Derek Gliddon
National Partnerships Manager

Typical Situation



1. Thematic silos
2. Ad hoc processes
3. Manual workflows
4. Manual collation of results



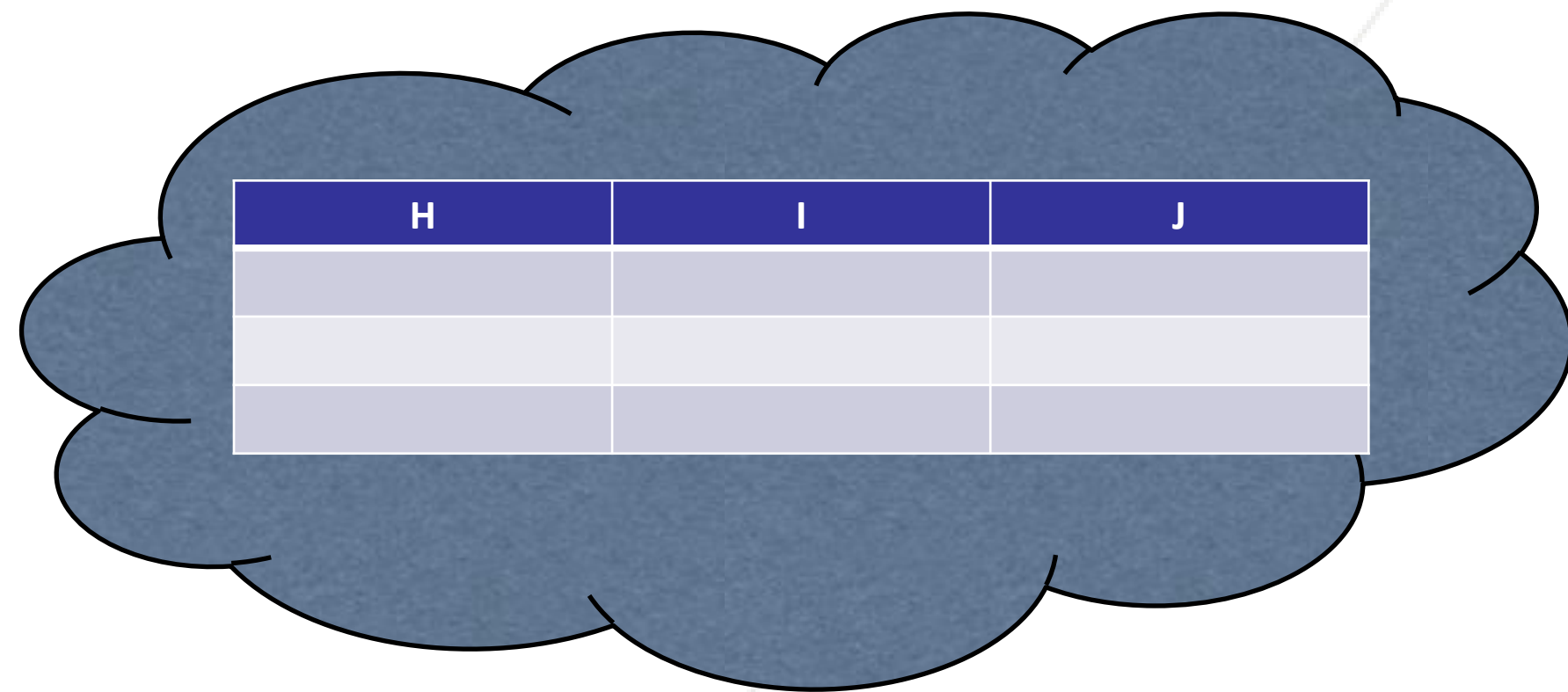
Decision maker overwhelmed with uncoordinated information

The Requirement/Briefing

1. An indicator-based reporting tool
2. To enable integrated (multi-indicator) environmental assessment – inclusive of social and economic dimensions
3. To provide a reporting capability for organisations with very limited resources
4. To be relevant at all scales of Government (Local to Global)
5. To enable formal inter-organizational reporting (Local >National > Regional/Global)
6. To support all data and information sharing policies – from fully Open to very-conservative
7. To support tactical reporting (dashboard)
8. To be relevant around the world (not tied to any specific indicators or regional specifics)
9. To be a durable solution (capable of accommodating new and evolving indicators)
10. To deliver business benefit – i.e. improving organisational capabilities and efficiency (automate routine reporting.)
11. To support Capacity Building by To enable establishment of a global Reporting Community of Practice with a community managed report and indicators resource/knowledgebase

Indicators

A	B	C



H	I	J

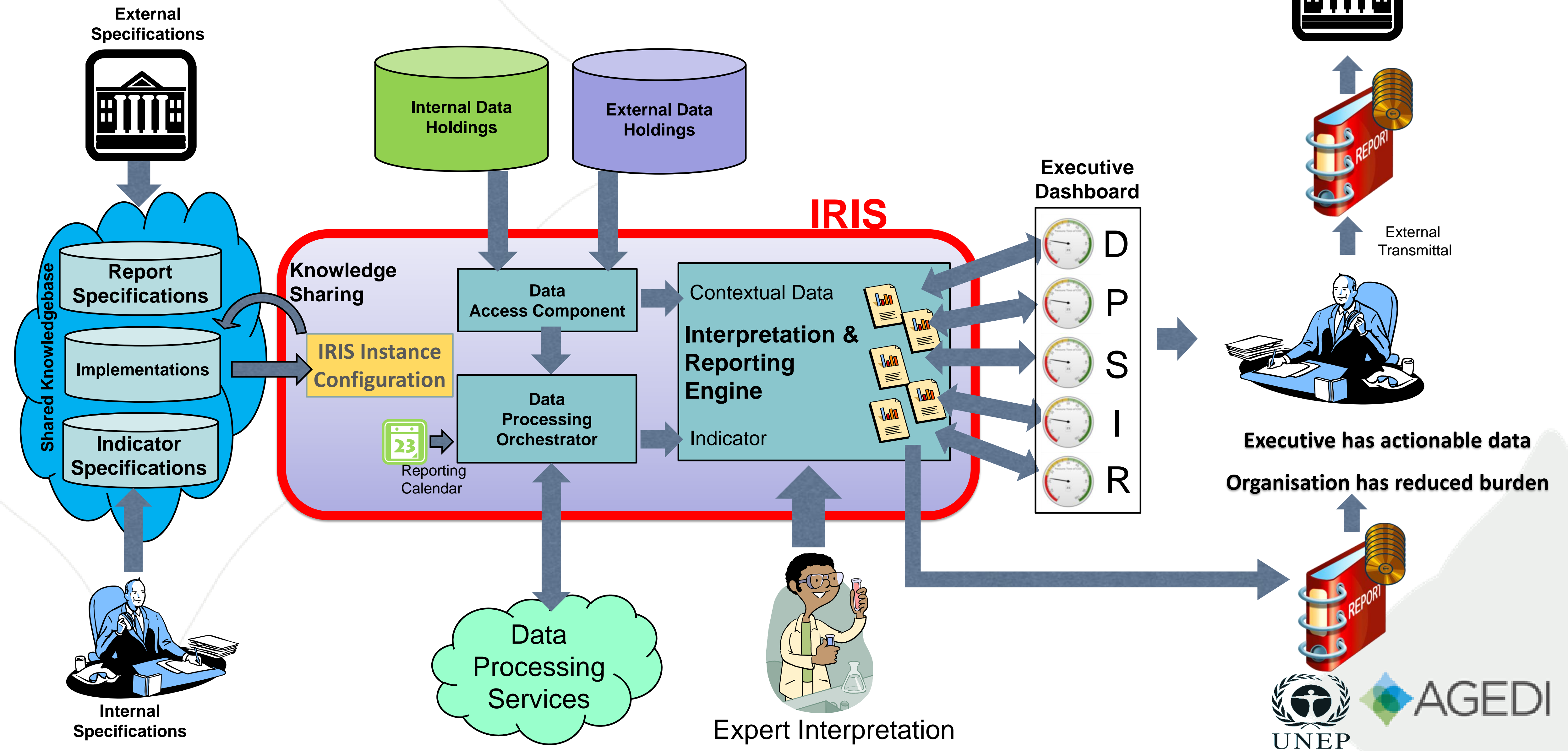
X	Y	Z

- The IRIS supports any indicator that can be expressed as a function

$$\text{Indicator value} = f(A, J, Z)$$

- Indicators implemented in a IRIS install/profile determined by users reporting obligations or operational needs
- Function may be simple or complex
 - algebraic, scripts, spatial analyses etc.
- Function involves one or more data parameters
- Parameters have documented specifications
- Collection and recording standards
- Parameters may come from one or more sources
- Sources may be local or remote
- Sources may be diverse in form (file, d/b, web)

Conceptual Architecture



Shared Knowledgebase

Reporting Obligations

Report Templates

Goals

Targets

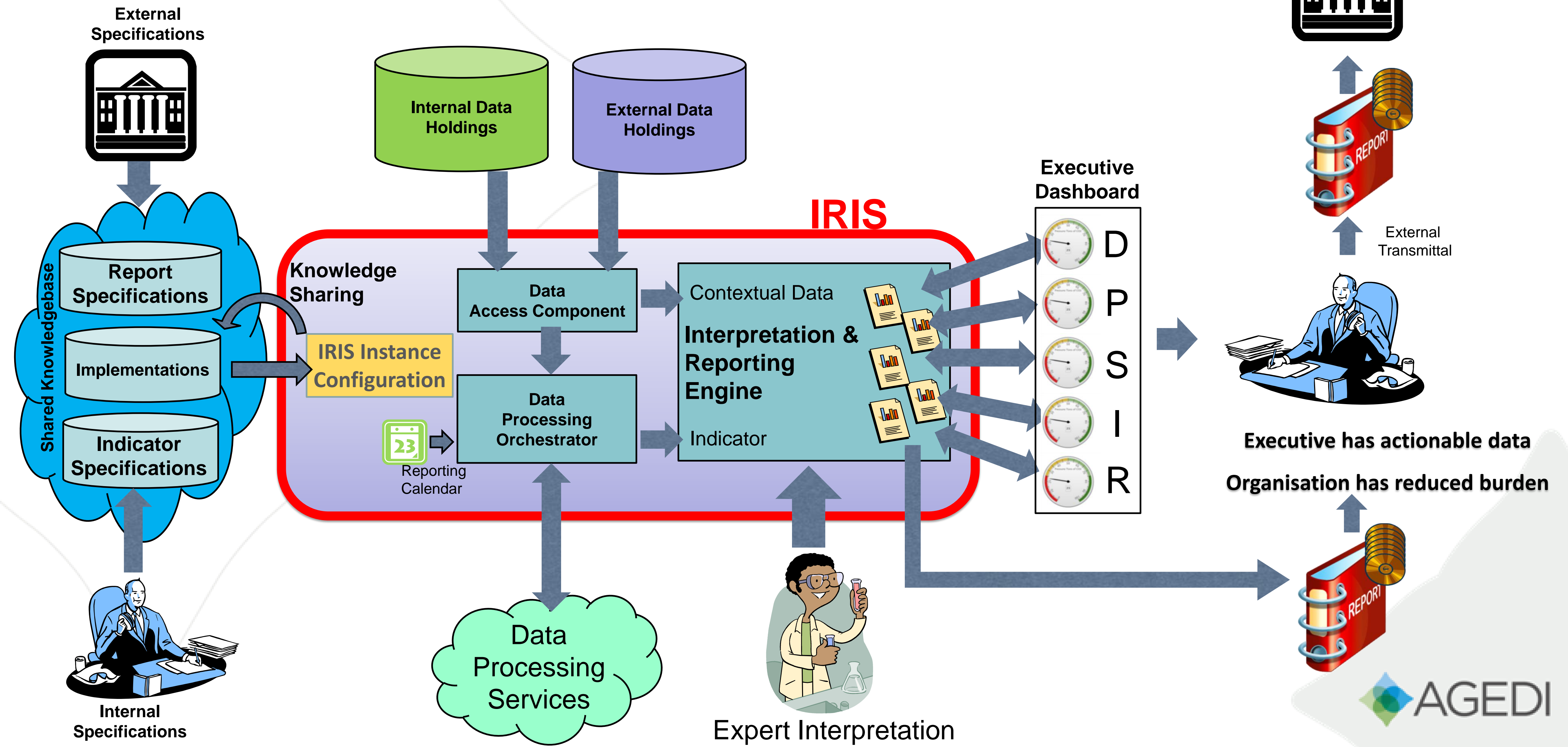
Indicators

Data Specifications

Data Collection & Processing

- **SKB will allow organizations with resources and technical leadership skills to develop indicator implementations and share them (with commentary) with others**
- **Applicability, Best practice, Experience**

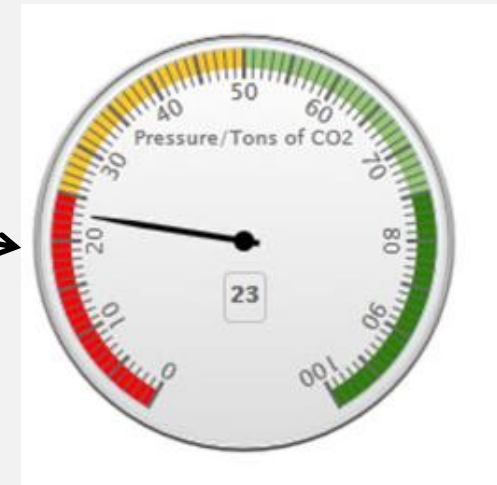
Conceptual Architecture



Interpretation Sheet

Indicator value for reporting period

Indicator Title



Period

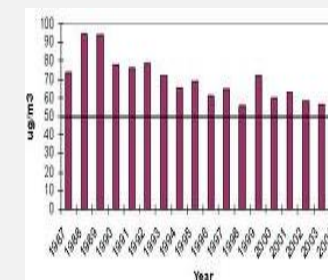
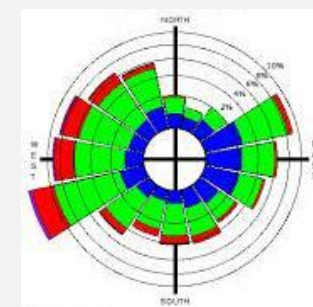
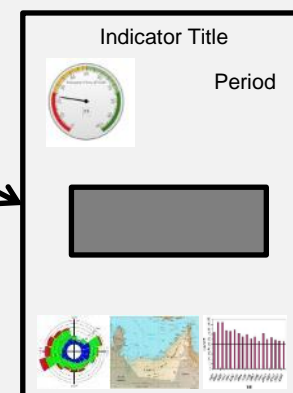
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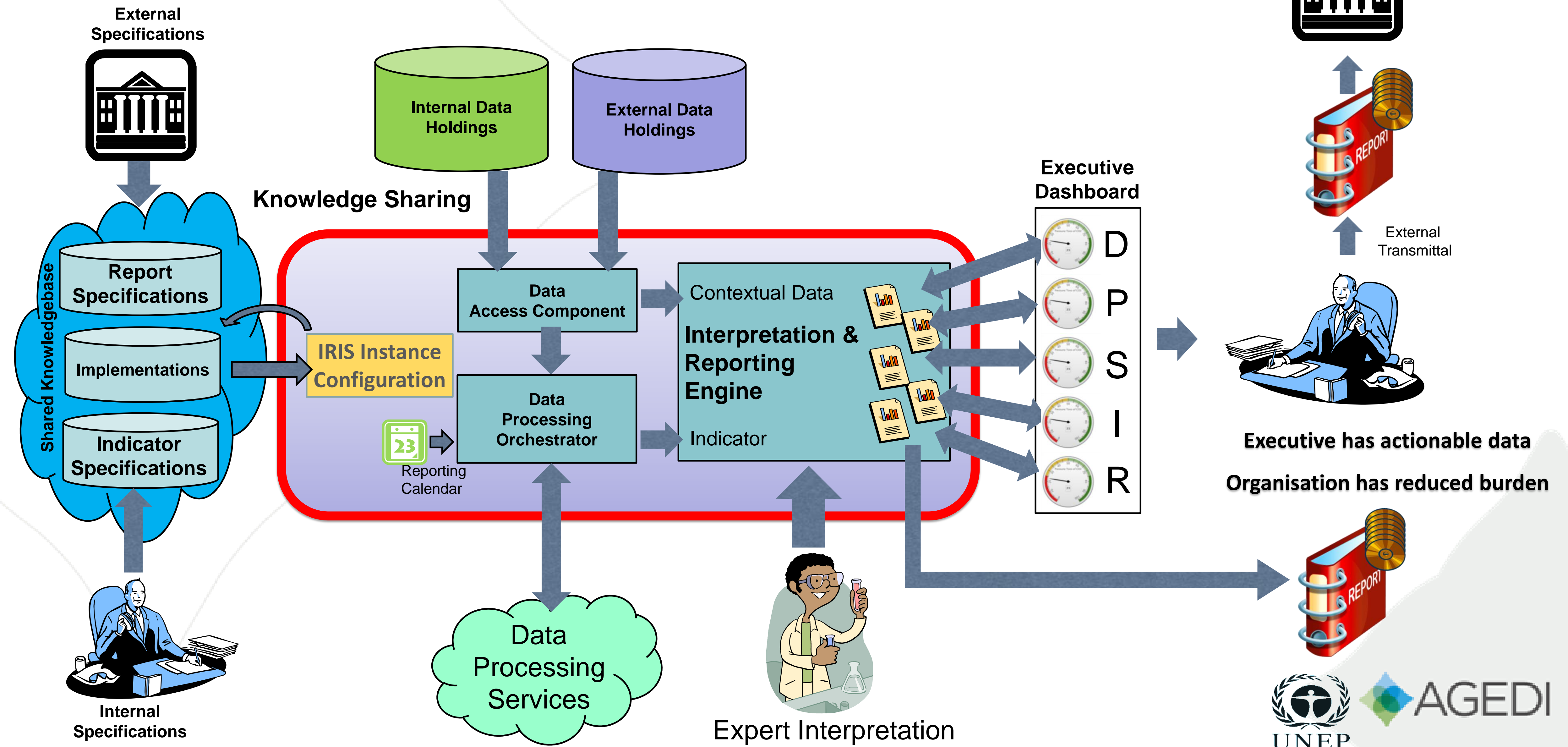
Subject matter expert enters interpretation narrative

Previous sheets to guide interpretation

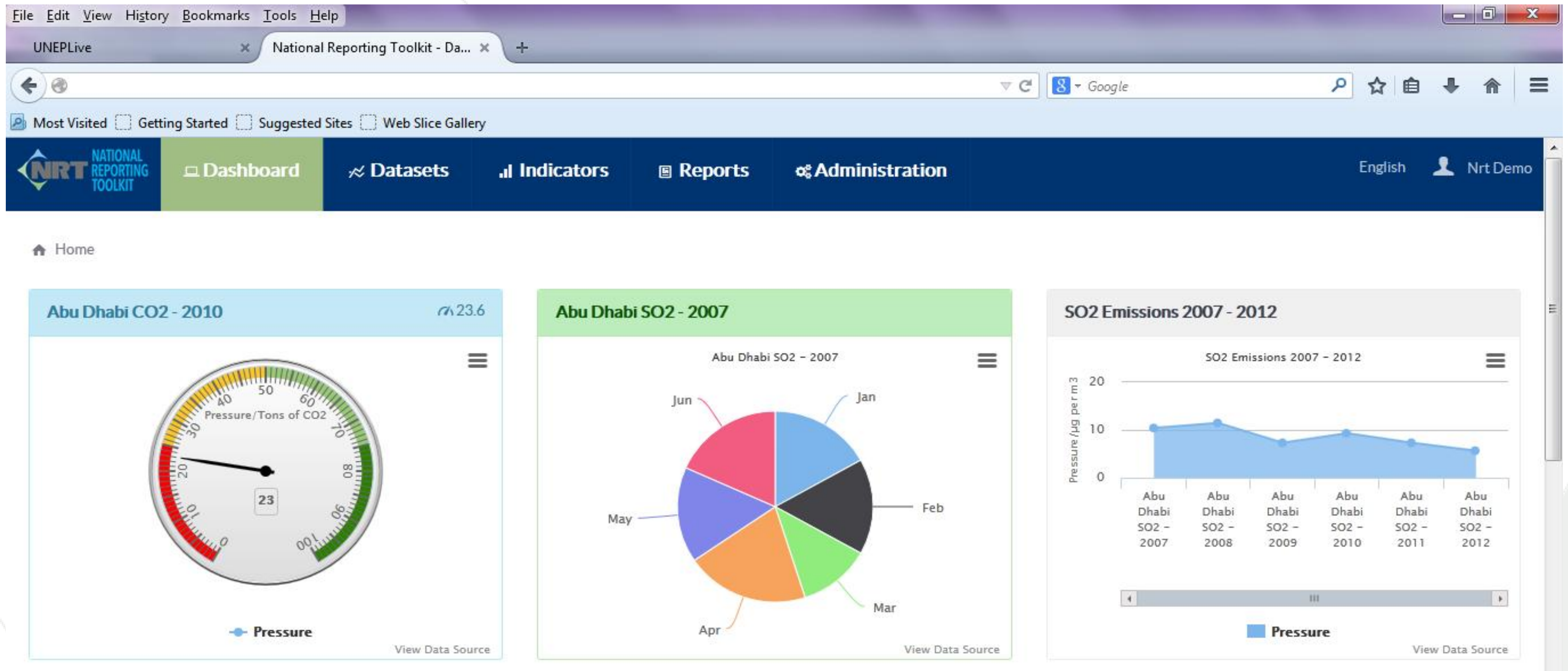


Related/contextual data-linked elements aid interpretation

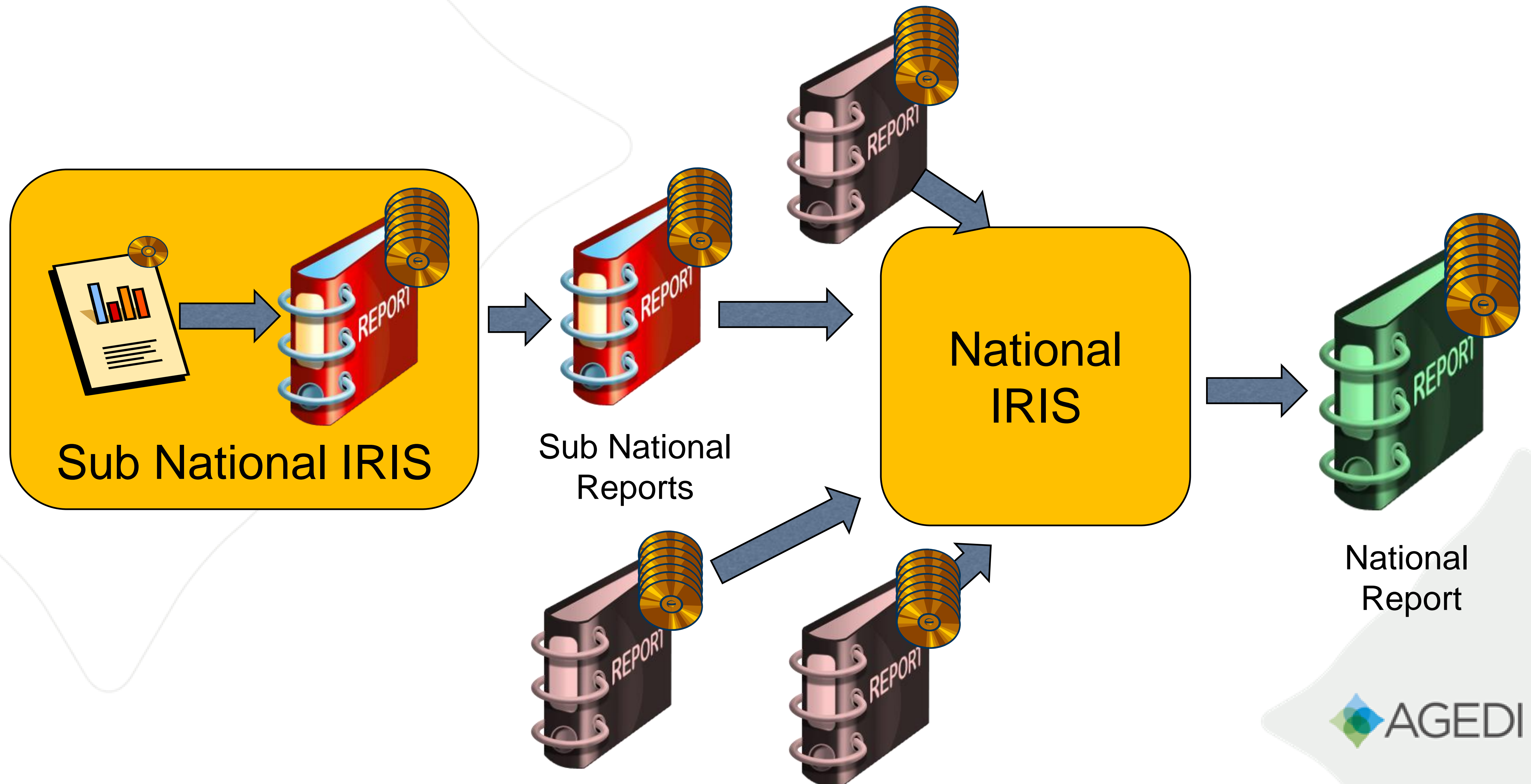
Conceptual Architecture



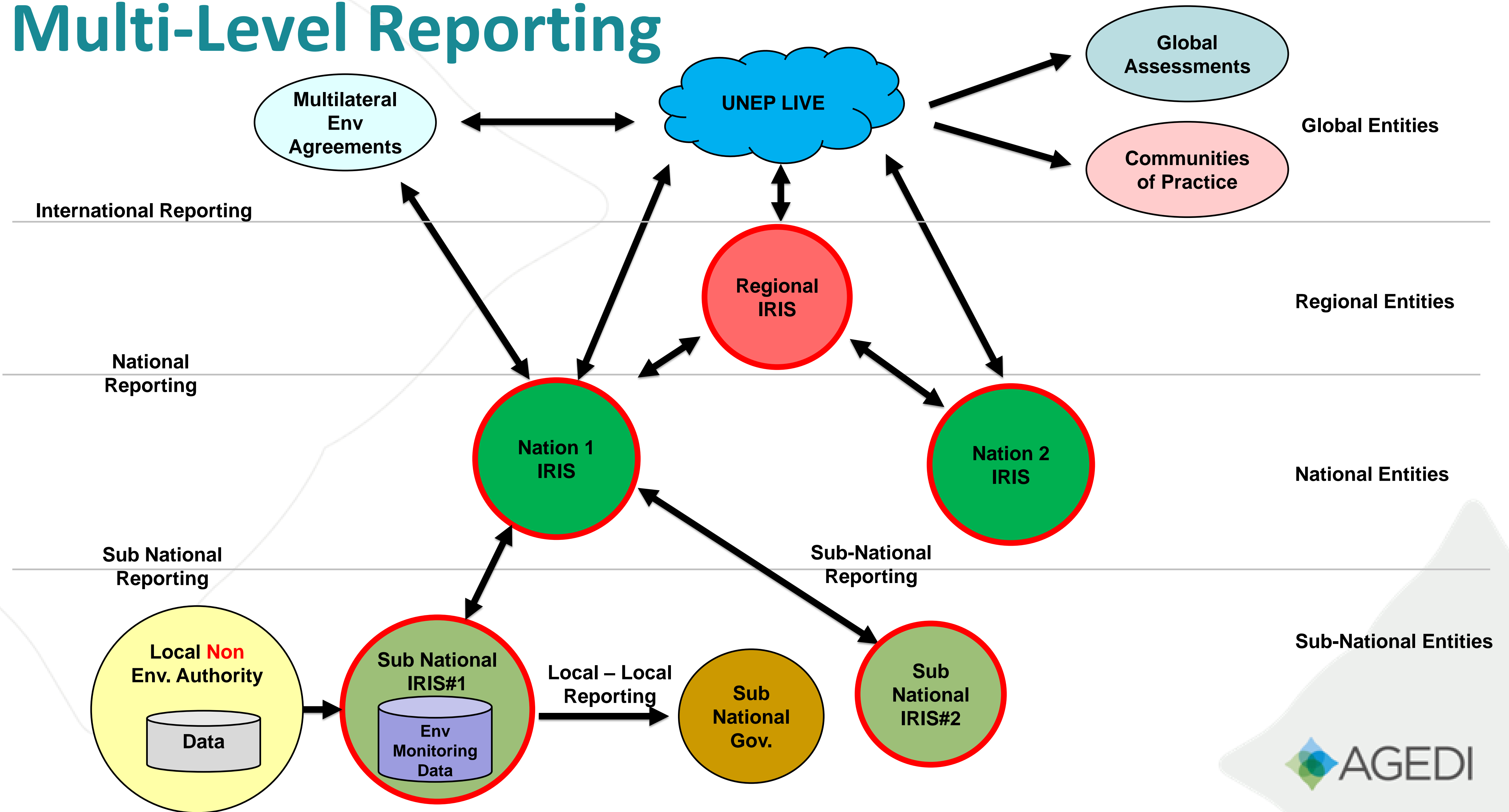
Executive Dashboard



IRIS Reports as Data Transfer Vehicle



Multi-Level Reporting





United Nations Environment Programme
environment for development



Climate Change



Disasters & Conflicts



Ecosystem Management



Environmental Governance



Chemicals & Waste



Resource Efficiency



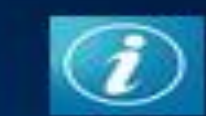
Environment Under Review

About us

LATEST: Indicators for a Resource Efficient and Green *Asia Pacific* region now available. Also see *country-specific* efficient indicators

[Communities of Practice](#)

[Mapping](#)



UNEP Live

OUR CHANGING ENVIRONMENT: PLACE BY PLACE

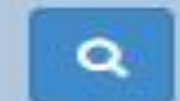
Select Country/Region/Global

Or

Select Theme

Go

Search



Global

Maps ▾

[Graphs](#)

[Global Data](#)

[Traditional Knowledge](#)

[UN World boundaries](#)

[2014 Environmental Performance Index \(EPI\)](#)

[Anthropogenic Biomes](#)

[Carbonn Cities Climate Registry](#)

[Coral Reef Watch](#)

[Disaster Alerts](#)

[Disaster Risk \(PREVIEW\)](#)

[Disasters \(PREVIEW\)](#)

[Disasters - Past Events \(PREVIEW\)](#)

[Disasters - Population Exposure \(PREVIEW\)](#)

[Disease Outbreak News \(MERS and H7N9\)](#)

[Earthquakes \(weekly data\)](#)

[Ebola: Situation Map as of 29th July 2015](#)

[Estimate of Plastic Pollution in the World's Oceans](#)

[Freshwater Water Monitoring Stations and Treaties](#)

[Global Agricultural Lands: Croplands](#)

[Global Agricultural Lands: Pastures](#)

[Global Amphibians Family Richness](#)

[Global Annual PM 2.5, 2001 - 2012](#)

[Global Annual PM2.5 Grids from MODIS](#)

[Global Drought Mortality Risks and Distribution](#)

[Global Flood Hazard Frequency and Distribution](#)

[Global Forecast System](#)

[Global Forest Watch](#)

[Global Human Footprint](#)



UN World boundaries

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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[Knowledge Providers](#)

[Apps](#)

United Arab Emirates

Maps ▾

Graphs

Country Data

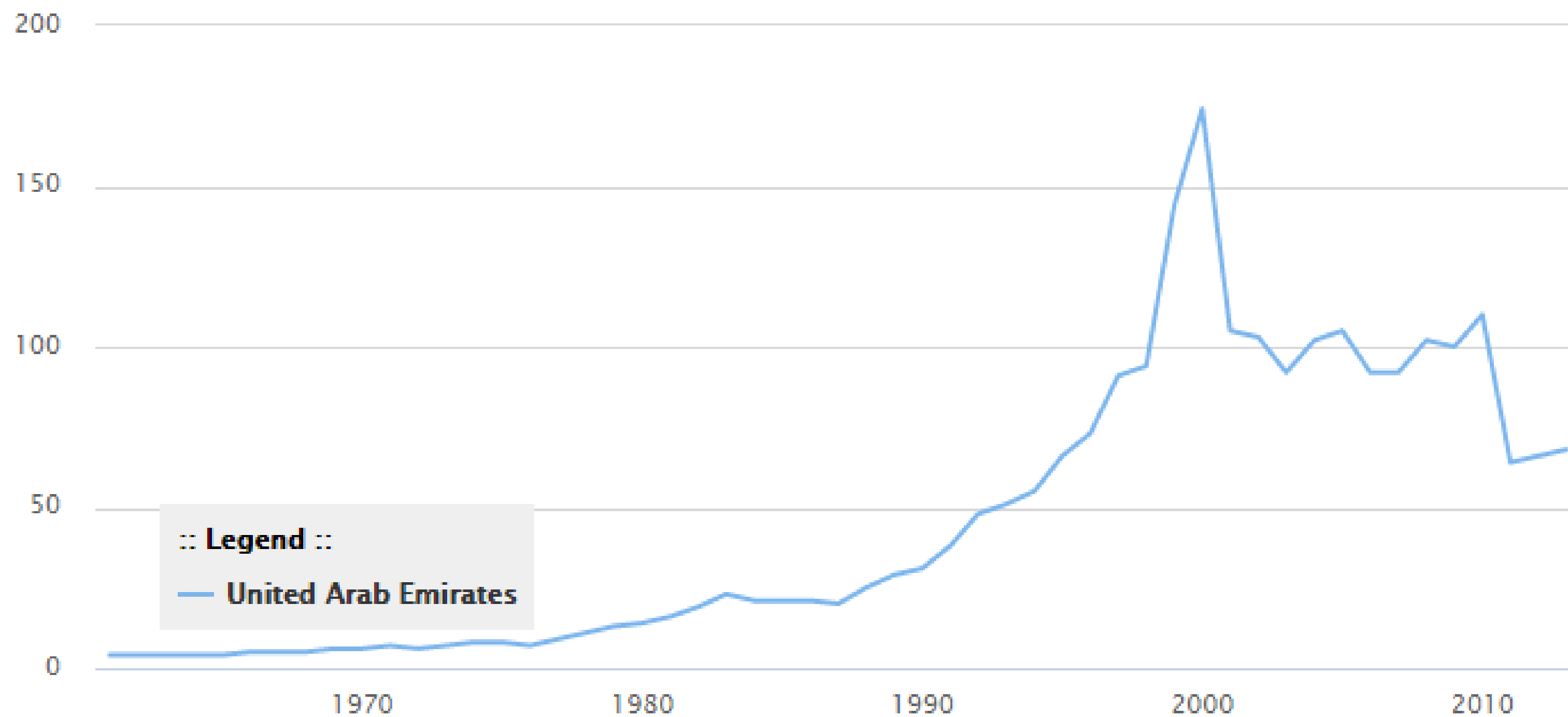
Traditional Knowledge

Net Production Index - Agriculture



Index (2004-2006 = 100)

Original data source: [FAO](#)



Legend

United Arab Emirates

Source: UNEP (2015): The UNEP Environmental Data Explorer, as compiled from Food and Agriculture Organization of the United Nations (FAO) - FAOStat . United Nations Environment Programme. <http://ede.grid.unep.ch>.

The FAO indices of agricultural production show the relative level of the aggregate volume of agricultural production for each year in comparison with the base period 2004-2006. They are based on the sum of price-weighted quantities of different agricultural commodities produced after deductions of quantities used as seed and feed weighted in a similar manner. The resulting aggregate represents, therefore, disposable production for any use except as

Analyze one indicator across countries

Select countries

United Arab Emirates

Select indicator

Net Production Index - Agriculture

Select year(s)

from:

1961

to: (optional)

2013

Per capita

Graph description

[Graph options »](#)

Draw graph

To create a map using your data, first choose a base map from the options provided and then simply drag and drop data (in a CSV or Excel file) on to the map. Your file must include coordinates (latitudes and longitudes).

HOME ▾ Mapping

[Modify Map](#) [Sign In](#)

The screenshot displays the UNEP Live Mapping interface. At the top, there are navigation links for 'HOME' and 'Mapping', along with 'Modify Map' and 'Sign In' buttons. Below the navigation is a toolbar with 'Details', 'Basemap', 'Share', 'Print', and 'Measure' options, and a search bar labeled 'Find address or place'. The main map area shows a world map with several orange circular data points of varying sizes, primarily concentrated in the Atlantic and Indian Oceans. A sidebar on the left contains a 'Contents' panel with a list of layers: 'Sea Birds' (checked), 'FAO Soils', 'Global Land Cover', 'Natural Capital Biodiversity', 'Vegetation Tree Cover', and 'World Database on Protected Areas' (highlighted). Below the sidebar are map controls including zoom in (+), home, zoom out (-), and refresh icons, and a scale bar showing 0, 500, and 1000 km. The bottom right corner features the 'United Nations Cartographic Section' logo and the 'POWERED BY esri' logo.

To save your modified map subscribe to [arcgis.com](#)

Other Programmes

Satellite/Space Programmes

[GEOSS Portal](#)

Reporting Obligations

Show entries

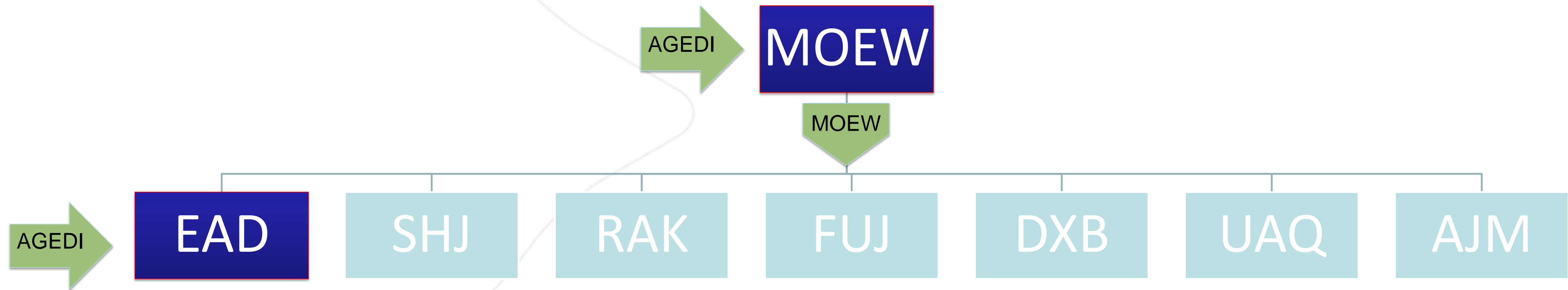
Search:

Obligation	Legislative Instrument	Report To	Reporting Format	Deadline
Annual Report	Convention on International Trade in Endangered Species of Wild Fauna and Flora	CITES Secretariat	Guidelines for the Preparation and Submission of CITES Annual Reports	2015-10-31
Biennial Report	Convention on International Trade in Endangered Species of Wild Fauna and Flora	CITES Secretariat	Biennial Report Format	2016-12-31
Biennial Update Report (Non-Annex I Parties)	United Nations Framework Convention on Climate Change	UN Framework Convention on Climate Change	UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention	2016-12-31
DDT Registration	Stockholm Convention on Persistent Organic Pollutants (POPs)	Secretariat of the Stockholm Convention	DDT Questionnaires	2016-12-31
Export notification	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	Secretariat for the Rotterdam Convention	Export notification form	
			FRA 2015	

IRIS as a Capacity Building tool

- **Focuses**
 - Organisational activities around reporting obligations/processes
 - Executive dashboard reveals the state of organisational monitoring and management
- **Encourages**
 - Systems approach to Environmental Management
 - e.g. DPSIR framework
 - Collection and Storing of field data
 - According to standard methods
 - In a timely manner
- **Facilitates**
 - Coordinated approach to environmental management and reporting across tiers of Government

Deployment of Model (e.g. UAE)



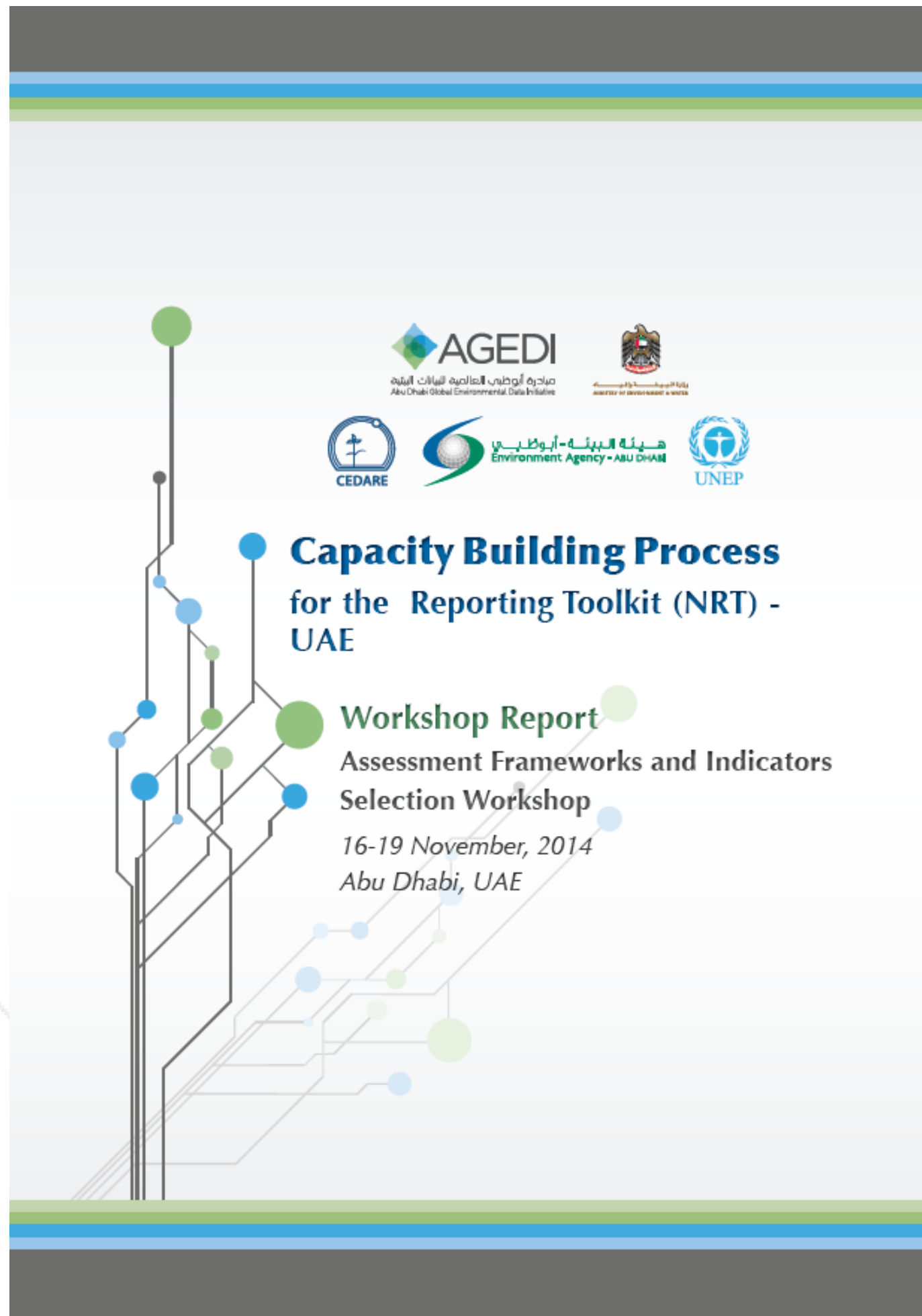
❖ Most effective as a top-down (Ministry) led initiative

- Capacity Building Workshops / On-line training
- Web version (UNEP-hosted)
- Local versions locally-resourced (MOEW hosted or sub-nationally – per data policy)

❖ Repeated at Regional Scale (with UNEP)

❖ Potential to repeated at all scales across globe (with UNEP et al)

Capacity Building Workshop (Nov 16-19 2014)



AGEDI
مبادرة أبوظبي العالمية للبيانات البيئية
Abu Dhabi Global Environmental Data Initiative

CEDARE
هيئة البيئة - أبوظبي
Environment Agency - ABU DHABI

UNEP

Capacity Building Process for the Reporting Toolkit (NRT) - UAE

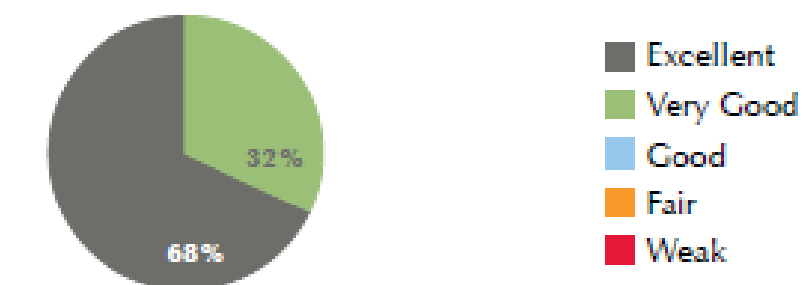
Workshop Report
Assessment Frameworks and Indicators
Selection Workshop
16-19 November, 2014
Abu Dhabi, UAE



Overall Organization



How relevant are the contents of the workshop
to the national needs



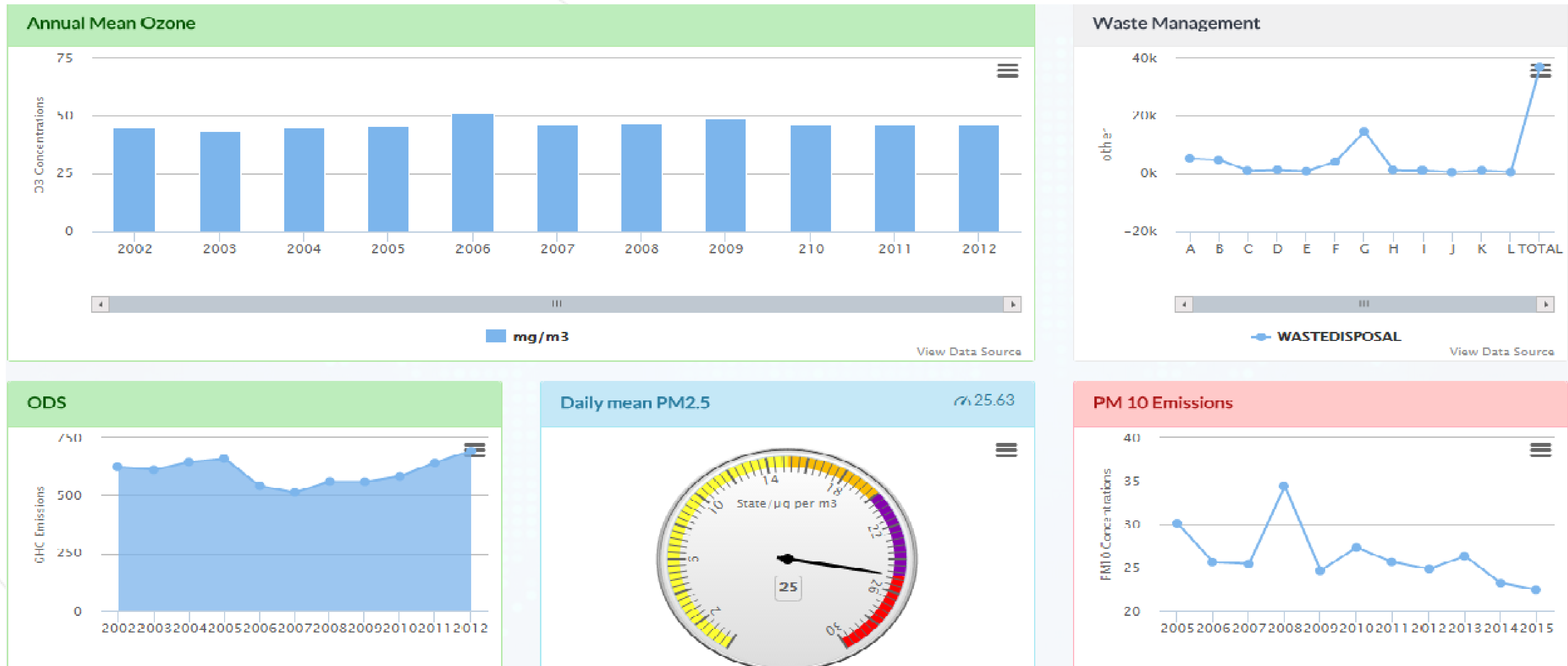
Practical use of workshop material



Efficiency of presenters

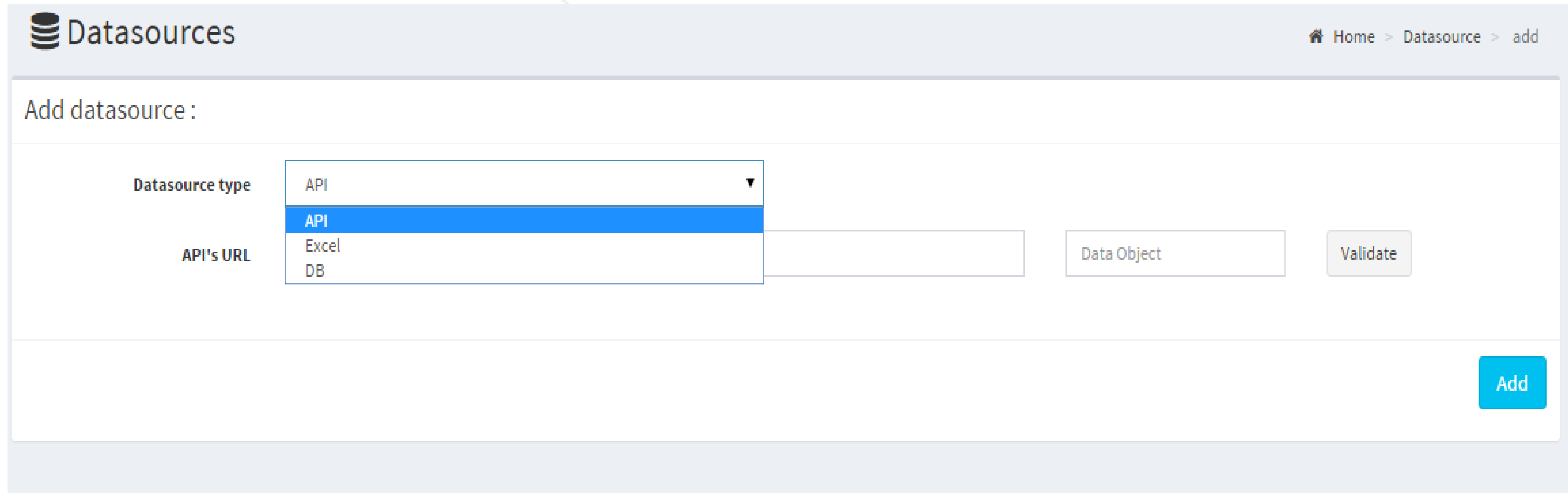


Multi-tab Dashboard



Multiple Dashboards that provide a graphical snap-shot of indicators that together highlight, in a quick, easy way, the state and trends of the environment.

Data Sources



The screenshot shows a web interface for adding a data source. The page title is 'Datasources' and the breadcrumb trail is 'Home > Datasource > add'. The main heading is 'Add datasource:'. Below this, there is a form with the following elements:

- Datasource type:** A dropdown menu with 'API' selected and highlighted in blue. Other options visible are 'Excel' and 'DB'.
- API's URL:** An empty text input field.
- Data Object:** An empty text input field.
- Validate:** A button to validate the input.
- Add:** A blue button to submit the form.

Data Sources can be uploaded so they are available for indicator development for multiple reporting needs.

Datasets

Datasets

Edit dataset

- Definition
- Connect datasource
- Computed value
- Chart
- Map

1. Define your dataset

Dataset name

2. Select indicator definition to use for this dataset or create a new one ...


Indicator definition

Definition name

Description

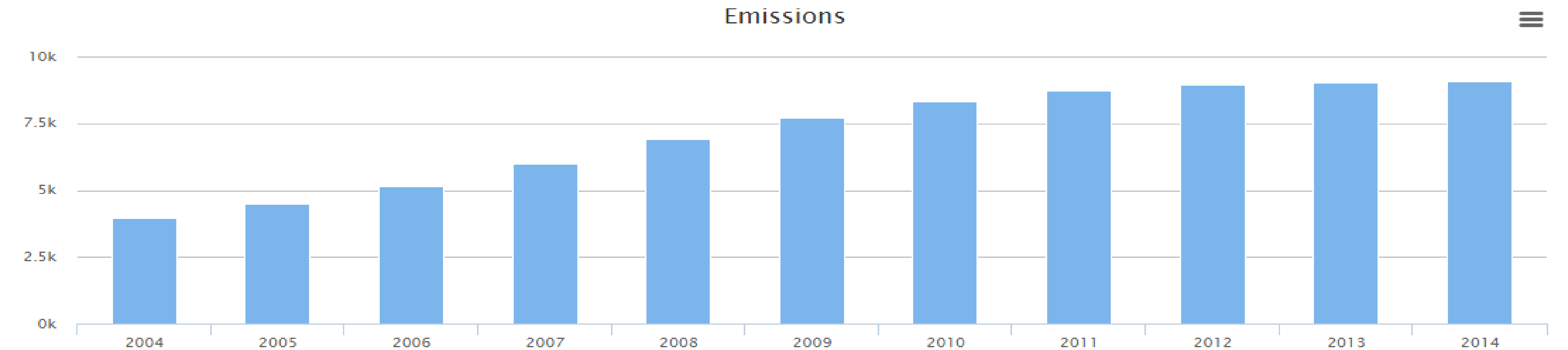
Datasets are used in the calculation of indicators and for supporting elements...

Data – Supporting Maps and Charts

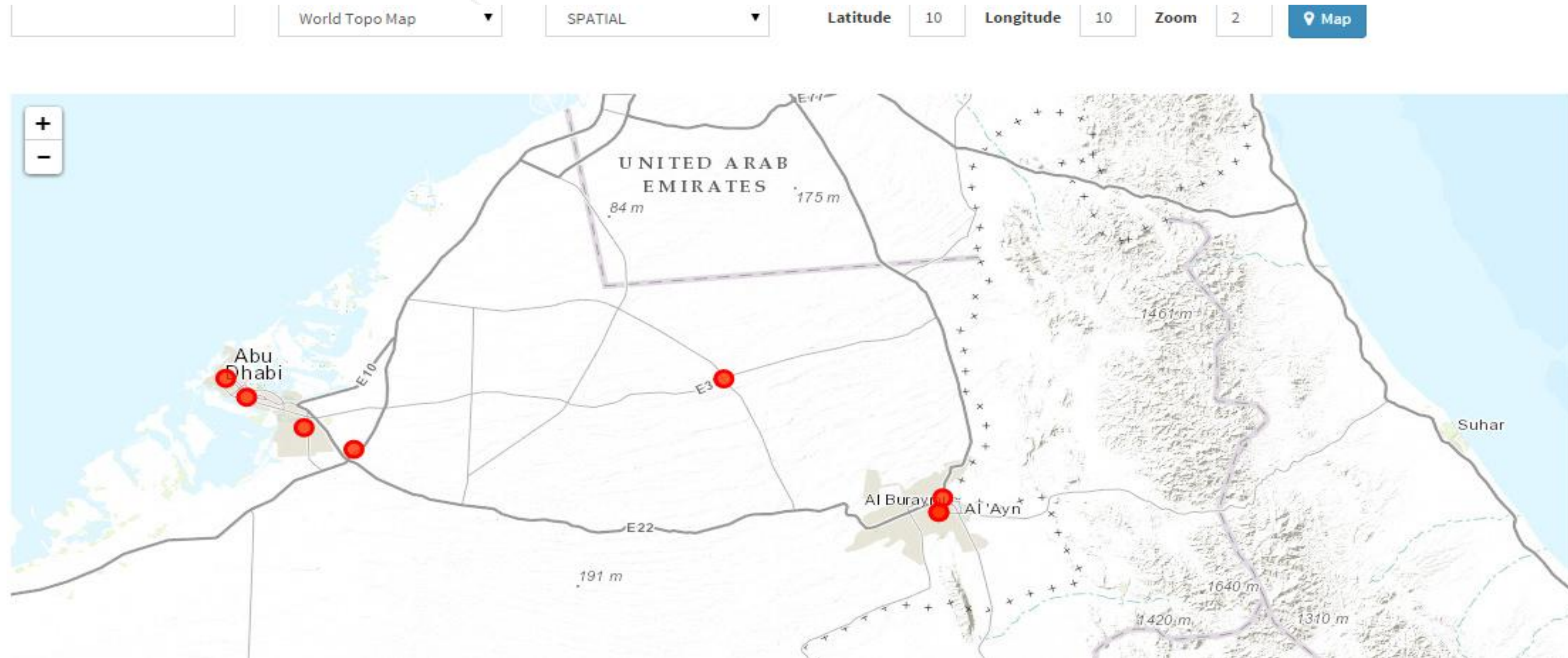
Definition Connect datasource Computed value **Chart** Map 

Title: Type: Source:

y-axis from: to x-axis from: to



Data – Supporting Maps and Charts



Reporting Templates

The screenshot displays a web application interface for creating reports. At the top, there is a 'Create report' header with a home icon and a breadcrumb trail 'Home > F'. Below this, the main content area is titled 'Create report'. A 'Template' dropdown menu is set to 'Protected Area Report Template', with a 'Load' button next to it. The interface is divided into two main sections: 'Header' and 'Content'. The 'Header' section contains a rich text editor toolbar with various icons for text formatting (bold, italic, underline, strikethrough, subscript, superscript, text color, background color), alignment (left, center, right, justified), bulleted and numbered lists, indentation, link, unlink, insert link, insert image, insert table, insert link, and insert help. Below the toolbar is a 'Header' text area. The 'Content' section contains another rich text editor toolbar with bold, italic, underline, bulleted list, numbered list, indentation, link, unlink, insert link, and paragraph icons. Below the toolbar is a 'Content Body' text area with a yellow icon. A 'Report Template Placeholder' dialog box is open, showing options for 'Indicator Type' (Map) and 'Indicator Categories' (Select...). The dialog box also has 'OK' and 'Cancel' buttons at the bottom.

- **Reports** can be generated using reporting templates, that bring in relevant indicators and an analysis of the data.
- With the data already in the system, it is a matter of a few clicks to produce a report with data, analysis, charts and maps.

Shared Knowledgebase

Import Indicator Definitions from SKB

Home > Dataset > import_indicator_definition

Import/Share with SKB Indicator Definitions

Local IRIS Instance Indicator Definitions

AQIs
GHC Emissions

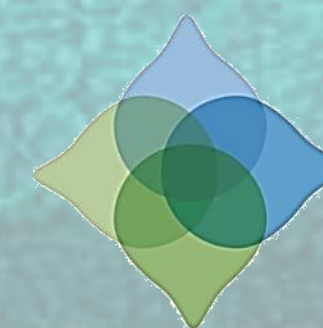


SKB Indicator Definitions

GHC Emissions
AQIs

- User can easily share resources with a public access database called the Shared Knowledge Base. Such resources include reporting templates, report specifications, indicator specifications, charts and maps created in IRIS.

Thank You



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