





Tracking progress of the mitigation commitments of NDCs CTF tables 6 to 11

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Reporting proyections under the ETF

Para MPGs	Туре	Requirement
92	Shall / Encouraged	Report projections with flexibility for developing countries
93	Shall	Indicative of the impact of PaMs, not for progress assessment unless specified
94	Shall / May	Report 'with measures' projection and optionally others
95	Shall	Projections to start from most recent year and extend at least 15 years, with flexibility for developing countries
96	Should	Methodology description including models, changes, assumptions, and sensitivity analysis
97	Shall	Provide projections of key indicators for NDC progress
98	Shall	Include sectoral, by gas and national total projections using a consistent metric
99	Shall	Present projections relative to actual inventory data
100	Shall	Provide emission projections with and without LULUCF
101	Shall	Present projections in graphical and tabular formats

Table of tables

lssue	Summary of GHG inventory	Scenarios (wem, wam, wom)	Indicators	Assumptions and parameters
Tale #	6	7,8,9	10	11
Para in MPG	91	94	97	96 a

Summary of GHG emissions and removals

	Α	В	С	D	E	F	G	Н	I	J	K	L	Μ
	6. Summary of greenhouse gas emissions and removals in accordance with the common reporting												
1	1 table 10 emission trends –summary												
2	According to paragraph 91 of the MPGs, each Party that submits a stand-alone national inventory report shall provide a summary												
3	of its GHG emissions and removals. This information shall be provided for those reporting years corresponding to the Party's												
4	most recent national inventory report, in a tabular format.												

National inventory report may be submitted as a stand-alone report or as a component of a biennial transparency report (paragraph 12 of chapter II of MPGs) and consists of a national inventory document and the common reporting tables (paragraph 38 of chapter II of MPGs).

TABLE 10 EMISSION TRENDS											Year
GHG CO ₂ eq emissions											Submission
(Sheet 1 of 6)											Country
Back to Index											Country
											Change from
	Reference			a. 1001.(<i>a</i> 1001 (<i>a</i> , 1001 ((Years 2021 to	(Years 2021 to	(Years 2021 to	
GREENHOUSE GAS SOURCE AND SINK CATEGORIES	year/period for	Base year ⁽²⁾	1990	(Years 1991 to 2019)	(Years 1991 to 2019)	(Years 1991 to 2019)	2020				year][referenc
	NDC ⁽¹⁾			2019)	2019)	2019)		year)	year)	year)	e[year][period]
] to latest
		1		1	kt CO ₂ equiv	valents (kt) ⁽³⁾	1	I	1	1	%
Total (net emissions) ⁽⁴⁾											
1. Energy											
1.A. Fuel combustion											
1.A.1. Energy industries											
1.A.2. Manufacturing industries and construction					I						
1.A.3. Transport											
1.A.4. Other sectors											
1.A.5. Other											
1.B. Fugitive emissions from fuels											
1.B.1. Solid fuels											
1.B.2. Oil and natural gas and other emissions from energy production											
1.C. CO ₂ Transport and storage											
2. Industrial processes and product use											
2.A. Mineral industry											
2.B. Chemical industry											
2.C. Metal industry											
2.D. Non-energy products from fuels and solvent use											
2.E. Electronic industry											
2.F. Product uses as substitutes for ODS											
2.G. Other product manufacture and use											
2.H. Other											

Projections of GHG emissions and removals

Tables: 7,8,9

Table 7: With existing measures scenario (WEM) 7. Information on projections of greenhouse gas emissions and removals under a 'with measures'

7. Information on projections of greenhouse gas emissions and removals under a **'with measures'**

scenario

7. Information on projections of greenhouse gas emissions and removals under a 'with measures' scenario ^{a,b}									
	Most recent year in the Party's national inventory report (kt CO2 eq) ^c	Projections of GH0	5 emissions and remov	vals, (kt CO2 eq)					
	2016	2025	2030	2035					
Sector ^d									
Energy	3013		2005						
Transport	1169		1385						
Industrial processes and product use	311		479						
Agriculture	158		188						
LULUCF	-330		-293						
Waste	559		322						
Other (specify)									
Gas									
CO2 emissions including net CO2 from LULUCF									
CO2 emissions excluding net CO2 from LULUCF									
CH4 emissions including CH4 from LULUCF									
CH4 emissions excluding CH4 from LULUCF									
N2O emissions including N2O from LULUCF									
N2O emissions excluding N2O from LULUCF									
HFCs									
PFCs									
SF6									
NF3									
Other (specify)									
Total with LULUCF	4881		4086						
Total without LULUCF	5211		4379						

Table 8: With additional measures scenario (WAM)

8. Information on projections of greenhouse gas emissions and removals under a 'with additional measures' scenario

scenario ^{a,b}								
	Most recent year in the Party's national inventory report (kt CO2 eq) ^c	Projections of GF	IG emissions and remo	vals, (kt CO2 eq) ^c				
	20XX	20X(0)(5)	20X(0)(5)	20X(0)(5)				
Sector ^d								
Energy								
Transport								
Industrial processes and product use								
Agriculture								
LULUCF								
Waste								
Other (specify)								
Gas								
CO2 emissions including net CO2 from LULUCF								
CO2 emissions excluding net CO2 from LULUCF								
CH4 emissions including CH4 from LULUCF								
CH4 emissions excluding CH4 from LULUCF								
N2O emissions including N2O from LULUCF								
N2O emissions excluding N2O from LULUCF								
HFCs								
PFCs								
SF6								
NF3								
Other (specify)								
Total with LULUCF								
Total without LULUCF								

auso gas omissions and removals under a fwith

Table 9: Without measures scenario (WOM)

9. Information on projections of greenhouse gas emissions and removals under a 'without measures' scenario

9. Information on projections of	greenhouse gas emissions	and removals u	nder a 'without m	easures' scenario ^{a,b}
	Most recent year in the Party's national inventory report (kt CO2 eq) ^c	Projections of	GHG emissions and re	movals, (kt CO2 eq)c
	2016	2025	2030	2035
Sector ^d				
Energy	3013		4316	
Transport	1169		1514	
Industrial processes and product use	311		534	
Agriculture	158		188	
LULUCF	-330		-293	
Waste	559		635	
Other (specify)				
Gas				
CO2 emissions including net CO2 from LULUC	F			
CO2 emissions excluding net CO2 from LULUC	F			
CH4 emissions including CH4 from LULUCF				
CH4 emissions excluding CH4 from LULUCF				
N2O emissions including N2O from LULUCF				
N2O emissions excluding N2O from LULUCF				
HFCs				
PFCs				
SF6				
NF3				
Other (specify)				
Total with LULUCF	4881		6894	
Total without LULUCF	5211		7187	

Report flexibility

5. *Decides* that those developing country Parties that need flexibility in the light of their capacities may, when reporting on a provision for which they have a capacity constraint, choose one or more of the following options, as applicable, to reflect the application of the specific flexibility provisions included in the annex to decision 18/CMA.1 in the common reporting tables and common tabular formats, as contained in annexes I and II, respectively:

(a) Use the new notation key "FX" (flexibility) in the relevant common reporting tables or common tabular formats, providing an explanation of how the specific flexibility provision has been applied in the corresponding documentation box;

(b) Collapse relevant row(s) or column(s) where "FX" is reported in each cell in the row or column and expand them again for display purposes, providing an explanation of how the specific flexibility provision has been applied in the corresponding documentation box;

m	neasures' scenario ^{a,b}			
	Most recent year in the Party's national inventory report (kt CO2 eq) ^c	-	s of GHG emi ovals, (kt CO2	
	2020	2025	2030	2035
CO2 emissions excluding net CO2 from LULUCF	5000	4800	4500	FX
CH4 emissions including CH4 from LULUCF	FX	FX	FX	FX
CH4 emissions excluding CH4 from LULUCF	FX	FX	FX	FX
N2O emissions including N2O from LULUCF	FX	FX	FX	FX
N2O emissions excluding N2O from LULUCF	FX	FX	FX	FX
HFCs	FX	FX	FX	FX
PFCs	FX	FX	FX	FX
SF6	FX	FX	FX	FX
NF3	FX	FX	FX	FX
Other (specify)	FX	FX	FX	FX
Total with LULUCF	FX	FX	FX	FX
Total without LULUCF	5000	4800	4500	FX

^a Each Party shall report projections pursuant to paras. 93–101 of the MPGs; those developing country Parties that need flexibility in the light of their capacities are instead encouraged to report such projections (para. 92 of the MPGs).

Exercises with CTF tables: Examples of projections reported

Exercises with CTF tables: Examples of projections reported

For purposes of this exercise, we will also use examples of a variety of countries: Australia, New Zealand, Canada, USA, Ireland, Japan

All the National Communications of Annex I Parties can be **downloaded** at: <u>https://unfccc.int/NC8</u>



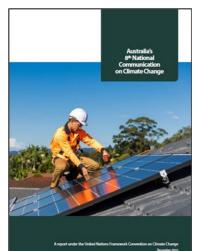
- 1st Exercise: Filling Tables CTF 7-11. Examples of Projections already reported
- 2nd Exercise: Filling Table CTF 7. Use your Table B (optional)



- Australia presents in Table #5.1 of its 8th National Communication (page 131), projections of GHG emissions by sector and gas.
- a) With this information available, which CTF Tables from 7 to 11 can be filled?

b) Fill the corresponding CTF tables with the data provided in Table #5.1 of Australia's 8th National Communication. Consider 2020 as the most recent year in the Party's national inventory report.





2. New Zealand presents in Tables #5.3 and 5.4 of its 8th National Communication (page 166), key assumptions for modelling their GHG projections.

a)With this information available, which CTF Tables from 7 to 11 can be filled?

b)Fill the corresponding CTF tables with the data provided in Tables #5.3 and 5.4 of New Zealand's 8th National Communication. Consider 2020 as the most recent year in the Party's national inventory report.



Te Whakawhitiwhiti Kōrero Tuawaru ā-Motu o Aotearoa New Zealand's Eighth National Communication Under the United Nations Framework Convention on Climate Change and the Kyoto Protocol



3. New Zealand presents in Table #5.6 of its 8th National Communication (page 168), WEM, WOM and WAM projections of GHG emissions by gas.

a)With this information available, which CTF Tables from 7 to 11 can be filled?

b)Fill one of the corresponding CTF tables with the data provided in #Table 5.6 of New Zealand's 8th National Communication. Consider 2020 as the most recent year in the Party's national inventory report.



Te Whakawhitiwhiti Kōrero Tuawaru ā-Motu o Aotearoa New Zealand's Eighth National Communication Under the United Nations Framework Convention on Climate Change and the Kyolo Protocol



4. Canada presents in Table #5-1 of its 8th National Communication (page 251), projections of GHG emissions by sector.

a)With this information available, which CTF Tables from 7 to 11 can be filled?

b)Do you identify specific problems to fill the CTF tables with the data provided by Canada in this Table?





5. USA presents in Table #5.1 of its 8th National Communication (page 138), projections of GHG emissions by gas and in table #5.2, projections of GHG emissions by sector.

a)With this information available, which CTF Tables from 7 to 11 can be filled?

b)Fill the corresponding CTF tables with the data provided in Table #5.2 of USA's 8th National Communication. Consider 2020 as the most recent year in the Party's national inventory report.

2022 U.S. CLIMATE AMBITION REPORT

Eighth National Communication and Fifth Biennial Report of the United States of America to the United Nations Framework Convention on Climate Change



6. Ireland presents in Table #5.4 and 5.5 of its 8th National Communication (page 211), projections of GHG emissions by gas for the WEM scenario and in Table #5.6, projections of GHG emissions by gas for the WAM scenario.

a)With this information available, which CTF Tables from 7 to 11 can be filled?

b)Fill the corresponding CTF tables with the data provided in Table #5.4 of Ireland's 8th National Communication. Consider 2020 as the most recent year in the Party's national inventory report.

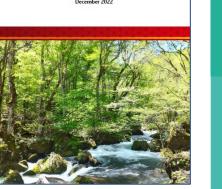




7. Japan presents in Table #4-1 of its 8th National Communication (page 207), projections of GHG emissions by sector and gas.

a)With this information available, which CTF Tables from 7 to 11 can be filled?

b)Fill the corresponding CTF tables with the data provided in Table #5.1 of Japan's 8th National Communication. Consider 2020 as the most recent year in the Party's national inventory report.



Japan's Eighth National Communication

and Fifth Biennial Report er the United Nations Framework Conventio

The Government of Japan



Projections key indicators

Table 10

Reporting projections under the ETF

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94	Shall / May	Report 'with measures' projection and optionally others
95	Shall	Projections to start from most recent year and extend at least 15 years, with flexibility for developing countries
96	Should	Methodology description including models, changes, assumptions, and sensitivity analysis
97	Shall	97. Each Party shall also provide projections of key indicators to determine progress towards its NDC under Article 4 of the Paris Agreement.
98	Shall	Include sectoral, by gas and national total projections using a consistent metric
99	Shall	Present projections relative to actual inventory data
100	Shall	Provide emission projections with and without LULUCF
101	Shall	Present projections in graphical and tabular formats

10. Projections of key indicators

	Most recent year in the Party's			
Jnit, as applicable	national	Project	ions of key indi	cators ^d
	2021	2025	2030	2035
	•			
	4881	4409	4086	3800
kt CO2 eq				
awatts (GW)	50	80	120	170
mber of Electric Vehicle	50	100	200	400
ctares (in thousands)	200	250	300	360
1	awatts (GW) mber of Electric Vehicle	4881 kt CO2 eq awatts (GW) 50 mber of Electric Vehicl∉ 50	48814409kt CO2 eqawatts (GW)5080mber of Electric Vehicl€50100	4881 4409 4086 kt CO2 eq 4086 4086 awatts (GW) 50 80 120 mber of Electric Vehicl€ 50 100 200

Key underlying assumptions and parameters used for projections Table 11

Reporting projections under the ETF

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95	Shall	Projections to start from most recent year and extend at least 15 years, with flexibility for developing countries
96	Should	 96. Each Party should provide information in describing the methodology used to develop the projections. This information should include: (a) Models and/or approaches used and key underlying assumptions and parameters used for projections (e.g. gross domestic product growth rate/level, population growth rate/level);
97	Shall	97. Each Party shall also provide projections of key indicators to determine progress to determine progress towards its NDC under Article 4 of the Paris Agreement.
98	Shall	Include sectoral, by gas and national total projections using a consistent metric
99	Shall	Present projections relative to actual inventory data
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101	Shall	Present projections in graphical and tabular formats

11. Key underlying assumptions and parameters used for projections

11. Key underlying assumptions and parameters used for projections^{a,b}

Key underlying assumptions and parameters: ^c	Unit, as applicable	Most recent year in the Party's national inventory report, or the most recent year for which data is available	Projections of	key underlying ass parameters ^d	sumptions and
		2021	2025	2030	2035
Gross Domestic Product Growth Rate	Percentage (%)	3.5	4	4.5	5
Population Growth Rate	Percentage (%)	1.2	1.5	1.8	2
Energy Consumption per Capita	MWh per person	7.5	8	8.5	9

Fill in CTF Tables 10 and 11 with data for your country

Data for your country: Table B: Projections in "Tables to be filled by participants" Fill in Tables CTF 10 and 11 in the file "CTF_Tracking_Progress_NDC_Template_Clean"