

# Introducing Japan's QA/QC process

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Requirement for QAQC under the ETF of Paris Agreement

#### Each Party

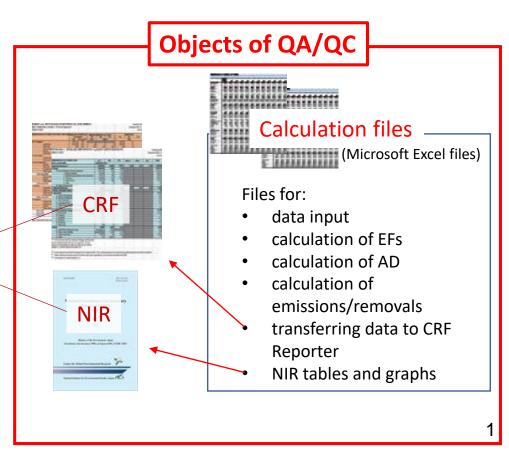
- shall elaborate an inventory QA/QC plan
- shall implement and provide information on general inventory QC procedures
- should apply category-specific QC procedures
  - for key categories and
  - for those individual categories in which significant methodological changes and/or data revisions have occurred.
- should implement QA procedures by conducting a basic expert peer review of their inventories

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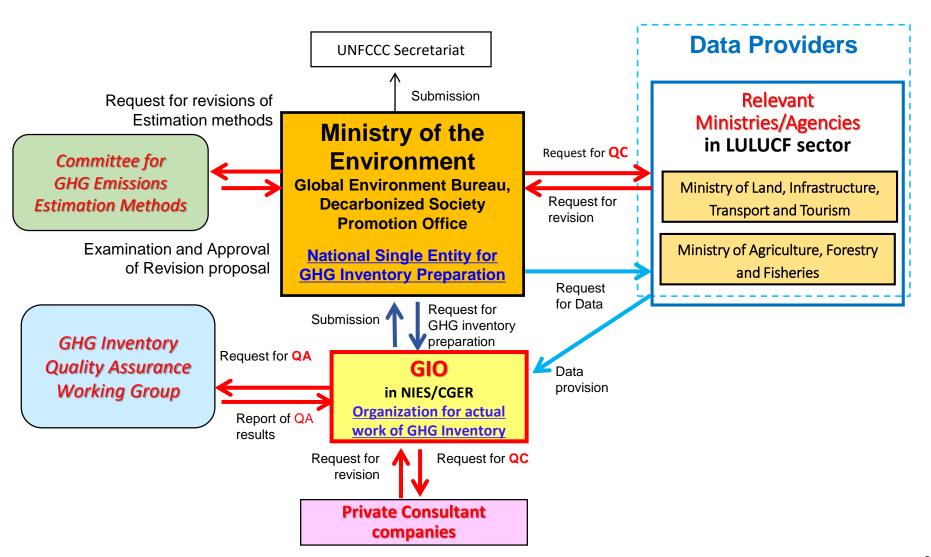
- how it works under Institutional arrangement
- how it is set in annual schedule for inventory preparation
- about the history: how it has been set up

Reporting requirements of GHG inventories

Components	Annex I Parties							
Reporting obligation	Shall report annually							
Reporting form	Should report two reporting forms;  ✓ Common Reporting Format (CRF)  ✓ National Inventory Report (NIR)							
Guidelines for methodology	Shall use: 2006 IPCC guidelines							
Year	Consistent time series from the base year (1990) to X-2 year (X=submission year)							



## QA/QC process under Japan's Institutional Arrangements



#### **QC process under Japan's Institutional Arrangements External QC check 2 by data providers** QC4 QC 1 Category-specific QC Check on the calculation files and Category-specific QC **CRF and NIR drafts** Discussing and assessing estimation Check on data entered in files methods, EFs and AD. **UNFCCC Secretariat Data Providers** Submission Relevant Request for revisions of Estimation methods Ministries/Agencies Ministry of the in LULUCF sector Request for QC **Environment** Committee for **GHG Emissions** Global Environment Bureau, Ministry of Land, Infrastructure, Request for **Decarbonized Society Estimation Methods Transport and Tourism** revision **Promotion Office Examination and Approval** Ministry of Agriculture, Forestry **National Single Entity for** of Revision proposal and Fisheries **GHG Inventory Preparation** Request for Data Request for Submission <sup>4</sup> **GHG** inventory preparation GHG Inventory QC3 **External QC check 1 Internal QC check** GIO Data QC 2 by Private Consultant companies provision in NIES/CGER ✓ Check on the calculation files and **Organization for actual** by National Inventory Compiler and sectoral exports **CRF and NIR drafts** work of GHG Inventory **General QC:** transcription errors in ✓ Check on **data** entered in files and data entry and referencing, time Request for QC auest for equations for calculating emissions revision series consistency, trends, etc. and removals. Confirming that CRF reporter data. **Private Consultant** by conducting mutual checks of key category analysis results, companies

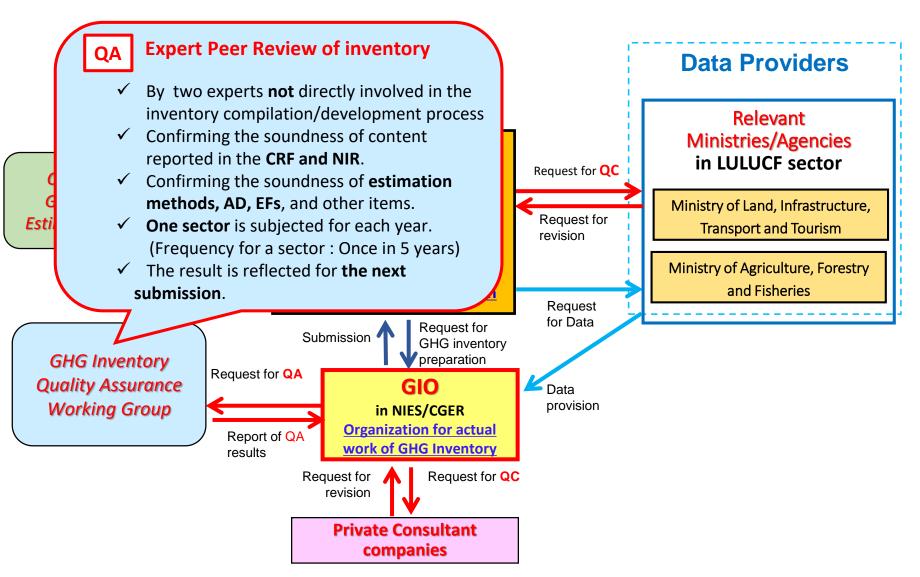
reasons for "NE" and "IE", etc.

3

estimation results by using their

own estimation files.

## QA process under Japan's Institutional Arrangements



### QA/QC process in Annual schedule of Inventory Compilation Process

Process		Relevant Entities	May Jun Jul Aug Sep Oct Nov Dec Ja		Jan	Feb	Mar	Apr						
1	Conducting QA  ( meeting of the QAWG	MOE, GIO			Δ									
2	Discussion for improvement ( ★ Kick-off meeting)	MOE, GIO	,	\_\_\_\										
3	Discussion for improvement In LULUCF sector ( meeting)	MOE, GIO, Relevant Ministries, Private consultant			*				$\bigstar$	Dutco	ome i	s refl	ected	l to
4	Consideration of inventory improvements (meeting of the Committee)	MOE, (GIO, Private consultant)								QC 1				
5	Data collection	MOE, GIO, Relevant Ministries, Private consultant			R	eleva	ant I	Mini	strie		MO	E, GI	0	
6	Preparation of draft CRF and NIR	GIO, Private consultant												>
7	Implementation of QC and coordination with relevant ministries	MOE, GIO, Relevant Ministries, Private consultant										0	C 2,3	,4
8	Finalizing draft CRF and NIR	MOE, GIO, Private consultant												\ <u>\</u>
9	Submission	MOE, GIO												

#### History of Japan's Institutional Arrangements

Phase 1	Phase 2	Phase 3	Phase 4		
For INC submission	The Act on Promotion of Global Warming Countermeasures was legislated. For annual submission	For KP submission	For corresponding to technical review		
MOFA Provider MOFA MOFA Provider MLITT MAFF  Private Consultant companies  Inventory preparation	Ad hoc  MOFA  Data Provider  MOF  MOFA  Private Consultant companies	Committee for GEEM  MOE  Provider  MAFF  MAFF  GIO  Inventory preparation  PCC  QC3  MOFA  Provider  MLITT  MAFF  QC1  QC2	Committee MOE Provider  MAFF  QAWG GIO  QC1  MAFF  QAWG QC2		

#### Summary

For conducting QA/QC Process, it is important to consider institutional arrangement for the national inventory preparation and inventory preparation schedule, together.

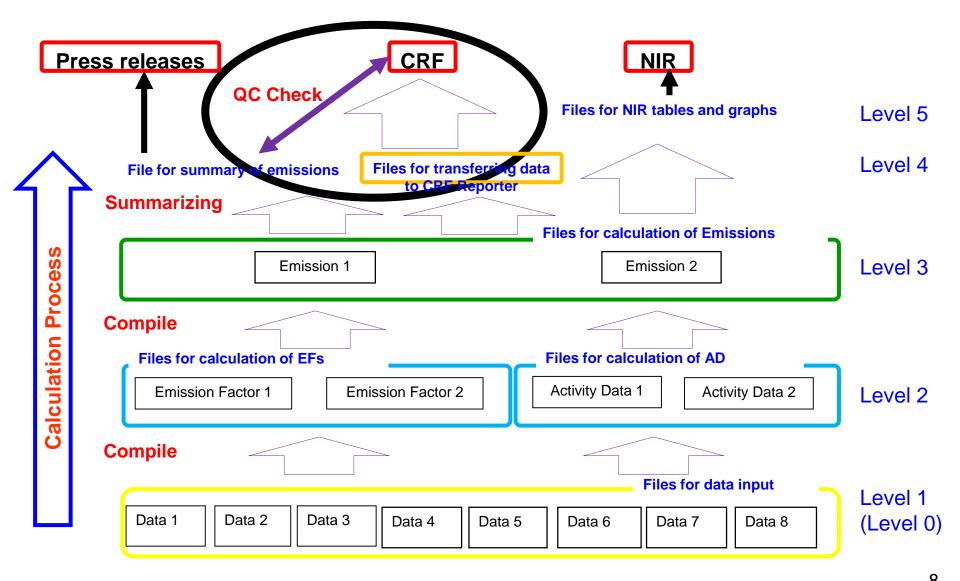


# Thank you

http://www.nies.go.jp/gio/en/index.html



## Structure of the Excel File System and general QC check



\* Use of CRF Tables helps with completeness check, especially at introduction of new sources

#### **Committee for GHG Emissions Estimation Methods**

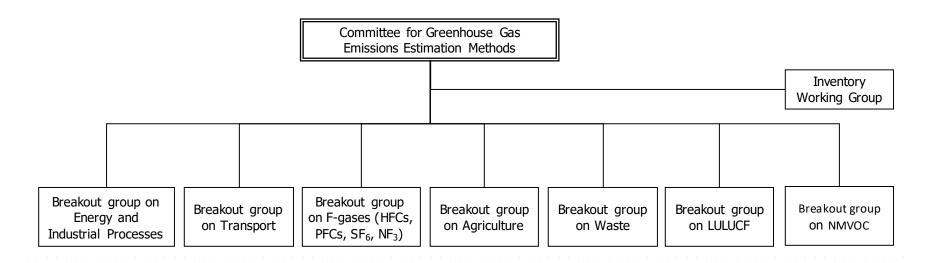


Figure 1-2 Structure of the Committee for the Greenhouse Gas Emissions Estimation Methods (page 1-4, NIR 2020)

Table 6-1 Methodological tiers used in the LULUCF sector

GREENHOUSE GAS	CO	$O_2$	Cl	H <sub>4</sub>	$N_2O$			
SOURCE AND SINK	Method	Emission	Method	Emission	Method	Emission		
BOCKEDIE (BELLE	applied	factor	applied	factor	applied	factor		
A. Forest land	T1,T2,T3	CS,D	T1	D	T1,T2	CS,D		
B. Cropland	T1,T2,T3	CS,D	T1	D	T1,CS	CS,D		
C. Grassland	T1,T2,T3	CS,D	T1	D	T1,CS	CS		
D. Wetlands	T1,T2	CS,D	NO,NA,NE	NA	NO,NA,NE	NA		
E. Settlements	T1,T2	CS,D	T1	CS,D	T1	CS,D		
F. Other land	T2	CS,D	NO	NO	T1	D		
G. Harvested wood products	T2,T3	CS,D						

Note: D: IPCC default, T1: IPCC Tier1, T2: IPCC Tier2, T3: IPCC Tier3, CS: country-specific method or emission factor

Table 6-4 Survey methods and due dates of major land area statistics

Name of the statis	stics / census	Survey method	Survey due date	Frequency	Presiding ministry	
Forest Status Surv	vey	Complete count survey	March, 31st	Approximately 5 years (Before 2004)	MAFF (Forestry Agency)	
National Forest R	esources Database	Complete count survey	April, 1st	Every year (Since 2005)	MAFF (Forestry Agency)	
Statistics of Cultivated and	[Cropland area]	Ground measurement survey (sample)	July, 15 <sup>th</sup>		MAFF	
Planted Area (Survey of cropland area)	[Expansion area and converted area of cropland]	Tabular survey (using documents from relevant agencies and aerial photographs, etc.)	July, 15 <sup>th</sup> in the previous year until July, 14 <sup>th</sup>	Every year		
World Census of Agriculture and Forestry		Complete count survey	[by 2000] August, 1 <sup>st</sup> [from 2005] February, 1 <sup>st</sup>	[by 2000] Every 10 years, [from 2005] every 5 years	MAFF	
Land Use Status Survey		Complete count Survey		Every year	MLIT	
	s on the Land Area d Municipalities in	Complete count Survey	October, 1st	Every year	GSI	

Note: Details for urban green facilities are shown in Table 11-11.