

Further details on Japan's QA process

PATPA
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Requirements and Definitions of QA/QC, and the activities in Japan

QA

Requirements Decision 24/CP.19

Each Party

- shall elaborate an inventory **QA/QC plan**
- should implement **QA procedures** by conducting a **basic expert peer review** of their inventories in accordance with the 2006 IPCC Guidelines.

Definition 2006 IPCC Guidelines

Quality assurance (QA) activities include a **planned system of review procedures** conducted by personnel not directly involved in the inventory compilation/development process to verify that **data quality** objectives were met, ensure that the inventory represents **the best possible estimate of emissions and sinks** given the current state of scientific knowledge and data available, and support the effectiveness of the QC programme.

In Japan



The **GHG Inventory Quality Assurance Working Group (QAWG)** was established and the reviews by experts who are outside the inventory compilation and improvement process is conducted.

QC

- 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.

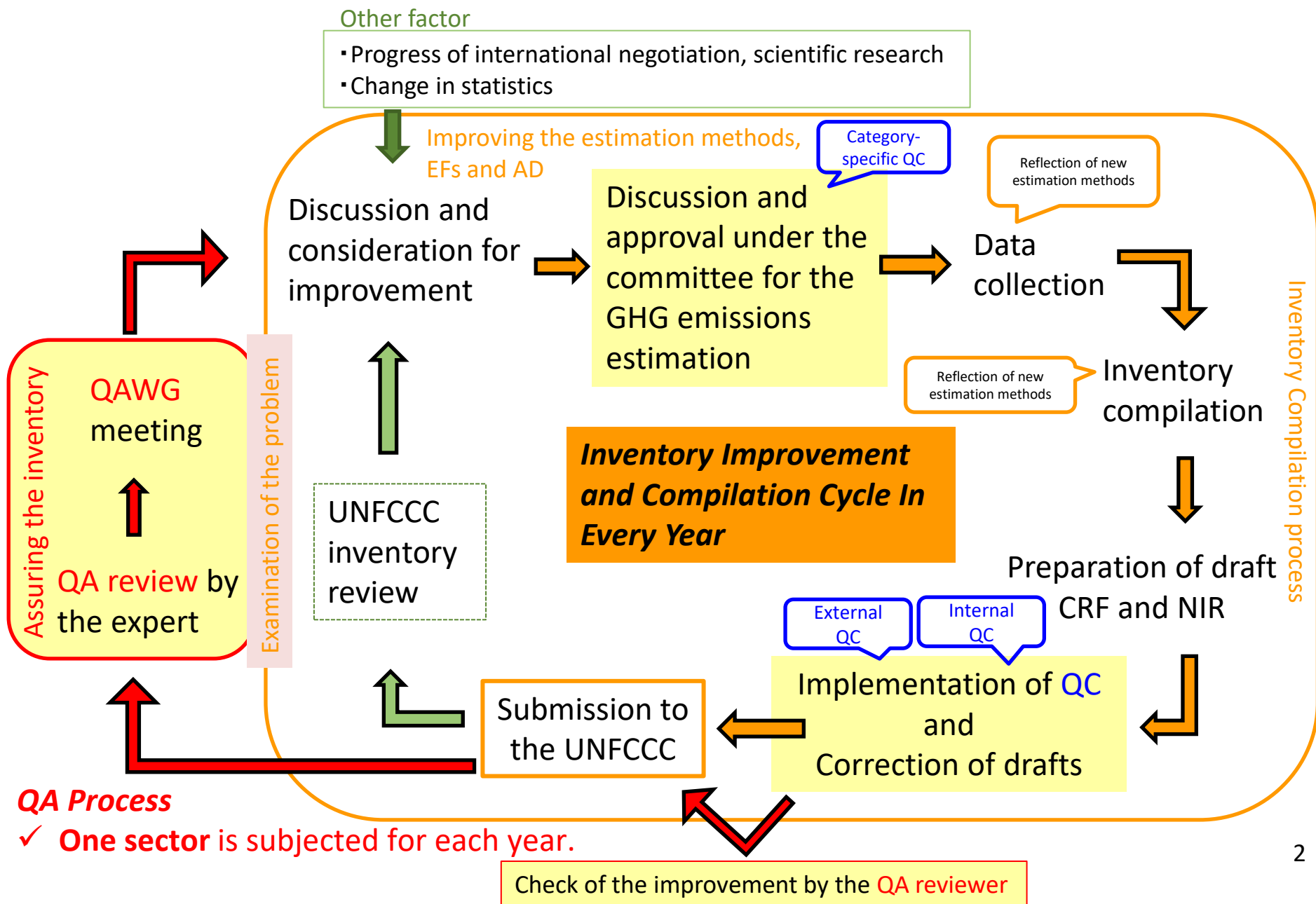
Quality control (QC) is a system of **routine technical activities to measure and control the quality of the inventory** as it is being developed.

- Provide **routine and consistent checks** to ensure data integrity, correctness and completeness;
- Identify and address **errors and omissions**;
- Document and archive inventory material** and record all QC activities.

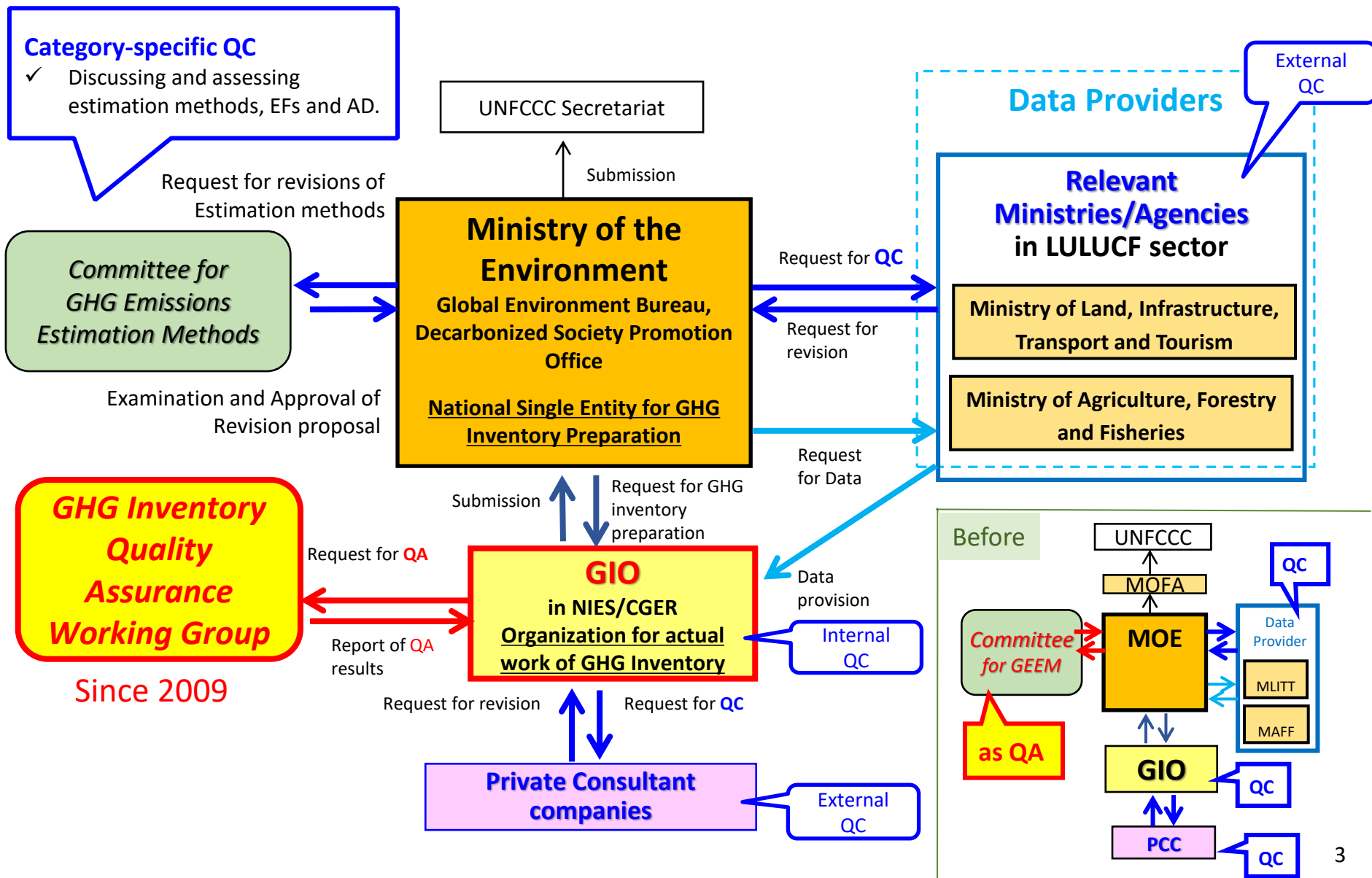


QCs are conducted by personnel belonging to agencies involved in inventory preparation cycle.

QA/QC activities in Inventory improvement and Compilation Cycle



QA/QC Process under Japan's Institutional Arrangements



Background of establishing QAWG

recommendation by the UNFCCC reviewer

Report of the individual review of the greenhouse gas inventory of Japan submitted in 2006*(FCCC/ARR/2006/JPN)

【5. Verification and quality assurance/quality control approaches】

12. Japan has in place a comprehensive QA/QC plan with clear institutional responsibilities and implementation procedures.

The QA/QC plan is in accordance with the IPCC good practice guidance, except that QA is performed by experts who are members of Japan's Committee for the Greenhouse Gases Emissions Estimation Methods, and are therefore part of the inventory preparation process.

Taking into account the IPCC good practice guidance, the ERT recommends that Japan invite experts who are not involved in the inventory process to undertake QA of its future GHG inventories.



To respond to the recommendation

The GHG Inventory Quality Assurance Working Group (QAWG) was set up independently from the ordinal inventory improvement and compiling process.

QA Activities in Japan

- The secretariat for the QAWG is established within the **GIO**.
- The secretariat and the MOE determine the sectors/categories to be reviewed at the year.
- In each year, **two experts** for the QAWG are selected by taking the following requirements into account.

Requirements for QAWG review experts

- a. **No direct involvement** in the **inventory preparation process** for estimating emissions/removals from the sectors/categories to be reviewed (i.e., no involvement in the Committee, the data creation and the data provision for those sectors/categories)
- b. No specific interests related to the inventory and the capability to judge objectively without being affected by any specific organizations and/or stakeholders
- c. Sufficient skills, knowledge and experiences to assure the quality of the inventory
Usually selected from University or Research institute

QA Review

May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
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Review →

meeting

- Review period: about **two months**
- Review is conducted by a form of desk review
- **Scope of the review:**
 - ✓ Confirming the soundness of **estimation methods, AD, EFs, and other items.**
 - ✓ Confirming the soundness of content reported in the CRF and NIR.

• Materials for review



Calculation files

(Microsoft Excel files)

Files for:

- Input data
- calculation of EFs
- calculation of AD
- calculation of emissions/removals
- transferring data to CRF Reporter
- NIR tables and graphs

• Points of review

- ✓ Appropriateness of responding to the recommendation/encouragement by annual UNFCCC review
- ✓ Appropriateness of responding to the indications by the Committee for GHG emissions estimation methods
- ✓ Consistency with the methodology provided by the IPCC
- ✓ Validity from the perspectives of scientific knowledge
- ✓ Appropriateness of reflection in CRF
- ✓ Accuracy and Transparency for NIR description
- ✓ Others

Evaluation for our response

- Appropriate
- Insufficient
- Inappropriate
- Other




Required Future action

- No action
- Simple correction
- Procedural correction
- Should be discussed in the committee for GHG Emissions Estimation Methods

- If evaluated as Appropriate  No action

 The quality of Inventory is assured.

- If evaluated as other than Appropriate

 The results are utilized for the preparation of the inventory **for the next submission** in accordance with the required future action

QA Review Cycle

Implemented Year	Objected Sector or Activity
FY 2009	Agriculture Waste
FY 2010	Industrial Process, Solvent and other product use
FY 2011	Energy
FY 2012	LULUCF and KP LULUCF
FY 2013	QA/QC Activity
FY 2014 - 2015	- (preparation periods for new submission for CP2)
FY 2016	Agriculture
FY 2017	Energy
FY 2018	Waste
FY 2019	IPPU
FY 2020	-
FY 2021	LULUCF and KP LULUCF

✓ We are in the **Second** cycle.

Summary

- Japan's GHG Inventory quality is assured by third party through the process of assessment.
- Useful suggestion on data collection were made.
- Sources not estimated were detected.
- (Sometimes) Plays an important role to move a data provider
- Insufficient explanations and incorrect descriptions were identified, and their transparency and accuracy were improved.

Thank you

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

