



**"Linking climate change statistics and policy"**  
Vlad TRUSCA, UN Climate Change Secretariat  
Fifth Meeting of the Expert Group on Environment Statistics, May 2018

# Who are we?

- UNFCCC - United Nations Framework Convention on Climate Change, 1992
- Kyoto Protocol, 1997 & Doha Amendment, 2014
- Paris Agreement, 2015



- intergovernmental negotiations
- constituted bodies
- technical expertise
- analysis of info & data

**"...stabilize GHG concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system."**



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# Reporting & Review

- **Mostly under Convention & Kyoto Protocol + Nationally Determined Contributions under Paris A.**
- **Two groups of Parties:**
  - Annex I Parties (developed countries)
  - Non-Annex I Parties (developing countries)
- **Different requirements:**
  - Methodological basis (IPCC guidelines)
  - Content & frequency
  - Conditional on funding (Non-Annex I Parties)
  - Rigorous review process (Annex I Parties)

Annex I  
Parties

Non-Annex I  
Parties

All Parties  
of PA



# Non-Annex I Parties - 153

- **Only under Convention**
- **National Communication (NC)** - every 4 years
- **Biennial Update Report (BUR)** - every 2 years
  - Policy-related info (mitigation, adaptation, funding and capacity building needs)
  - Depending on funding
- **GHG Inventory** - less detailed, included in NC/BUR
  - flexibility to use 1996 IPCC Guidelines
- **National Adaptation Plan (NAP)**
- **National Adaptation Programme of Action (NAPA)** - LDCs



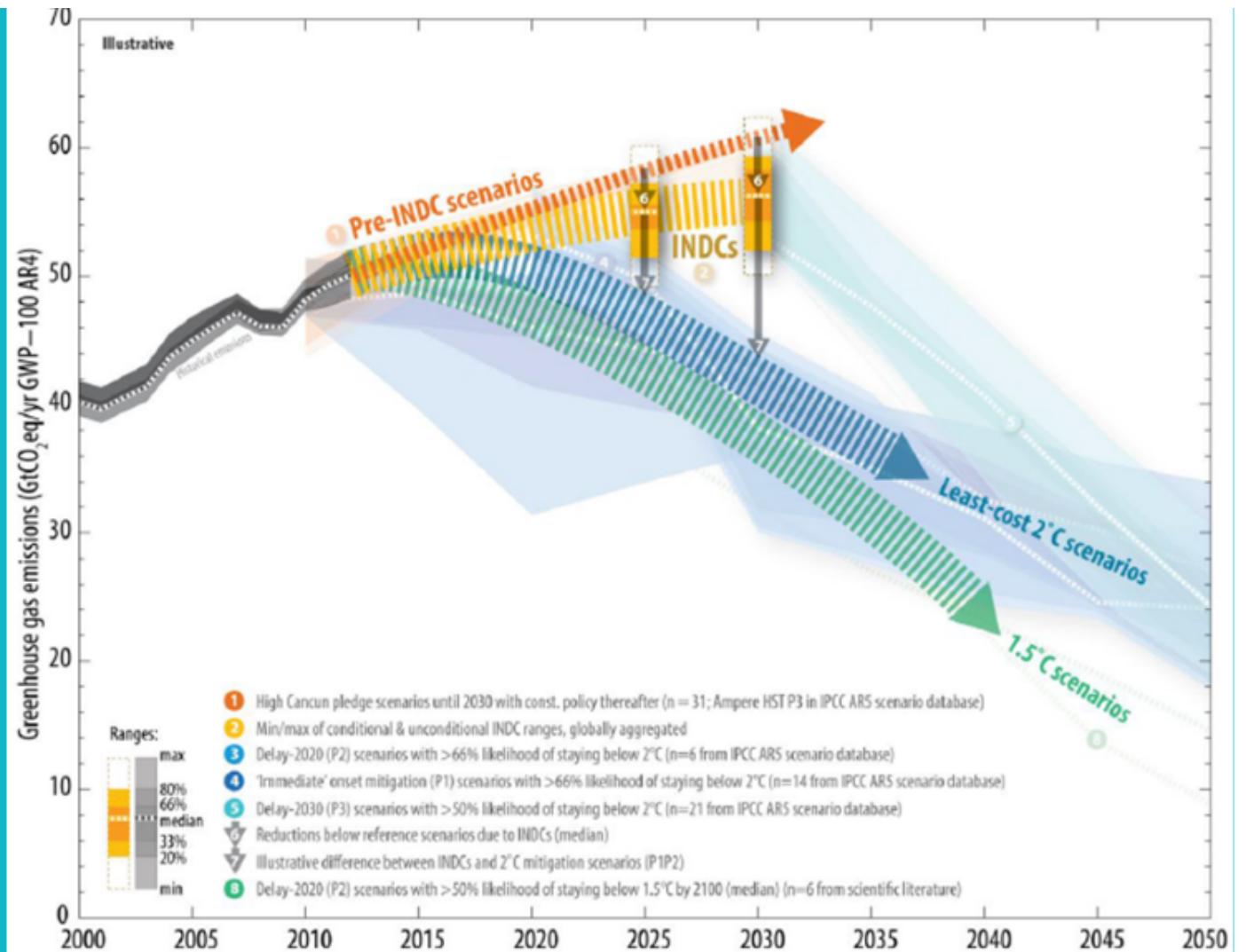
# All Parties under Paris Agreement - 176\*

- **INDC (Intended Nationally Determined Contributions) -** Parties communicated them before COP 21 (Paris)
  - 152 - Automatic conversion of INDC to NDC
  - 18 - Revisions to INDCs or NDCs submitted
  - 6 - Parties currently revising NDCs
- **NDCs (Nationally Determined Contributions) -** Parties to communicate 1st NDC at the time of PA ratification
  - 152 - Automatic conversion of INDC to NDC
  - 18 - Revisions to INDCs or NDCs submitted
  - 6 - Parties currently revising NDCs
- **NDC -** post-2020 climate actions reflecting country ambition for reducing emissions by considering domestic circumstances and capabilities





# Synthesis report on the aggregate effect of INDCs







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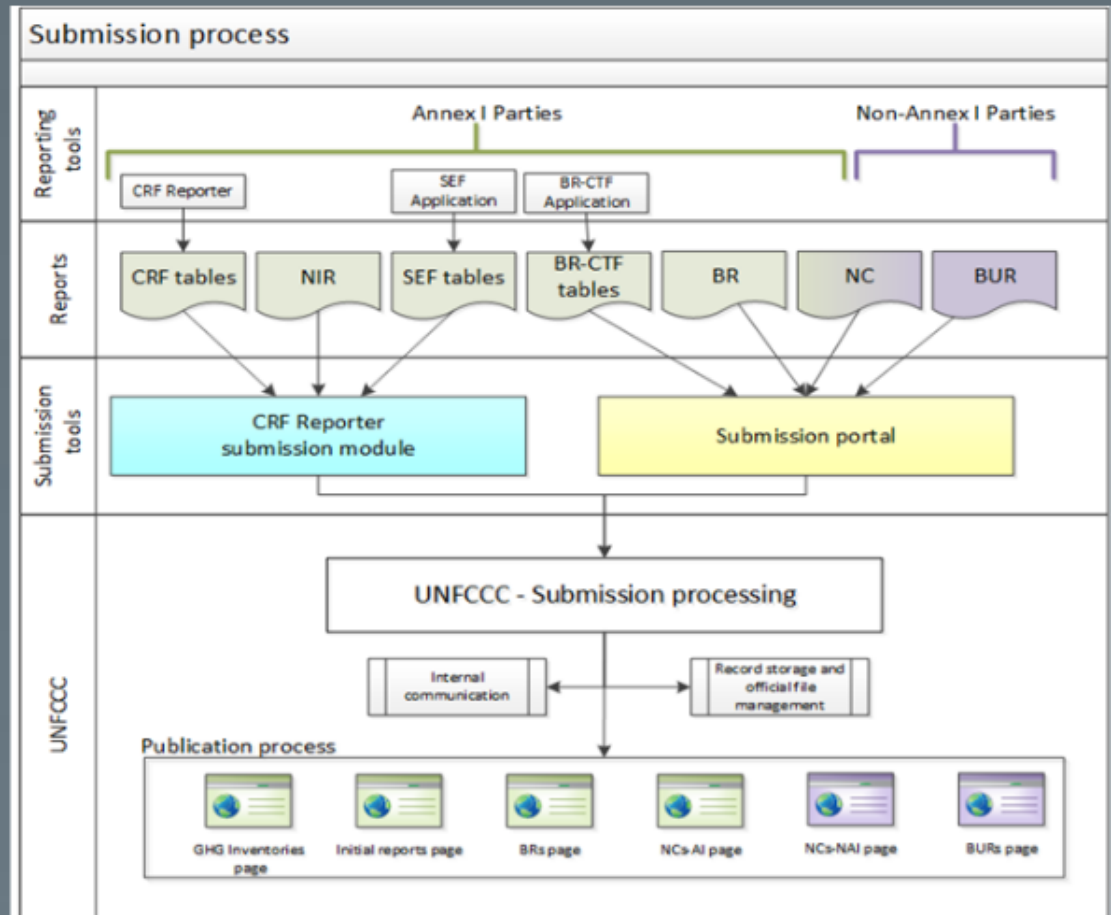
# Our Data

- Data collection
- Data analysis
- Data management
- Data dissemination

Data  
Process

# Data process

- **Data collection** - MRV, mandates
- **Data analysis** - status reports; assessment reports; aggregate GHG info; compilation and accounting reports; etc.
- **Data management** - processing by internal tools:
  - portal & Data Warehouse
  - review process
- **Data dissemination** - BR DI; GHG DI; webpages; cooperation agreements with FAO, IEA, WRI





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# Our Tools

- Internal vs external
- User friendly
- Comprehensive
- Accurate
- Simple

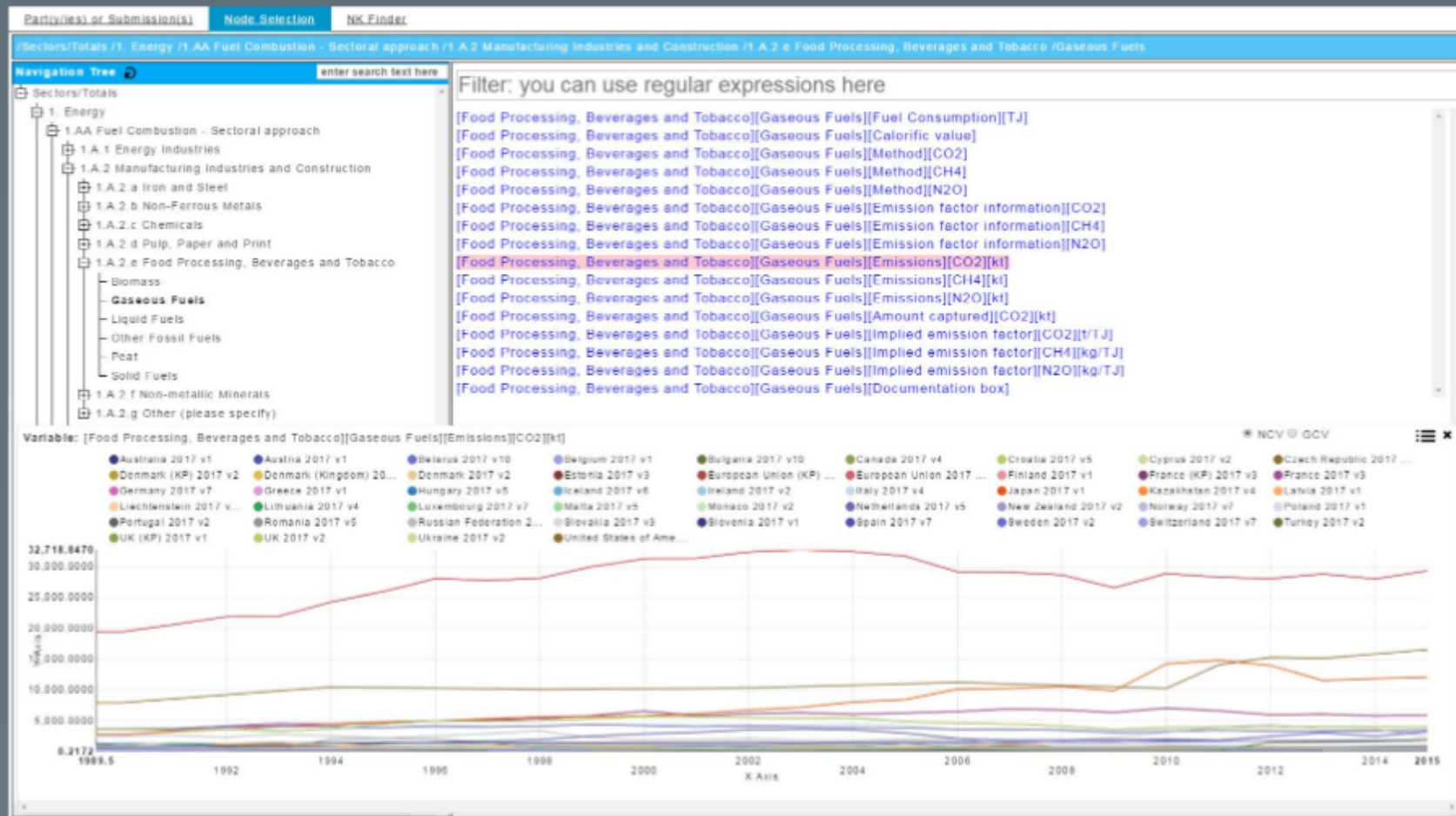
GHG  
Locator

GHG Data  
Interface

Biennial Report  
Data Interface

NDC  
Registry

# GHG Emissions Locator



# GHG Data Interface



**United Nations**  
Framework Convention on  
Climate Change

## Process

GHG Data - UNFCCC

Time series - Annex I

Detailed data by Party

Comparison by Category

Comparison by Gas

GHG profiles

Annex I

Non-Annex I

Global map - Annex I

## Greenhouse Gas Inventory Data - Comparison by Gas

Please select two different Parties for comparison

Australia

European Union (Convention)

Please select Category

Total GHG emissions without LULUCF

Please select two different years for comparison

Base year

1990

Query results for — Parties: Australia and European Union (Convention) — Years: Base year and 1990 — Category: Total GHG emissions without LULUCF — Unit: kt CO2 equivalent

Export to Excel Export to CSV Printer Friendly Version

Gas	Australia			European Union (Convention)			European Union (Convention) to Australia Difference	
	Base year	1990	Difference	Base year	1990	Difference	Base year	1990
CO2	278,352.79	278,352.79	0.00%	4,457,424.17	4,457,424.17	0.00%	1501.36%	1501.36%
CH4	119,920.32	119,920.32	0.00%	728,408.46	728,408.46	0.00%	507.41%	507.41%
N2O	15,327.33	15,327.33	0.00%	384,989.38	384,989.38	0.00%	2411.78%	2411.78%
HFCs	1,424.68	1,424.68	0.00%	29,125.49	29,125.49	0.00%	1944.35%	1944.35%
PFCs	4,607.01	4,607.01	0.00%	25,870.24	25,870.24	0.00%	461.54%	461.54%
Unspecified mix of HFCs and PFCs	NO	NO	—	5,840.68	5,840.68	0.00%	—	—
SF6	211.02	211.02	0.00%	11,002.95	11,002.95	0.00%	5114.21%	5114.21%



# GHG Data Interface



**United Nations**  
Framework Convention on  
Climate Change

- Process
- GHG Data - UNFCCC
- Time series - Annex I
- Detailed data by Party**
- Comparison by Category
- Comparison by Gas
- GHG profiles
- Annex I
- Non-Annex I
- Global map - Annex I

## Greenhouse Gas Inventory Data - Detailed data by Party <sup>?</sup>

Please select Party, Inventory Year, Category, Gas and Unit.

Brazil    
 1990, 2000, 2010 and last year    
 2. Industrial Processes    
 Aggregate GHGs    
 Gg CO2 equivalent

Query results for — Party: Brazil — Years: 1990, 2000, 2010 and last year — Category: 2. Industrial Processes — Gas: Aggregate GHGs — Unit: Gg CO2 equivalent

Category	1990	2000	2010	Last Reported Year (2012)
<b>2. Industrial Processes</b>	<b>52,059.52</b>	<b>75,536.10</b>	<b>86,700.04</b>	<b>93,967.62</b>
2.A Mineral Products	14,859.20	21,244.00	27,485.80	—
2.B Chemical Industry	4,996.90	7,844.40	2,027.30	—
2.C Metal Production	27,766.18	42,225.76	48,064.53	—
2.D Other Production	—	—	—	—
2.E Production of Halocarbons and SF6	1,406.34	—	—	—
2.F Consumption of Halocarbons and SF6	100.90	767.94	3,743.41	—
2.G Other	2,930.00	3,454.00	5,379.00	—

Showing 1 to 8 of 8 entries

# GHG Data Interface



United Nations  
Framework Convention  
on Climate Change

Submission Portal - sessions  
<http://www4.unfccc.int/submissions/SitePages/sessions.aspx>

## Process

GHG Data - UNFCCC

Time series - Annex I

Detailed data by Party

Comparison by Category

Comparison by Gas

GHG profiles

Annex I

Non-Annex I

Global map - Annex I

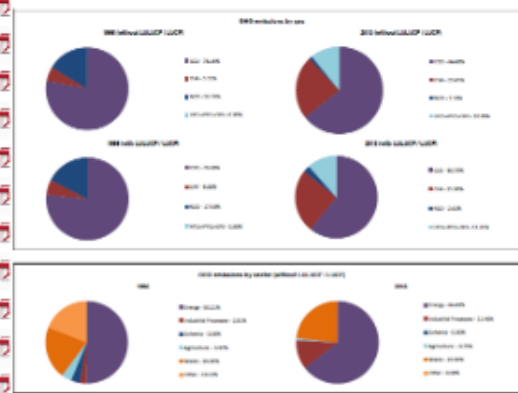
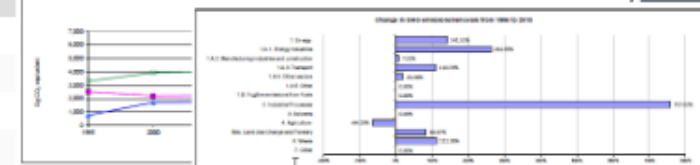
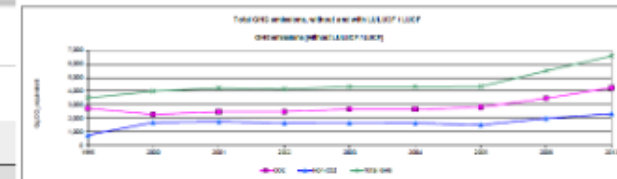
## GHG Profiles - Non-Annex I <sup>?</sup>

Search:

Party	Link to Excel
Non Annex I	
Afghanistan	<a href="#">Excel</a>
Albania	<a href="#">Excel</a>
Algeria	<a href="#">Excel</a>
Andorra	—
Angola	<a href="#">Excel</a>
Antigua and Barbuda	<a href="#">Excel</a>
Argentina	<a href="#">Excel</a>
Armenia	<a href="#">Excel</a>
Azerbaijan	<a href="#">Excel</a>
Bahamas	<a href="#">Excel</a>
Bahrain	<a href="#">Excel</a>
Bangladesh	<a href="#">Excel</a>
Barbados	<a href="#">Excel</a>
Belize	<a href="#">Excel</a>
Benin	<a href="#">Excel</a>

### Emissions Summary for Mauritius

Category	2005	2010	2011
Annex I Parties (excluding EU)	0.000	0.000	0.000
Annex I Parties (including EU)	2.112	2.112	2.112
Annex II Parties (excluding EU)	0.000	0.000	0.000
Annex II Parties (including EU)	0.000	0.000	0.000
Annex III Parties (excluding EU)	0.000	0.000	0.000
Annex III Parties (including EU)	0.000	0.000	0.000
<b>Total</b>	<b>2.112</b>	<b>2.112</b>	<b>2.112</b>



# Biennial Report Common Tabular Format

Table 5  
Summary of key variables and assumptions used in the projection analysis<sup>a</sup>

Key underlying assumptions	Unit	Historical <sup>b</sup>								Projected				
		1988	1993	2000	2005	2010	2015	2020	2025	2030	2035	2040	2045	
GDP growth rate (1)	%	1.30	3.00	3.90	2.30	1.90		1.60	1.93	1.15		1.99	1.99	
Population (2)	thousands	5,035.00	5,216.00	5,330.00	5,411.00	5,535.00		5,890.00	5,930.00	6,000.00		6,190.00	6,190.00	
Population growth (3)	%	0.10	0.37	0.30	0.24	0.44		0.59	0.25	0.47		0.23	0.30	
International oil price (4)	USD / bar	23.75	17.02	28.50	54.52	99.90		45.90	30.34	81.72		92.45	92.45	
International coal price (5)	USD / ton	10.25	10.73	8.78	15.30	23.18		14.09	14.46	15.83		16.93	16.93	
International gas price (6)	USD / bar	NA	10.82	15.72	42.82	86.03		29.47	34.59	47.86		58.84	58.84	
EU ETS Carbon price (7)	EUR(2013)/tCO <sub>2</sub>	NA	NA	NA	22.00	15.00		7.59	5.97	7.17		10.07	10.07	

<sup>a</sup> Parties should include key underlying assumptions as appropriate.  
<sup>b</sup> Parties should include historical data used to develop the greenhouse gas projections reported.

Custom Footnote

(1) \* In general the starting point for the GHG projection is the latest historical GHG inventory, with the future development projected on the basis of the projected parameters only, such as projected GDP, projected fuel prices etc. (i.e. not historical parameters). Therefore the historic parameters shown here for 1990-2010 are shown only to follow the recommendations from the review of Denmark's BR2, although this is not in line with the purpose of the table: 'include historical data used to develop the greenhouse gas projections reported'. \*\* The key variables shown here for 2020-2035 are used for the 'with existing resources' (WED) scenario. The results are shown in table 6(a).

(2) \* In general the starting point for the GHG projection is the latest historical GHG inventory, with the future development projected on the basis of the projected parameters only, such as projected GDP, projected fuel prices etc. (i.e. not historical parameters). Therefore the historic parameters shown here for 1990-2010 are shown only to follow the recommendations from the review of Denmark's BR2, although this is not in line with the purpose of the table: 'include historical data used to develop the greenhouse gas projections reported'. \*\* The key variables shown here for 2020-2035 are used for the 'with existing resources' (WED) scenario. The results are shown in table 6(a).

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# Biennial Report Data Interface

## Biennial Reports Data Interface (BR-DI)

- Home
- GHG inventory data
- Information on reduction target
- Progress towards achieving the target (mitigation measures)
- Reporting on progress
- GHG projections - assumptions
- GHG projections
- Financial contributions
- Financial contributions - summary
- Capacity building
- Technology support

## Home

Decision 19/CP.18 adopted the biennial report common tabular format (BR CTF) for the "UNFCCC biennial reporting guidelines for developed country Parties". The BR CTF, as contained in the annex to decision 19/CP.18, consists of 27 tables designed to facilitate the provision of information by developed country Parties on:

- Greenhouse gas (GHG) emission trends;
- Description of quantified economy-wide emission reduction target;
- Progress in achievement of this target;
- GHG projections; and
- Provision of financial, technological and capacity building support.

To facilitate flexible search queries of the BR CTF data submitted by developed country Parties, the secretariat has launched the Biennial Reports Data Interface (BR-DI) application. The BR-DI allows the BR CTF data to be searched via user-defined queries within any of the ten categories. Within each of these ten categories, multiple search options are available that allow users to refine their queries by various criteria. In an effort to streamline the functionalities of applications within the secretariat, users searching for GHG inventory data and GHG projections are automatically redirected to the "flexible GHG data queries" page.

Note: The data presented in the BR-DI has been extracted from the BR CTF tables submitted by developed country Parties, and every effort has been made to ensure the accuracy and consistency of the information. Users may wish to read the full Biennial Reports and the associated BR CTF tables for more detailed and comprehensive Party information at: [http://unfccc.int/national\\_reports/biennial\\_reports\\_and\\_unsubmitted\\_biennial\\_reports/items/7500.php](http://unfccc.int/national_reports/biennial_reports_and_unsubmitted_biennial_reports/items/7500.php)

# NDC Registry



NDC Registry  
(interim)

Login

HOME ALL NDCs NDC Information - FAQ

169 Parties have submitted their first NDCs.

ALL A B C D E F G H I J K L M N O P Q R S T U V W X Y Z



AFGHANISTAN FIRST NDC

COUNTRY PAGE



ALBANIA FIRST NDC

COUNTRY PAGE



ALGERIA FIRST NDC

COUNTRY PAGE



ANDORRA FIRST NDC

COUNTRY PAGE



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# Negotiations



**Paris Agreement Work Programme** - rules and modalities under the new climate regime

Key elements:

- NDCs
- Global stocktake
- Transparency framework
- Adaptation
- Finance and support



**COP 24** (Nov. 2018) - Katowice, Poland  
**Talanoa Dialogue** - platform for Parties and non-state actors

Conclusions

# Conclusions

- Parties submit a **vast amount of data** about all national activities - **publicly available**
- Data needed from **national statistical offices** is complex - expertise, resources & analytical efforts
- Understand the link between **national statistics and climate-change data**
- Enhance the cooperation between **NSOs** and **authorities** responsible for reporting CC data
- Expect an **increase of data reporting/needs** under Paris Agreement - transparency framework
- Difficult year ahead - negotiations under **Paris Agreement Work Programme**





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# More information

## **UN Climate Change Secretariat**

<http://cop23.unfccc.int/>

<http://unfccc.int/2860.php>

## **NDC Registry**

<http://www4.unfccc.int/ndcregistry/Pages/Home.aspx>

## **GHG Data Interface**

[http://di.unfccc.int/time\\_series](http://di.unfccc.int/time_series)

[http://di.unfccc.int/detailed\\_data\\_by\\_party](http://di.unfccc.int/detailed_data_by_party)

## **Talanoa Dialogue**

<https://talanoadialogue.com/>



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