

# Elaboration of GHG inventories by local and regional governments

Insights on data availability and quality

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## **Background**



## **CDP-ICLEI Unified Reporting System**



Local Governments and Municipal Authorities
- UNFCCC



CDP and ICLEI's Unified Reporting System makes for simpler reporting and stronger data.



## Introduction



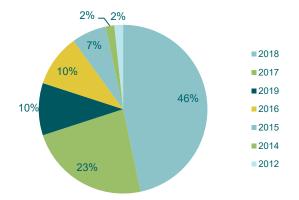
## **Description**

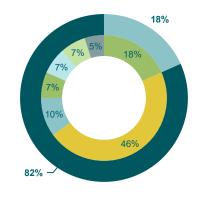


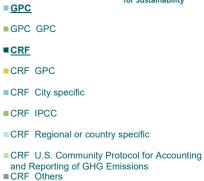


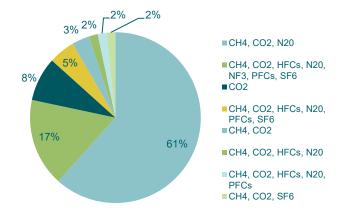
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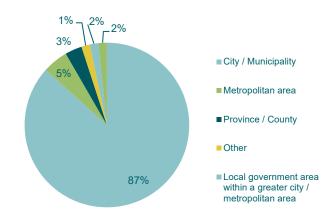






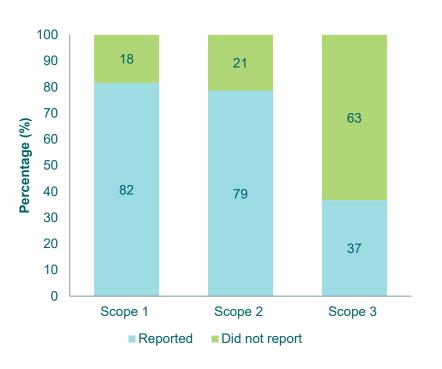


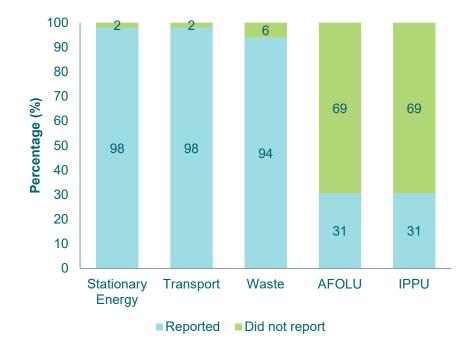




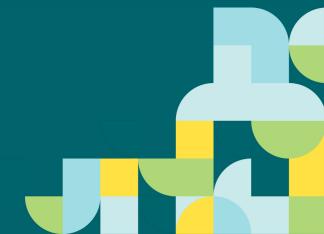
## **Completeness**







## Insights on data quality and availability



## Insights on data quality and availability



-Scope 1 emissions

#### **Quality assessment**

- Detailed activity data (high)
- Modeled activity data using robust assumptions (medium)
- Highly-modeled or uncertain activity data (low)

#### **Data Sources**

- National-level institutions (energy, statistics)
- Regional-level institutions (environment, transport)
- Local-level institutions (waste)
- Industry
- Academia

## **Stationary Energy**



#### Reported issues

- Lack of disaggregated data
- Lack of access to data

Residential
Commercial
Institutional
Manufacturing &
industries



Fugitive emissions



- Scale down regional/national data
  - Population
  - Industrial GDP



### **Transport**



#### Reported issues

- Lack of disaggregated data
- Lack of data

On-road Railway Off-road



Waterborne nav. Aviation

Private ships
Cargo ships
Private and public aircrafts

- Scale down regional/national data
  - Population
  - Other resident information
  - Sector growth rates
- Estimation of sub-sectoral shares
  - Data from previous years
- Included elsewhere
- Projected from older emissions data



#### **Waste**



#### Reported issues

- Lack of data
- Lack of disaggregated data
- Lack of access to data

Solid waste treatment

Composition of waste Shares of landfill disposal Landfill information Direct emissions data

Wastewater treatment

domestic industrial



- Scale down regional/national data on waste generation
  - Population
- Not estimated
- Scale down regional/national emissions data
  - Population
  - Industry type
  - Treatment type



#### **AFOLU**



#### Reported issues

Lack of data

Livestock Land Aggregate sources

- Project data from different years
- Estimate data with
  - Local agricultural statistics
  - Land cover data
  - Agricultural practices info
- Scale down regional/national emissions data
  - Number of existing animals
  - Local land use changes
  - Ratios of the city's cropland and grassland to national areas

#### **IPPU**



#### Reported issues

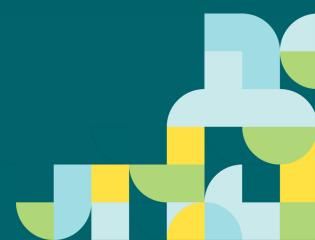
- Lack of data
- Lack of access to data
- Uncertainty of data collected through surveys



- Scale down regional/national emissions data
  - Population
- Surveys

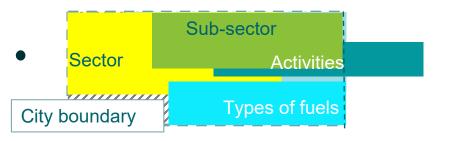


## **Conclusions\***



## **Insights**







All sectors

Data from private/national entities

Waste Transport IPPU



All sectors





## **THANK YOU!**

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