

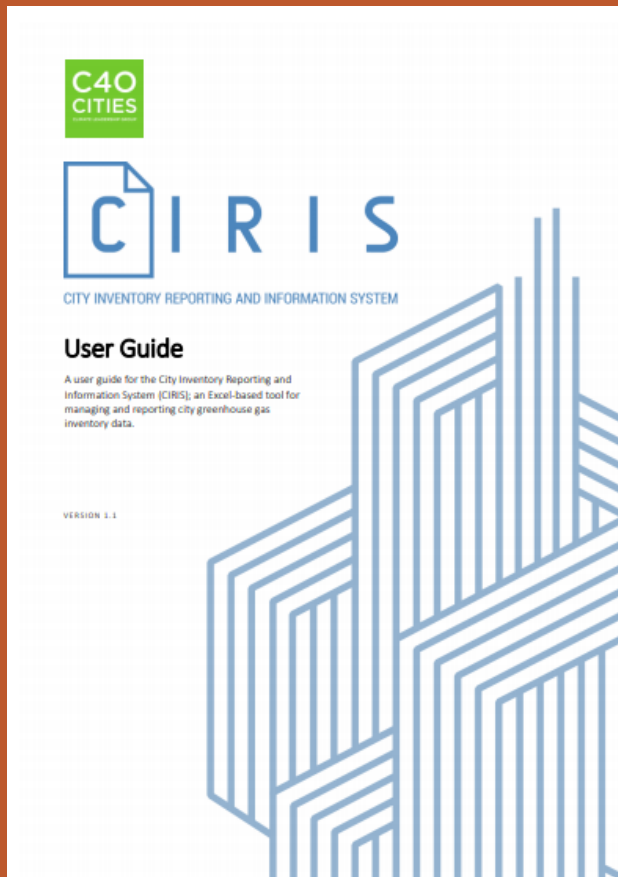
Gap analysis through practical experiences in cities in Southeast Asia -CIRIS/GPC and national MRV requirements-

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Cities' initiatives for strengthening climate actions and transparency



- ✓ C40 member cities are requested to regularly update their information through developing a city-level GHG inventory.
- ✓ Development and updating of city-level GHG inventory contribute to help cities capture status of GHG emissions within their cities and strategize their actions based on quantified information and data.
- ✓ The ways of quantification of GHG emissions are standardized via City Inventory Reporting and Information System (CIRIS) , which is based of GHG Protocol for Cities(GPC).

Distinctive feature of CIRIS based on GHG Protocol for Cities



Station	Waste	IPPU	AFOLU	Scope 3
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Template/Spreadsheet

CIRIS provides a designated template (spread sheet), in which member cities provide inputs of activity data and selected GHG emission factors, and GHG emission amounts are automatically calculated, unless otherwise opted.

Use this tab to record activity and emissions data for Stationary energy sources. The "Add" function allows you to select the required number of rows for each section. Emission factors should be recorded in the 'Emission factors' tab. Use the 'Activity data unit converter' if activity data units do not match the emission factor selected. Notation keys should be used for each section where no data is reported. Some BASIC and all BASIC+ activities been pre-assigned the notation keys NO and NE respectively. Please delete these and the explanation if you have activity or emissions data for these activities.

1.1 RESIDENTIAL BUILDINGS

Enter activity data

GPC ref No.	Scope	GHG Emissions Source			Notation keys	Activity data	
		Sub-category	Activity	Description		Amount	Unit
Add I.1.1	1	Emissions from fuel combustion within the city boundary					
Add I.1.2	2	Emissions from grid-supplied energy consumed within the city boundary					
Add I.1.3	3	Transmission and distribution losses from grid-supplied energy			NE		

1.2 COMMERCIAL AND INSTITUTIONAL BUILDINGS AND FACILITIES (please report emissions from commercial use and institutional use separately, where pos

GPC ref No.	Scope	GHG Emissions Source			Notation keys	Activity data	
		Sub-category	Activity	Description		Amount	Unit
Add I.2.1	1	Emissions from fuel combustion within the city boundary					
Add I.2.2	2	Emissions from grid-supplied energy consumed within the city boundary					

Scopes

The CIRIS templates require calculation of GHG emissions, not only Scope 1 but also Scopes 2 and 3, in order to capture both direct and indirect impact of human activities relevant with GHG emissions.

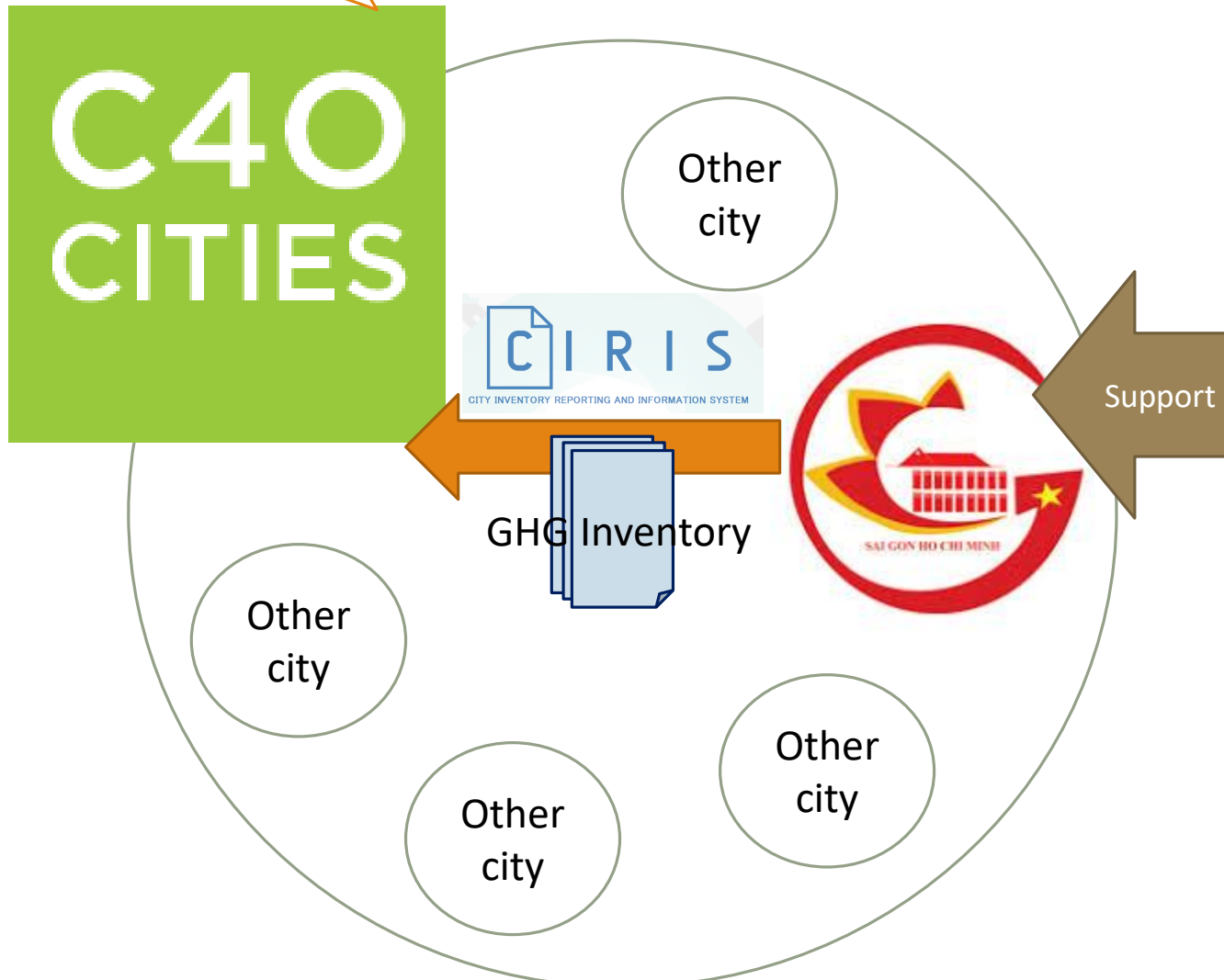
Scope	Definition
Scope 1	GHG emissions from sources located within the city boundary.
Scope 2	GHG emissions occurring as a consequence of the use of grid-supplied electricity, heat, steam and/or cooling within the city boundary.
Scope 3	All other GHG emissions that occur outside the city boundary as a result of activities taking places within the city boundary.

Sectors and sub-sectors	Scope 1	Scope 2	Scope 3
Stationary energy			
Residential buildings	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>
Commercial buildings	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>
Institutional buildings	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>
Manufacturing industries and construction	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>
Energy industries	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>
<i>Energy generation supplied to the grid</i>	✓ <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Agriculture, forestry, and fishing activities	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>
.....	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>	✓ <input type="checkbox"/>

GHG inventory submission is a mandatory action for C40 members.

Technical support provided by JICA

(Case of SPI-NAMA Project in Ho Chi Minh City)



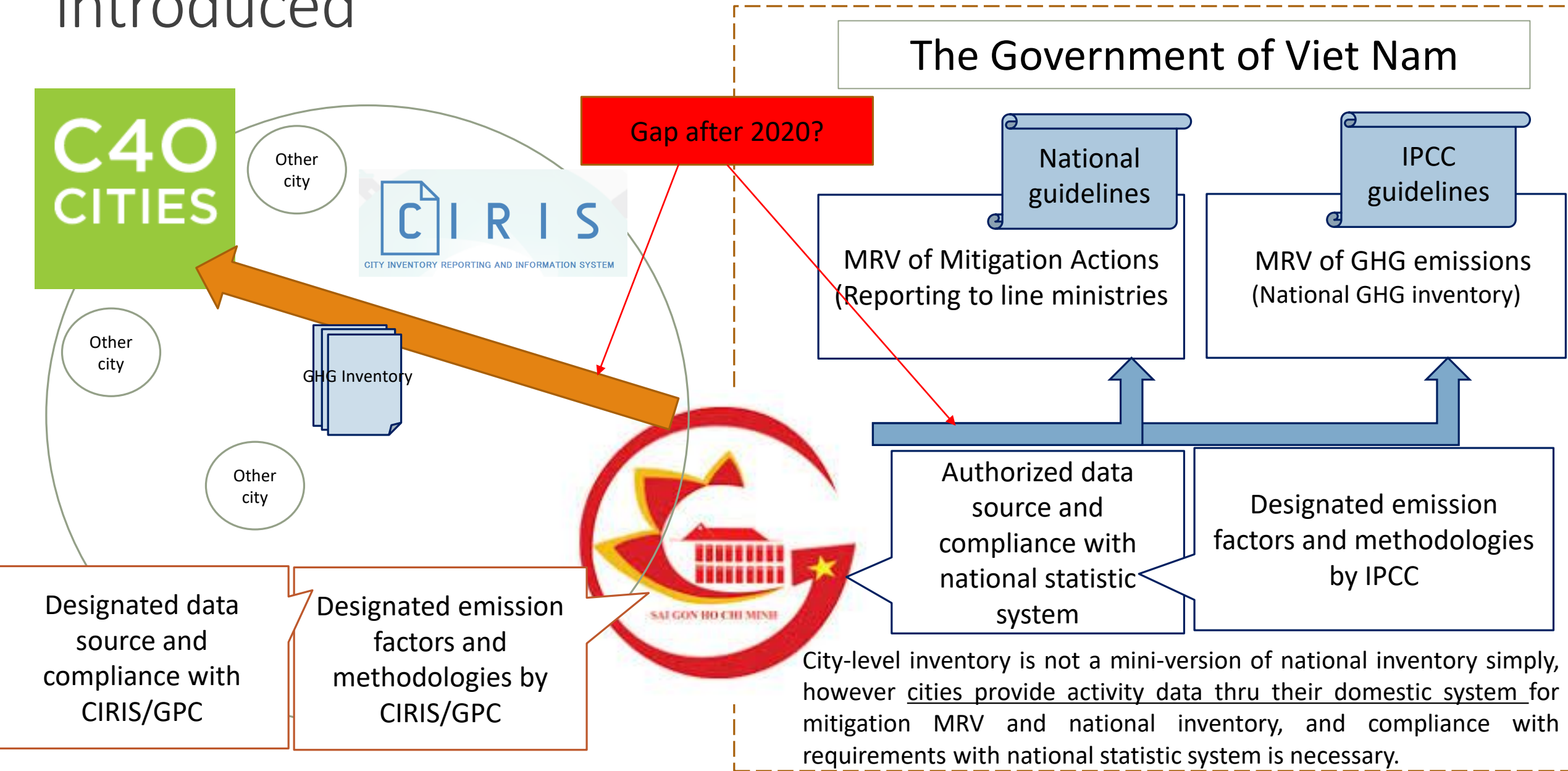
2015-2017

- Supported development of **GHG inventory of 2013** in compliance with CIRIS
- Individual and institutional capacity-building for local officers and HCMC Department of Natural Resources and Environment (DONRE)

2018

- Ho Chi Minh City developed **GHG inventory of 2016** by its own capacity and resources (own budget was mobilized)
- Provided Quality Assurance (QA) by international experts
- Further capacity-building for HCMC/DONRE for better work with local consultant

Expected trends after domestic MRV systems are introduced



Potential areas of gap and ways for reconciliation

Potential Gap

- Application of methodologies such as in the waste sector (GPC methodology vs FOD model in IPCC GL)

- Specific Emission Factors/activity data

(Recommended by GPC vs Authorized by the Government)

- Capacity of local governments (mostly they cannot afford making two different inventories with different protocols).

Ways for reconciliation

- Flexibility is necessary⁶ in case where there are difference between CIRIS/GPC and national MRV system requirements,
- When choosing national data/methodologies, Cities need to be transparent in providing background data and methodologies, in order to conform the CIRIS/GPC requirement in alternative ways

Thank you!
