Tools Supported by the Secretariat

Sectoral Activity Data for GHG Emissions - SAGE

IPCC Inventory Software

Mitigation-Inventory Tool for Integrated Climate Action - MITICA

Interoperability with the UNFCCC reporting tools
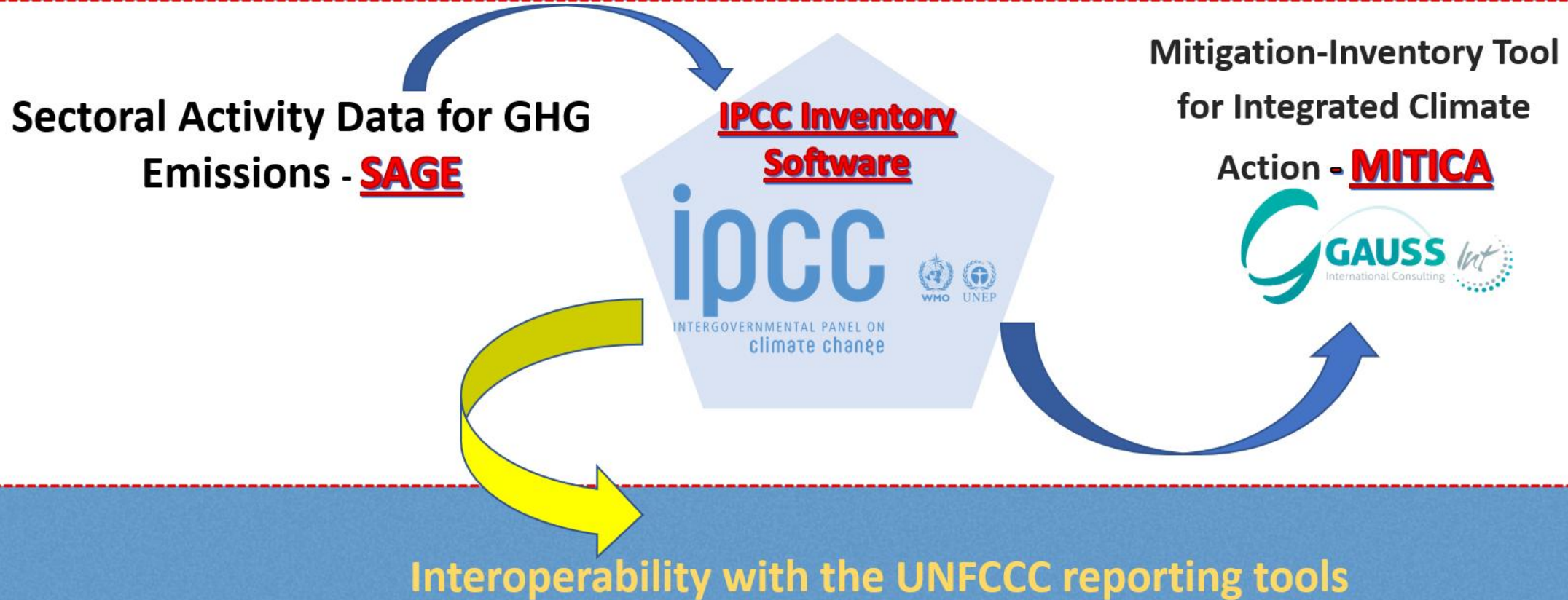
Agenda

15:00 – 15:05	**Opening remarks by the UNFCCC secretariat** – Mr. Dominique Revet, Team Lead, GHG Support Unit **Opening remarks by GHG MI** – Ms. Molly White, Senior Director, Education Program
15:05 – 15:20	**SAGE overview** – Ms. Olia Glade, GHG MI, Director MRV Systems
15:20 – 15:40	**Country panel on using SAGE** – Zimbabwe, Fiji and Vanuatu
15:40 – 15:55	**Facilitated Q&A from audience** - Ms. Olia Glade
15:55 – 16:25	**Demonstration of the tool features**, including: - how to use basic elements of the tool; and - problem-solving with elements of role-playing - Ms. Olia Glade
16:25 – 16:30	**How to request SAGE** - GHG MI **Closing remarks** - UNFCCC secretariat and, GHG MI

#Together4Transparency
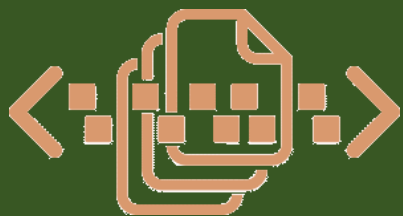
Recording metadata

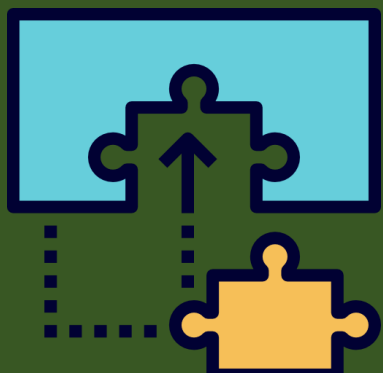Creates time series AD collections
for data repository & calculations

Implemented 2006 IPCC methodology

Data analysis

Time series
calculations

Data Gaps
search & filling

Compatible with UNFCC/ETF &
IPCC categorization

**Excel Import/Export
Option**
Facility of import and export
data via Excel files

Examples of what SAGE does and how it does it

SAGE: The home page

1. Creating and entering the data in AD Collections

Administration

Configuration - Basic

- 1. Energy
- 2. IPPU
- 3. Agriculture
- 4. Waste

💼 **AD Collections**

- + ⏱ Dashboard
- + Explore
- + Compare
- + ☑ Annual AD (21)
- + **Manage all**
- + Draft (21)
- + Review (0)
- + Approve (0)
- + Publish (1)

💼 **AD Collections**

List | Add

show 50

	id ↓
☐ ✏	100
☐ ✏	99
☐ ✏	98

List | **Add** | Delete | History | Info

Time-series AD collection code:

Add multiple:
☐

Year:

Copy AD records:
☐

AD collection approach:
Sectoral ▾

Name:

Description:

Open for editing from:
dd-----yyyy 📅

To:
dd-----yyyy 📅

Status:
enabled ▾

Sector → AD Collections → Manage all → Add

ghg management institute

2. Enter data in the AD Collection

3. Data analysis – Historical trend

sage — Sectoral Activity data for GHG Emissions · Energy

▶ ▾ · 🏠 ▾ · Switch to ▾ · 🔧 Configuration ▾ · 💼 AD Collections ▾ · ᴧ Analytic ▾ · 👁 Data Gaps ▾ · ⚙ Olia ▾ · ⎋ Logout · ◠ Reset · ✎

Historical trend - 1.B.1.a Coal

Analytic

- + 🕐 Dashboard
- + Total values
- + **Historical trend**
- + Rank by Category
- + Rank by Fuel
- + AD Change
- + Performance Indicator

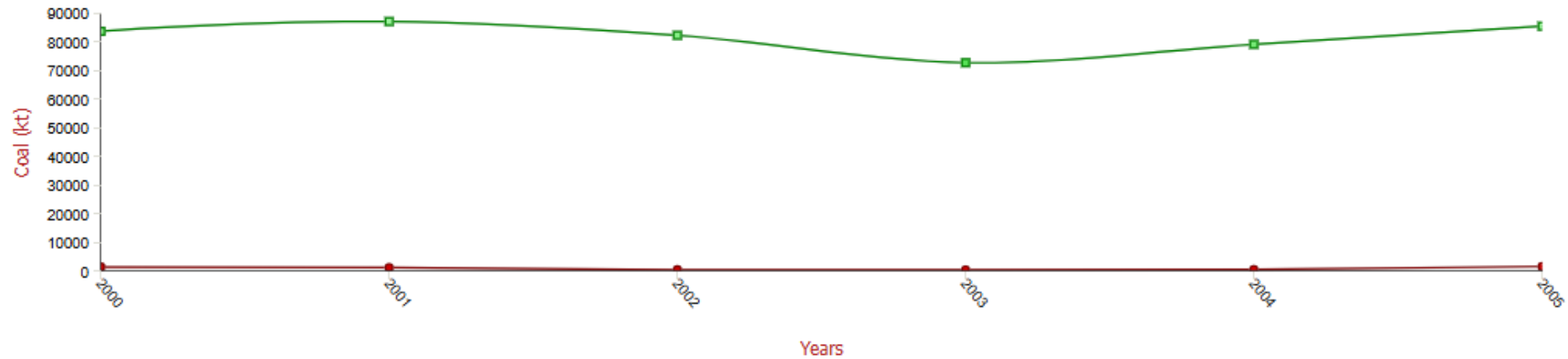| 1.A | 1.B.1.a Coal | 1.B.2.a Oil | 1.B.2.b Gas | Info |

Data categories: (all) ▾

Time-series AD collection:
GAPS_TEST_2000-2010 ▾

Years (leave empty for all):
2000-2005

Trend:

ipcc/year	2000	2001	2002	2003	2004	2005
1.B.1.a.i	1,454.75	1,289.77	517.40	454.06	589.38	1,637.43
1.B.1.a.ii	83,663.70	87,063.10	82,248.80	72,681.60	79,086.60	85,424.20

Analytic → Historical trend → Select category group → Fill the form → Calculate

☑ ─○─ 1.B.1.a.i   ☑ ─□─ 1.B.1.a.ii

Calculate   Clear

4. Data gaps – Extrapolation

Data Gaps

- + Dashboard
- + Find
- + Aggregate
- + **Inter./Extrapolate**
- + Surrogate
- + Average value
- + First value

Inter./Extrapolate - Data Gaps 1.A

| Data Gaps 1.A | Data Gaps 1.B.1.a Coal | Data Gaps 1.B.2.a Oil | Data Gaps 1.B.2.b Gas | Info | Modeling log |

Time-series AD collection: GAPS_TEST_2000-2010

Category: 1.A.1.a

Model as Reference Approach: ☐

Fuel: Anthracite

Years range for analysis: 2000-2006

Existing data:

years:	2000	2001	2002	2003	2004	2005	2006
⟳ calculate trend with:	☑	☑	☑	☑	☑	☑	*
⟳ model these data:							☐
Energy (TJ):	5,340.00	5,607.00	5,887.35	6,181.72	6,490.80	6,815.34	7,085.94

Process flow: Data Gaps → Find → Select category → Fill the form → Search → "Eye" → Inter/Extrapolate
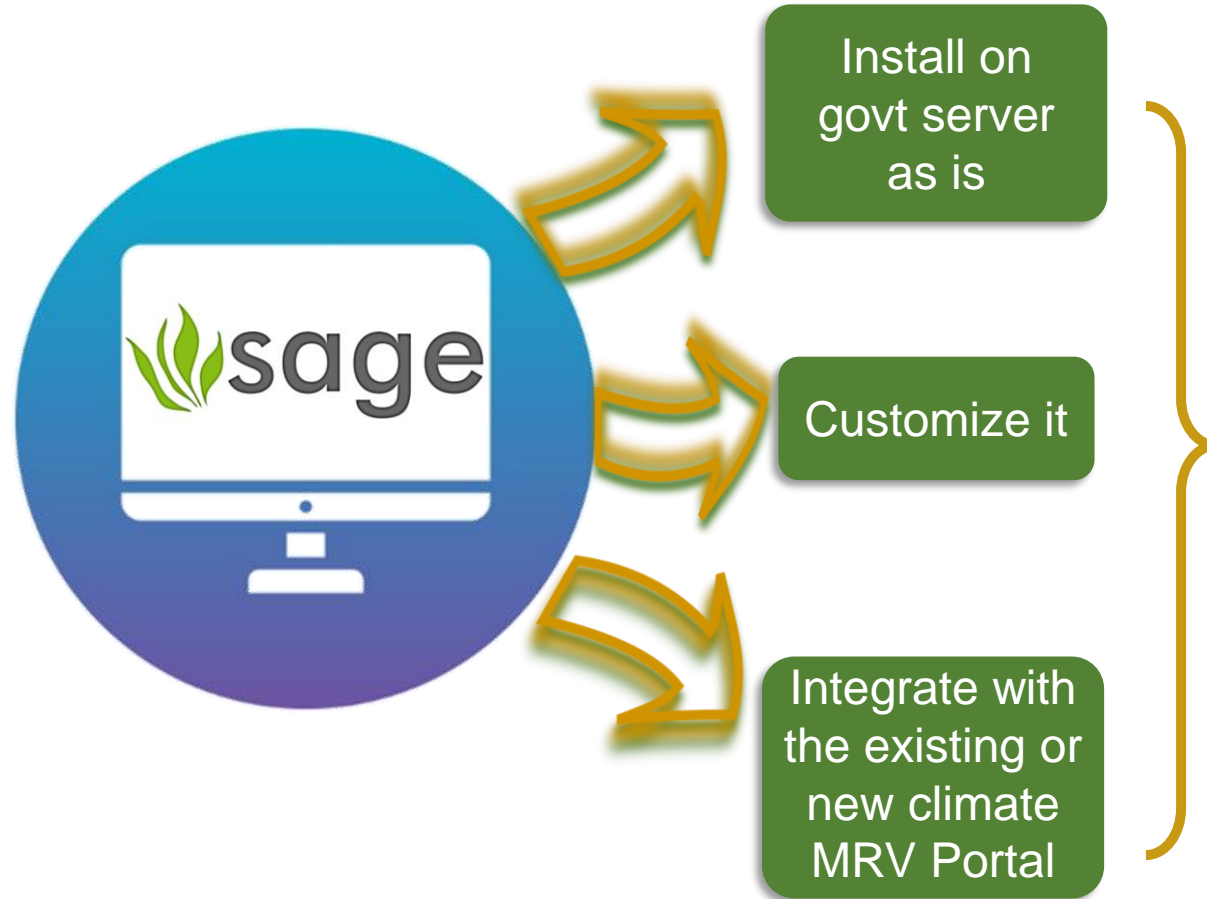
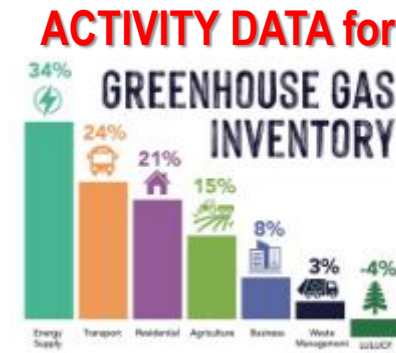☑ ■ MODELED ☑ ■ EXISTING ☑ Trend line (R-square = 0.9987)

[Calculate] [Clear] [Cancel]

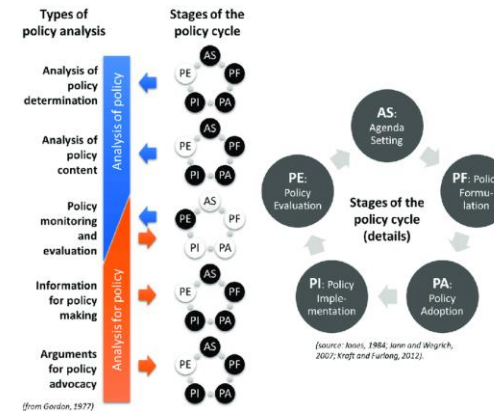# How exactly can governments/companies use this technology toward their Enhanced Transparency Framework goals?

Install on govt server as is

Customize it

Integrate with the existing or new climate MRV Portal

How can they use it?

ACTIVITY DATA for

POLICY ANALYSIS & REPORTING

NDCs

MITIGATION

What can they use it for?
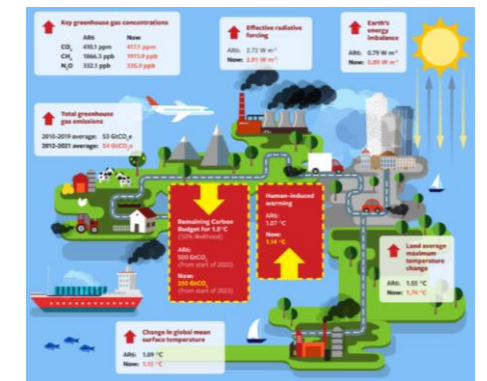
How to learn more about it and acquire it?

https://ghginstitute.org/sage/

https://unfccc.int/process-and-meetings/transparency-and-reporting/support-for-developing-countries/ghg-support#eq-4

Thank you!
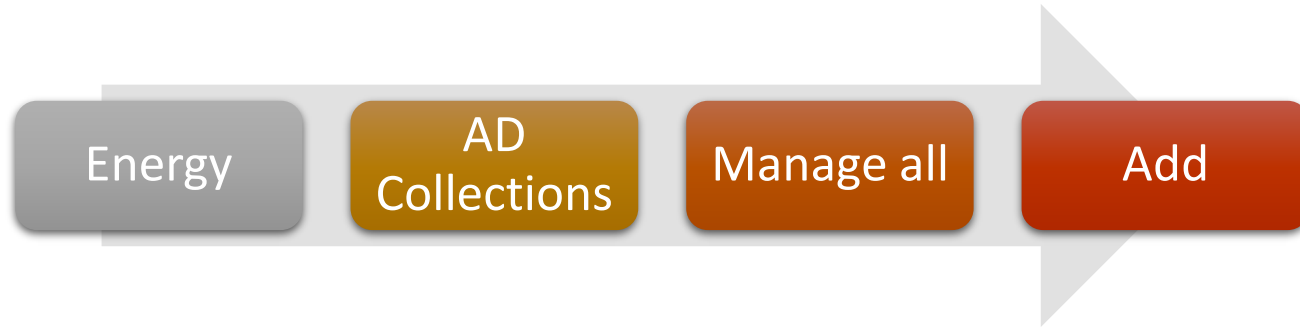
Exercise 1

Individual exercise (if the internet allows)

Please follow the instructor's lead

1. Create Activity data collection

- Login to SAGE
https://cop29.sage-test-25.xyz/
  - sageX   (X = 1 – 70), e.g., sage10
  - sagecop29

Energy	AD Collections	Manage all	Add

- Time-series AD collection = sageX_2022-2024 (X is the number assigned to you)
- Add multiple = select
- Years range = 2022-2024
- Name = sageX_2022-2024 (*you can copy and paste*)
- Description =my first AD collection, COP29
- Dates: from today to tomorrow
- Press **ADD**

2. Add a new record using a form

AD Collection	Annual AD	Select category	Add

- Time-series AD collection = sageX_2022-2024_2022
- Select 1.A Fuel Combustion → 1.A.3.a T1 (= tier 1)
- Click **ADD (form appears)**
- Name = sageX (your collection)
- Category =Domestic aviation
- Leave aggregation and statistics quality as is
- Fuel = aviation gasoline
- Click **OK** to invitation to set fuel parameters from IPCC defaults

Optional:

Repeat these steps for the year **2024** (use **1100** TJ)

- **Enter some fuel consumption data:**
  - Value = 1000
  - Unit = TJ
  - Type = survey
  - Source = "National fuel statistics
  - Date = today
  - Reference = COP29
- Uncertainty: Set from default
- Press **Save**

3. Calculate the AD change between selected two years

| Analytic | AD change | Select category group | Fill the form | Calculate |
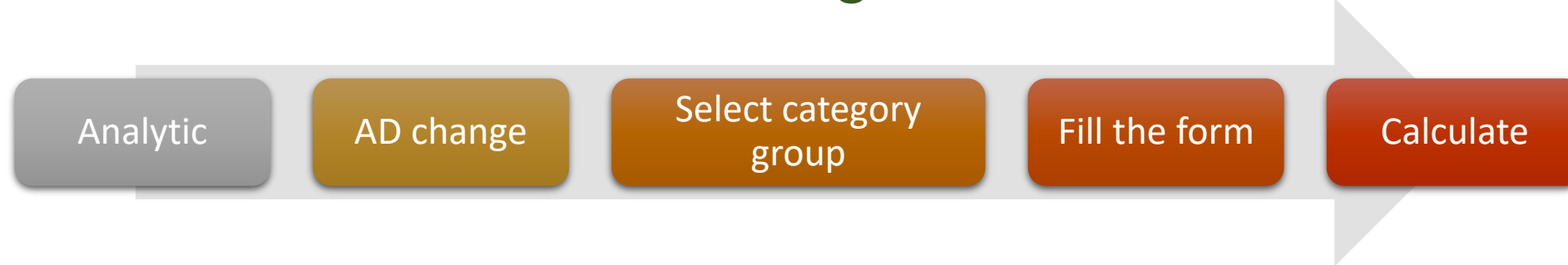
- Category: pick *1.A.2.a/Iron and Steel*
- Time-series = *GAPS_TEST_2000-2010*
- Sum sub-categories – leave empty
- Years = 2000-2005
- Click Calculate
- Now select years 2000 and 2005
- Click Calculate
- What did you get?

4. Data gaps

Data Gaps	Find	Select category	Fill the form	Search	"Eye"	Inter/ Extrapolate

- Click Data gaps → Find (links on the top of each page)
- In Find: Click on the tab *Data Gaps 1.B.2.a Oil*
- Time-series = *GAPS_TEST_2000-2010*
- Years = 2000-2010
- Click on the "eye" icon
- Select *Inter/extrapolate*

- Click **Search**
- **What did SAGE tell you?** (also look at the R-square value under the graph)
- Unselect the year 2005 (the outlier) and click **Calculate**
- **Can you see the warning from SAGE now?** (look again at the R-square value under the graph)

Exercise 2

Group exercise (if the internet allows)

In your groups, attempt the questions provided:
Group 1: Q1 – 2
Group 2: Q3 – 4
Group 3: Q5 - 6

For ALL groups, for all tasks

- *Please use the EXERCISE 2.docx file*
- *The questions and the additional data are provided in the file for you*
- *Each question contains a hint with the pathway and the additional data (where needed)*

Country A scenario

Country A produces ammonia with the main purpose of synthetic N fertilizer production (Urea). It takes approximately 0,57 tonnes of ammonia to produce 1 t of urea. Approximately 80% of all produced ammonia is used for making urea annually. The base year = 2000, the final reporting year = 2020.

- Click on Switch to Quick links (links on the top of each screen)
- Select *2. IPPU*
- Use AD collection *IPPU_TEST_2000-2020, category 2.B.1 (Ammonia production)*