CBIT-GSP
CLIMATE TRANSPARENCY

Partnership on Transparency
in the Paris Agreement

forestry, fisheries
& the environment
Department:
Forestry, Fisheries and the Environment
REPUBLIC OF SOUTH AFRICA

Filling UNFCCC Reporting tables using GACMO tool Day 3.

Training workshop for Anglophone African countries:
Deep dive into tracking NDC mitigation commitments under the Paris Agreement

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UNEP Copenhagen Climate Centre

UN environment programme

UN environment programme | copenhagen climate centre

supported by UNOPS

gef

Supported by:

Federal Ministry for Economic Affairs and Climate Action

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IKI INTERNATIONAL CLIMATE INITIATIVE

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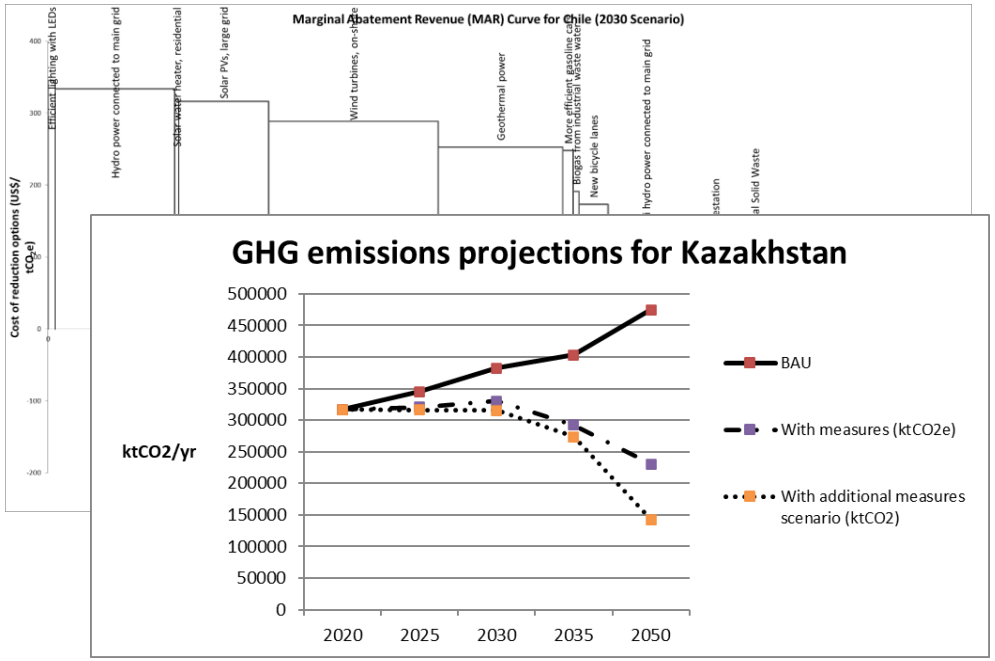
GACMO can be useful for identifying target level for NDC indicator

GACMO tool can be useful to identify target level of GHG emission reduction, as well as sectoral targets (capacity of renewable energy, hectares of reforestation, number of electric vehicles etc.)



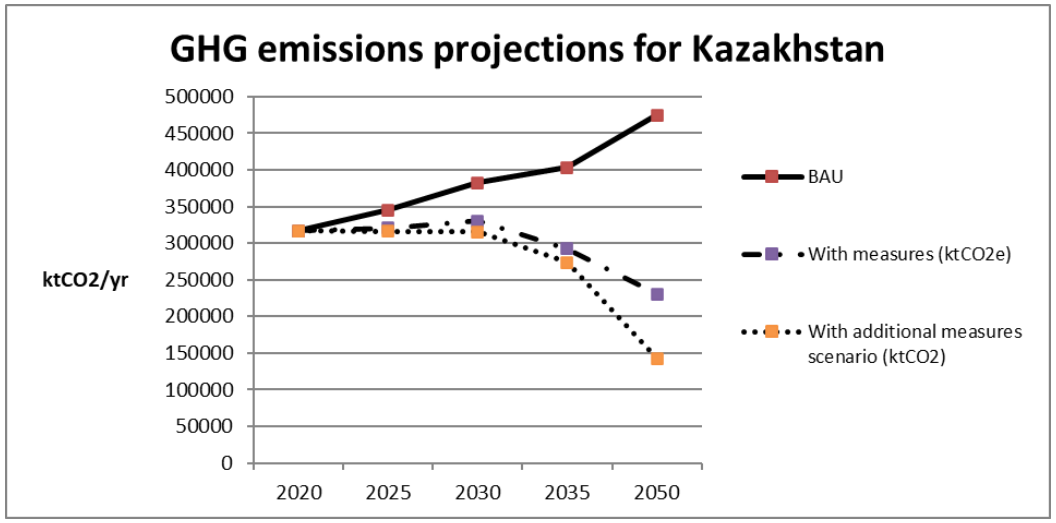
CTF Table 1. Description of selected indicator

CTF Table 2. Definitions needed to understand NDC

CTF Table 3. Methodologies and accounting approaches – consistency with Article 4, paragraphs 13 and 14, of the Paris Agreement and with decision 4/CMA.1

GHG emissions projections from GACMO tool can be used to fill in CTF Tables for NDC tracking

Result of GACMO tool



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

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

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

CTF Table 10. **Projections of key indicators**

GACMO tool can be used to estimate expected GHG emissions reduction by mitigation policies and measures

GACMO tool

Total GHG mitigation in	Kazakhstan	In 2030								
Type	Reduction option	US$/tonCO$_2$	Sub-type unit	Emission reduction t CO2/unit	Investment Million US$	Annual costs MUS$/year	Units penetrating in 2030	Emission Per option kt/year	duction in 2030 Added kt/year	Frac.c
	Efficient lighting with CFLs	-20.29	1000 Bulps	93	0.0	0.0		0.00	0	
	Efficient lighting with LEDs	-34.06	1000 Bulps	190	0.0	0.0		0.00	0	
	Efficient lighting with LEDs replacing CFL	23.64	1000 Bulps	22	0.0	0.0		0.00	0	
	Efficient wood stoves	-933.25	1000 stoves	1,338	0.0	0.0		0.00	0	
	Efficient charcoal stoves	-62.01	1000 stoves	293	0.0	0.0		0.00	0	
	LPG stoves replacing wood stoves	74.17	1000 stoves	2,055	0.0	0.0		0.00	0	
	Efficient electric stoves	-0.93	1000 stoves	379	402.0	-2.1	6,000	2,271.14	2,271	
	Induction based cooking	318.09	1000 stoves	28	0.0	0.0		0.00	2,271	
	New passive home	-11.00	1000 new homes	20,746	0.0	0.0		0.00	2,271	
	Efficient refrigerators	13.75	1000 refrigerators	1,555.2	1556.4	128.3	6,000	9,330.93	11,602	

CTF Table 5 for NDC tracking

5. Mitigation policies and measures, actions and plans, including those with mitigation co-benefits resulting from adaptation actions and economic diversification plans, related to implementing and achieving a nationally determined contribution under Article 4 of the Paris Agreement [a, b]

No.	*Name [c]*	*Description [d,e,f]*	*Objectives*	*Type of instrument [g]*	*Status [h]*	*Sector(s) affected [i]*	*Gases affected*	*Start year of implementation*	*Implementing entity or entities*	*Estimates of GHG emission reductions (kt CO2 eq) [j, k]*	
										Achieved	*Expected*

GACMO tool can be used for tracking achieved GHG emissions reduction by mitigation policies and measures

GACMO tool

	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1																Total		
2																Accumulated	Total	Total
3	Accumulated Implemented mitigation options															GHG	external	internal
4	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	reduction	finance	finance
5																kt/CO2e/yr	Million US$	
6																0		
7																0		
8																0		
9																0		
10																0		
11																0		
12																0		
13																0		
14																0		
15																0		

CTF Table 5 for NDC tracking

5. Mitigation policies and measures, actions and plans, including those with mitigation co-benefits resulting from adaptation actions and economic diversification plans, related to implementing and achieving a nationally determined contribution under Article 4 of the Paris Agreement [a, b]

No.	*Name* [c]	*Description* [d,e,f]	*Objectives*	*Type of instrument* [g]	*Status* [h]	*Sector(s) affected* [i]	*Gases affected*	*Start year of implementation*	*Implementing entity or entities*	*Estimates of GHG emission reductions (kt CO2 eq)* [j, k]	
										Achieved	*Expected*

Applied exercises
Filling in CTF tables for NDC tracking

Exercise 1 Mitigation policies and measures

- Fill in the data on **one mitigation policy or measure of your country** in the **CTF Table 5.**
- Add expected GHG emissions reduction in 2030 from the GACMO model exercise

5. Mitigation policies and measures, actions and plans, including those with mitigation co-benefits resulting from adaptation actions and economic diversification plans, related to implementing and achieving a nationally determined contribution under Article 4 of the Paris Agreement [a, b]

No.	*Name* [c]	*Description* [d,e,f]	*Objectives*	*Type of instrument* [g]	*Status* [h]	*Sector(s) affected* [i]	*Gases affected*	*Start year of implementation*	*Implementing entity or entities*	*Estimates of GHG emission reductions (kt CO2 eq)* [j, k]	
										Achieved	*Expected*

Exercise 1 Mitigation policies and measures

If the data is not available for your country, use the example of the policy of Mauritius

- Name: Electric Vehicle Integration Roadmap for Mauritius
- Objectives: Reducing consumption of fossil fuels through increased adoption of lower-carbon vehicles.
- Description: Increasing the use of electric cars to 26000 in 2030.
- Status: adopted.
- Type of instrument: regulatory, economic
- Start year of implementation: 2021
- Implementing entity or entities: Ministry of Land Transport and Light Rail
- Expected emissions reduction - from GACMO model

Exercise 2A
Scenario of GHG emissions under a “with measures” scenario

- Fill in the data on GHG emissions **projections under a “with measures”** scenario for your country in the CTF Table 7.
- Use the data from NDC, BUR, NC.

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 GHG emissions and removals, (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				

Exercise 2A
Scenario of GHG emissions under a “with measures” scenario

If the data is not available for your country, use the data for Country X

Sectoral split of mitigation scenario emissions					
ktCO2e/year	2020	2025	2030	2035	2050
Total	316,859	320,591	330,537	292,387	230,567
Power	105,019	104,000	109,416	79,289	21,053
Industry	93,494	103,701	115,625	115,996	139,661
Transport	22,296	27,066	32,602	29,728	23,083
Households	29,921	30,484	19,456	14,571	-3,848
Services	7,652	7,796	2,018	2,292	7,523
Agriculture & Fishery	42,778	42,374	53,525	54,755	58,616
Forestry	8,375	-2,689	-10,528	-12,310	-22,733
Waste	7,323	7,859	8,422	8,066	7,212

Exercise 2B
Scenario of GHG emissions under a “without measures” scenario

- Fill in the data on GHG emissions projections under a “without measures” scenario for your country in the CTF Table 9.
- Use the data from NDC, BUR, NC.

9. Information on projections of greenhouse gas emissions and removals under a ‘without measures’ scenario[a,b]

	Most recent year in the Party's national inventory report (kt CO2 eq)[c]	*Projections of GHG emissions and removals, (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				

Exercise 2B
Scenario of GHG emissions under a “without measures” scenario

If the data is not available for your country, use the data for Country X

Sectoral split of BAU scenario emissions					
ktCO2e/year	2015	2025	2030	2035	2050
Total	472,374	809,908	1,065,631	1,283,633	1,704,898
Power	185,295	331,835	444,070	540,279	727,144
Industry	139,020	200,943	248,370	289,025	367,988
Transport	72,834	130,434	174,550	212,367	285,818
Households	32,974	59,052	79,025	96,146	129,400
Services	23,858	42,727	57,178	69,566	93,627
Agriculture & Fishery	65,533	92,057	109,578	123,390	148,061
Forestry	-64,020	-64,020	-64,020	-64,020	-64,020
Waste	16,880	16,880	16,880	16,880	16,880