



NATIONAL GHG INVENTORY IN VIET NAM



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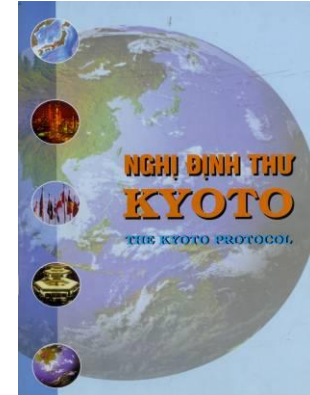
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General Introduction

- ✓ Viet Nam signed the UNFCCC on 11 June 1992 and approved it on 16 November 1994; signed KP on 03 December 1998 and approved it on 25 September 2002
- ✓ Viet Nam accepted the Doha Amendment to the KP on 08 June 2015

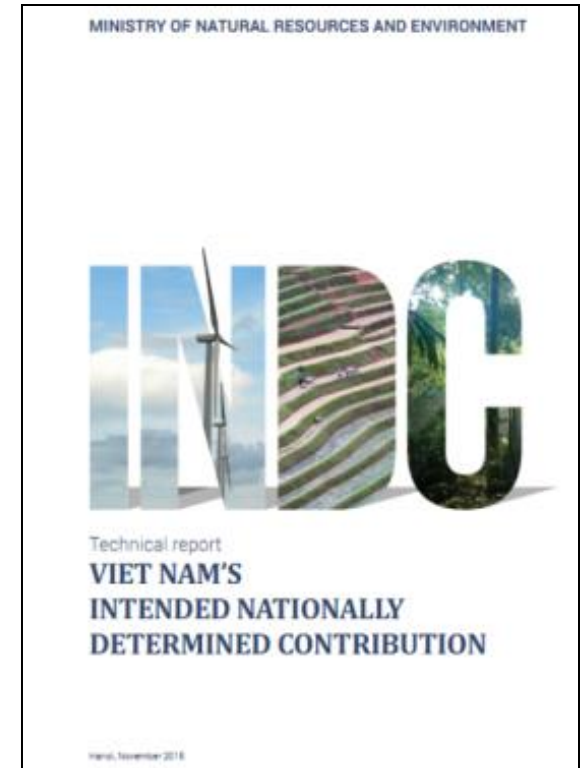


- ✓ Viet Nam signed the Paris Agreement on April 2016 and approved it on October 2016
 - ✓ The Prime Minister issued the Decision No. 2053/QĐ-TTg dated 28 October 2016 approved the Implementation Plan of the Paris Agreement.
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General Introduction

- ✓ Viet Nam submitted its (I)NDC to UNFCCC on 30 September 2015
- ✓ Viet Nam's (I)NDC including 2 components: GHG mitigation and CC adaptation
- ✓ Target: Reducing GHG compared to BAU: 8% (unconditional); 25% (conditional)
- ✓ Viet Nam's (I)NDC are being reviewing and updating that will be completed and submitted to the UNFCCC on 2019.



<http://www4.unfccc.int/ndcregistry/PublishedDocuments/Viet%20Nam%20First/VIETNAM%27S%20INDC.pdf>

Mandate for implementation of national GHG inventory of non-Annex I countries - NCs



➡ Article 4.1 & 12.1 of the UNFCCC:

- *Develop, periodically update, publish and make available to the COP, in accordance with Article 12, **national inventories of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol***
- *Each Party shall communicate to the COP information on **a national inventory of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol***

➡ Decision 17/CP.8:

- *Annex II: guideline for preparation of the national communications related to national GHG inventory*
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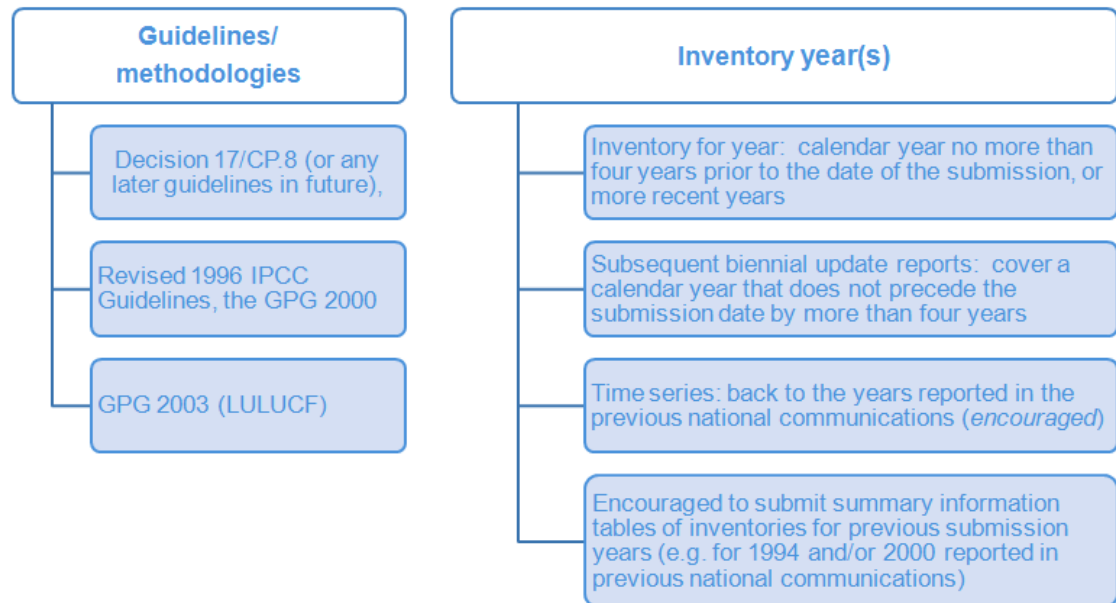
Mandate for implementation of national GHG inventory of non-Annex I countries - BURs

➔ 1/CP.16, paragraph 60 (c):

- *Should also submit biennial update reports (BURs) containing updates of **national GHG inventories**, including a National Inventory Report and information on mitigation actions, needs and support received.*

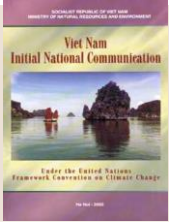
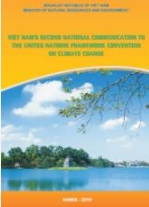
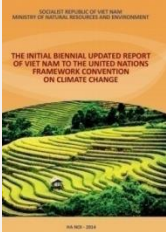
➔ Decision 2/CP.17:

- *Adopted the guidelines for preparation of BURs*
- *Set the timeframe for the submissions of BURs - first BURs by December 2014*
- *Frequency of submission of BURs: every two years*



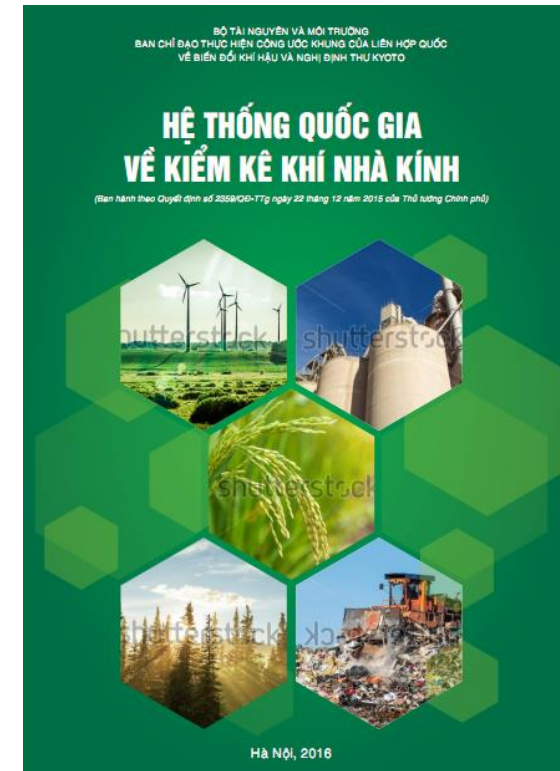
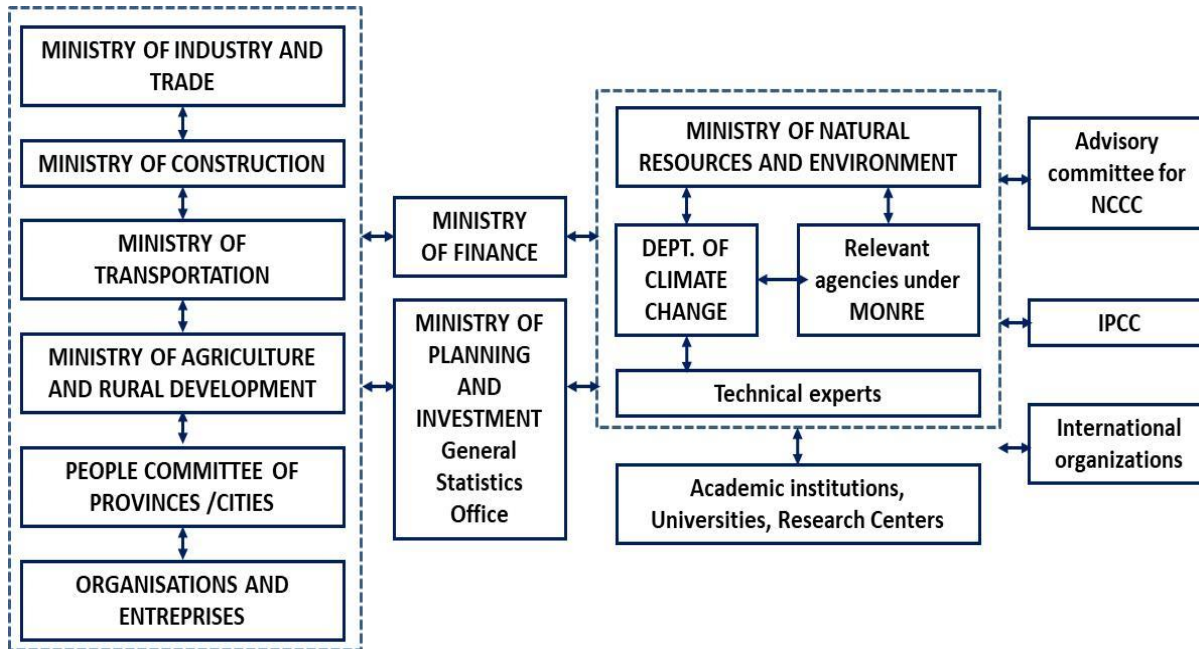


Completed national GHG inventories

Base year		Donnors
1994	 <p>NC1 http://unfccc.int/resource/docs/natc/vnmnc01.pdf</p>	UNEP/GEF
2000	 <p>NC2 http://unfccc.int/resource/docs/natc/vnmnc02.pdf</p>	UNEP/GEF
2005	Capacity Building for GHG Inventory in Viet Nam Project	Jica
2010	 <p>Capacity Building for GHG Inventory in Viet Nam Project - used for BUR1 http://unfccc.int/resource/docs/natc/vnmbur1.pdf</p>	Jica
2013	BUR2	UNEP/GEF

National GHG Inventory System

(Decision 2359/ QĐ-TTg dated December 22th, 2015 by Prime Minister)

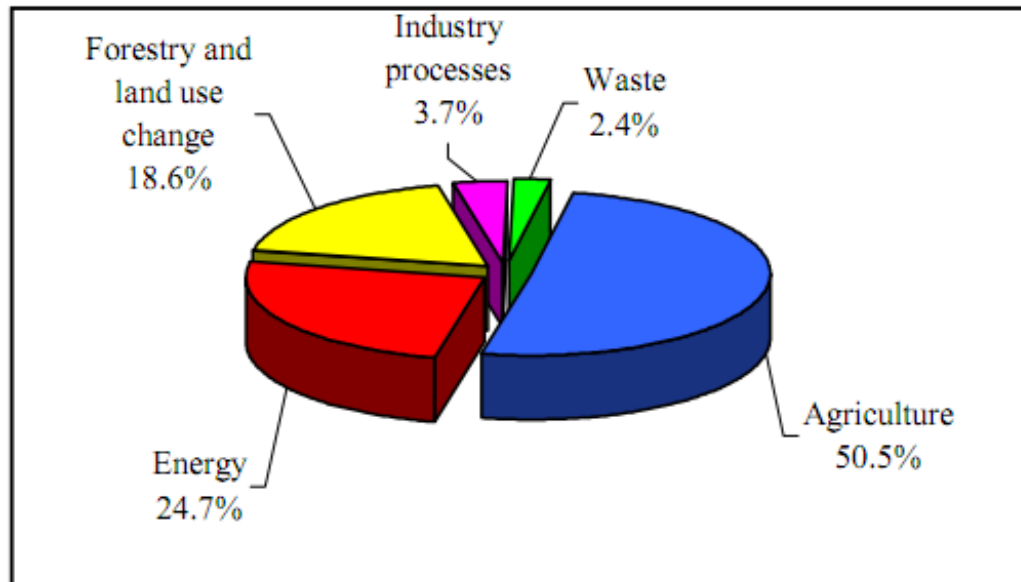


Apply for national GHG inventories from BUR2 (2013) and NC3 (2014)



Result of national GHG inventory for 1994 - NC1

Emission sector	Emissions in CO ₂ equivalent (thousand tons)	(%)
1. Energy	25,637.09	24.7
2. Industrial processes	3,807.19	3.7
3. Agriculture	52,450.00	50.5
4. Forestry and land use change	19,380.00	18.7
5. Waste	2,565.02	2.4
Total emission	103, 839.30	100

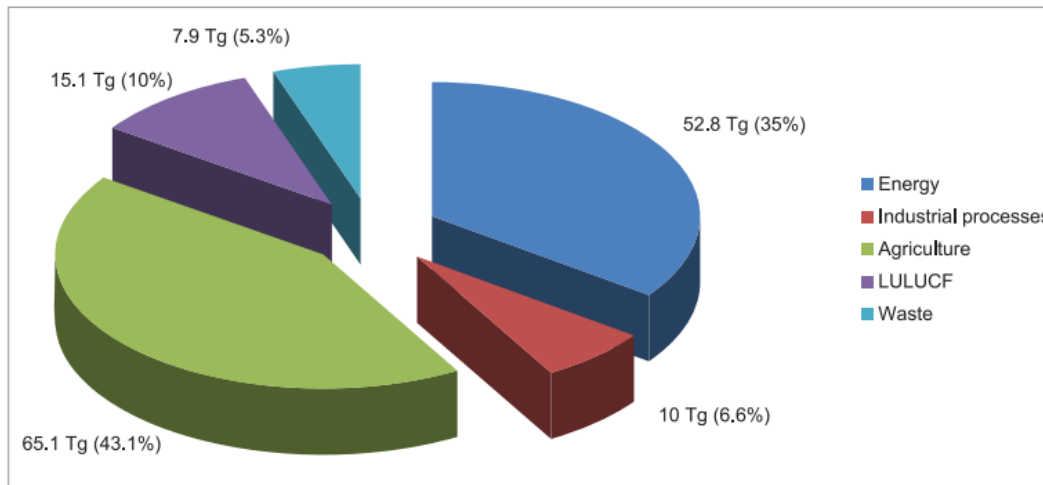




Result of national GHG inventory for 2000 - NC2

Unit: thousand tonnes

Sector	CO ₂	CH ₄	N ₂ O	CO ₂ e	Percentage
Energy	45,900.00	308.56	1.27	52,773.46	35.0
Industrial processes	10,005.72	0	0	10,005.72	6.6
Agriculture	0	2,383.75	48.49	65,090.65	43.1
LULUCF	11,860.19	140.33	0.96	15,104.72	10.0
Waste	0	331.48	3.11	7,925.18	5.3
Total	67,765.91	3,164.12	53.83	150,899.73	100

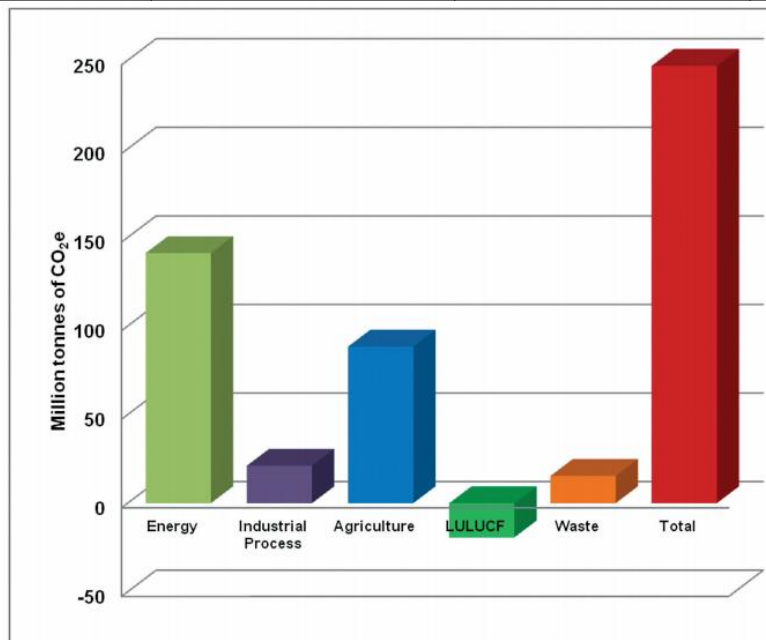




Result of national GHG inventory for 2010 - BUR1

Unit: thousand tonnes of CO₂e

Sector	CO ₂	CH ₄	N ₂ O	Total
Energy	124,799.34	15,958.52	412.93	141,170.79
Industrial Processes	21,172.01	0	0	21,172.01
Agriculture	0	57,908.95	30,445.82	88,354.77
LULUCF	-20,347.59	1,011.51	117.48	-19,218.59
Waste	65.43	13,448.68	1,837.55	15,351.67
Total (without LULUCF)	146,036.78	87,316.15	32,696.31	266,049.24
Total (with LULUCF)	125,689.19	88,327.66	32,813.79	246,830.64

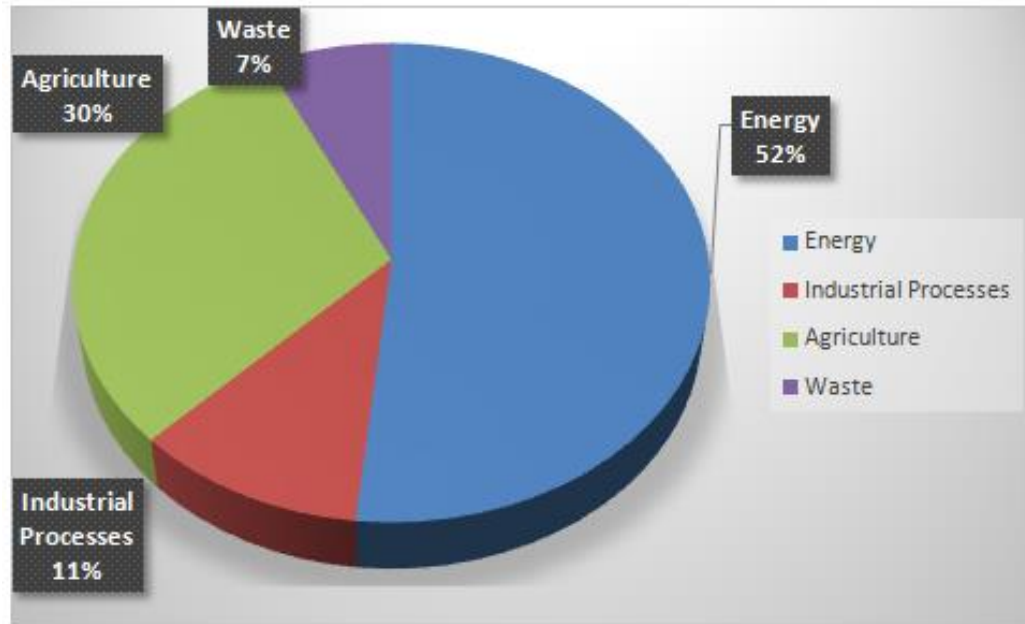




Result of national GHG inventory for 2013 - BUR2

Unit: thousand tonnes of CO₂e

Sector	CO ₂	CH ₄	N ₂ O	HFCs	Total
Energy	126,914.6	23,397.8	1,090.1		151,402.5
Industrial Processes	29,799.8			1,967.6	31,767.4
Agriculture		59,131.2	30,276.7		89,407.9
LULUCF	-34,359.5	101.1	18.6		-34,239.8
Waste	255.0	18,494.4	1,937.0		20,686.4
Total emission (without LULUCF)	156,969.4	101,023.4	33,303.8		293,264.2
Total emission (with LULUCF)	122,609.9	101,124.5	33,322.3		259,024.4



Key categories analysis of national GHG inventory for 2013 - BUR2



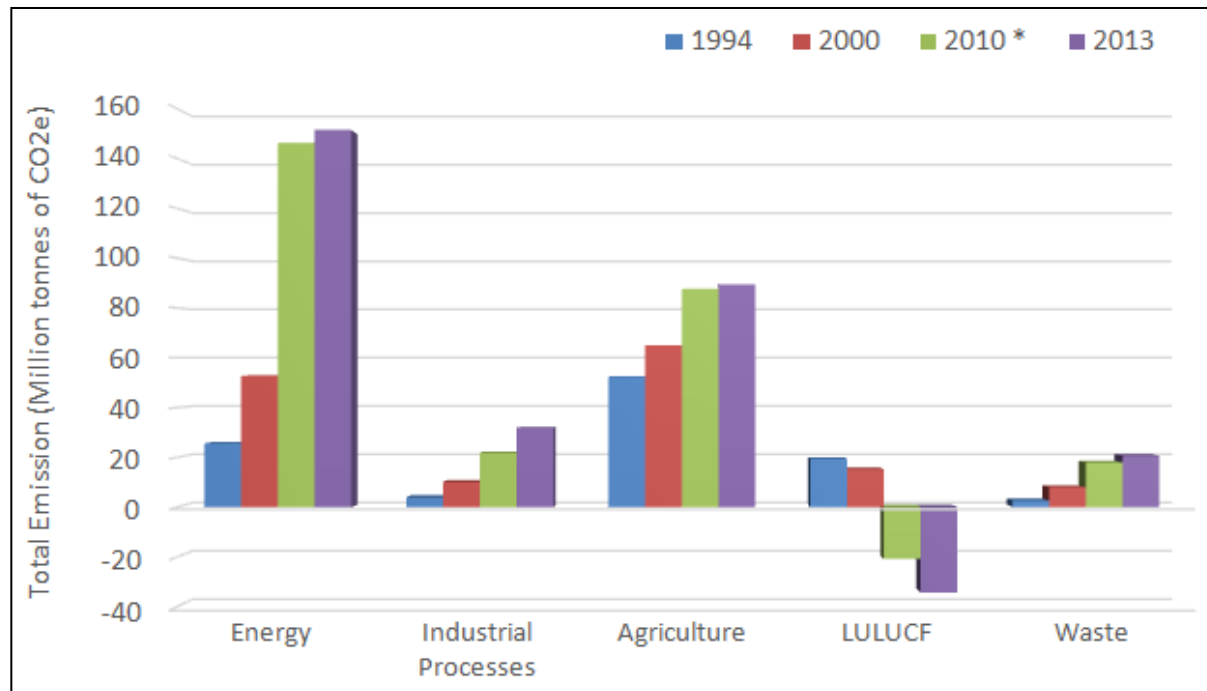
No.	Sector	KCA without LULUCF	KCA with LULUCF	CO ₂	CH ₄	N ₂ O
1	Energy	16	16	12	4	0
2	Industrial Processes	2	2	2	0	0
3	Agriculture	8	8	0	5	3
4	LULUCF		4	4	0	0
5	Waste	4	4	0	3	1
	Total	30	34	18	12	4

Trends of emissions/removals among inventory cycles



Unit: thousand tonnes of CO₂e

Year	Energy	Industrial Processes	Agriculture	LULUCF	Waste	Total
1994	25,637.0	3,807.0	52,445.0	19,378.0	2,565.0	103,832.0
2000	52,774.0	10,006.0	65,091.0	15,105.0	7,925.0	150,901.0
2010*	146,170.7	21,682.4	87,602.0	-20,720.7	17,887.0	252,621.5
2013	151,402.5	31,767.4	89,407.8	-34,239.8	20,686.4	259,024.3



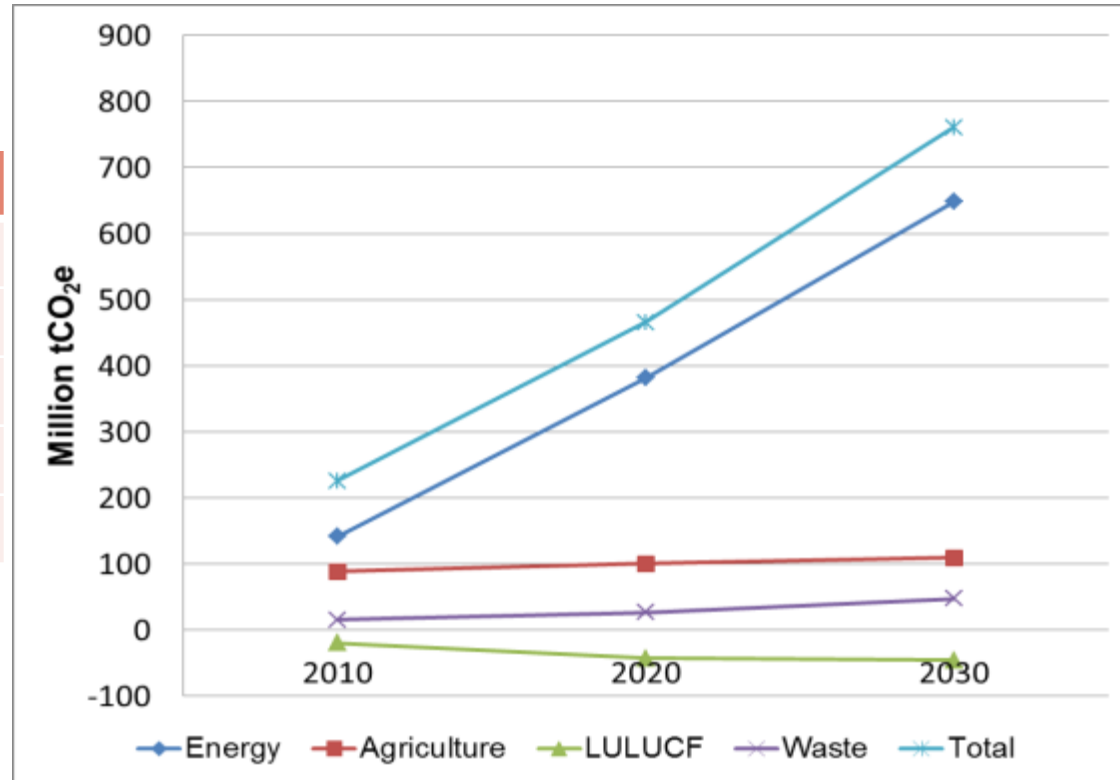


GHGs emission projection to 2030

Unit: million tCO₂e

	2010	2020	2030
Energy	141.1	389.3	675.5
Agriculture	88.3	100.8	109.3
Waste	15.4	26.6	48.0
LULUCF	-19.2	-42.5	-45.3
Total	225.6	474.2	787.5

Source: BUR1, 2014



Improvement of national GHG inventory for 2013 in comparison with previous inventories



- The national GHG inventory system which was established by the Prime Minister at Decision 2359/QĐ-TTg dated December 22th, 2015, facilitate for following activities, including:
 - *Collecting data for GHG inventory by General Statistics Office of Ministry of Planning and Investment ;*
 - *Planning and executing GHG inventory and developing GHG inventory report by Department of Climate Change (formerly Department of Meteorology, Hydrology and Climate Change);*
 - *Strengthening the cooperation between focal point agency on GHG inventory and relevant agencies and organizations within the system.*
 - QA/QC activities have been improved. QA for GHG inventory of the year of 2013 was carried out by Institute of Strategy and Policy on Natural Resources and Environment, MONRE.
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Next steps

Tasks	Deadline
Complete the national GHG inventory for 2014 under the NC3	2017
Set up the data base system for national GHG inventory	2018
Review and update GHG emission projection for the period of 2020-2030	2018
Complete the NC3 and submit it to the UNFCCC Secretariat	2018
Set up the national MRV system in connection to national GHG inventory system	2019
Evaluate the effectiveness of the national GHG inventory system	2019
Develop the plan for strengthening the national GHG inventory system for the period post-2020	2019
Review and update NDC	2019
Improve the national GHG inventory system	2020



Thank you very much for your attention

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