

*TECHNICAL WORKSHOP ON SECTORAL APPROACHES:  
BENCHMARKING, SECTOR BOUNDARY AND MONITORING,  
REPORTING & VERIFICATION ISSUES*

*Brussels, 17 & 18 September 2008*

# Overview of Data Available in China

**Dr. WANG Can**

**Research Center for International Environment Policy  
Department of Environmental Science and Engineering  
Tsinghua University**

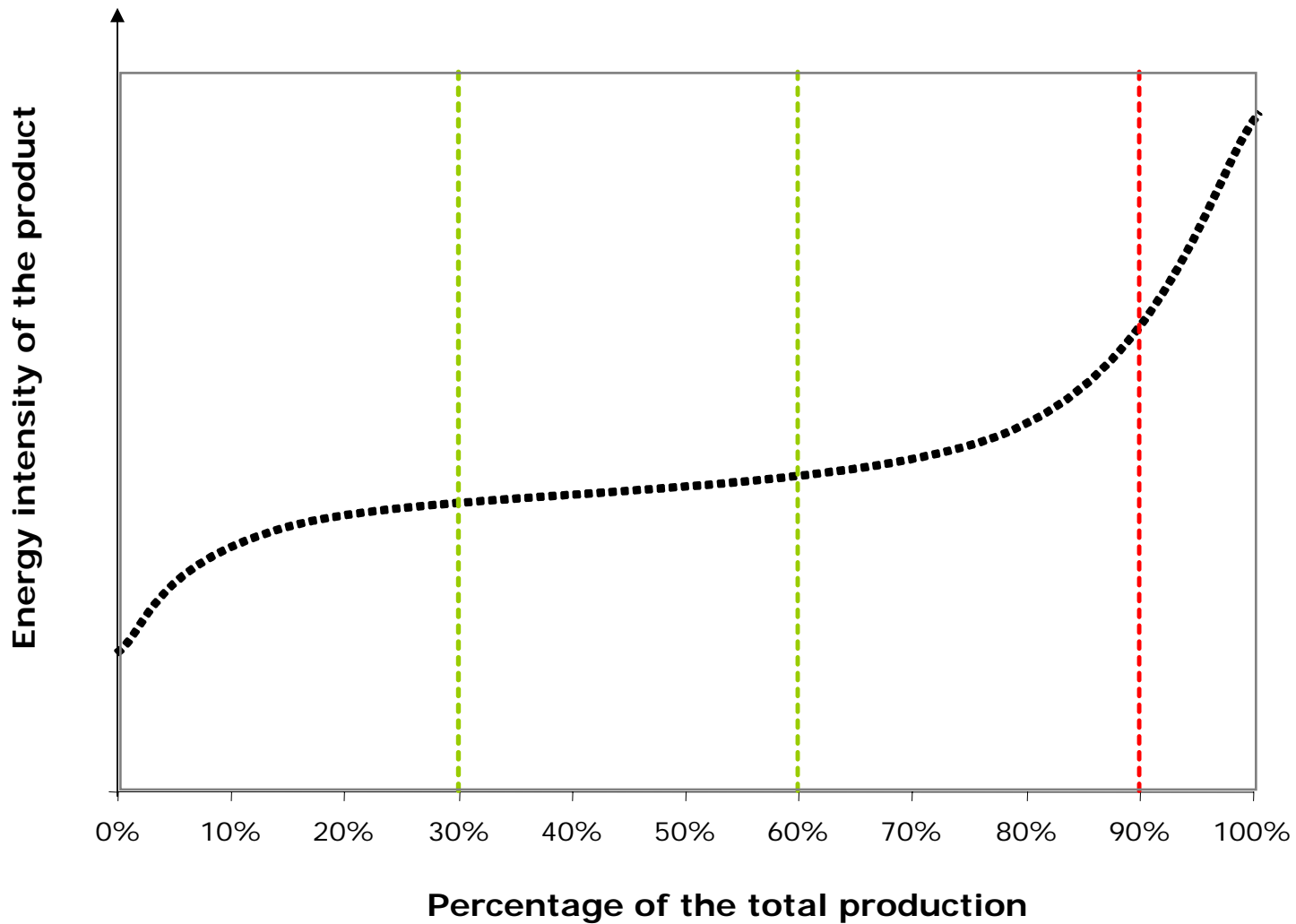


## Contents/key questions

- ◆ **What kinds of data needed?**
- ◆ **Where are the data?**
- ◆ **How possible to get the data?**



# Distribution curve



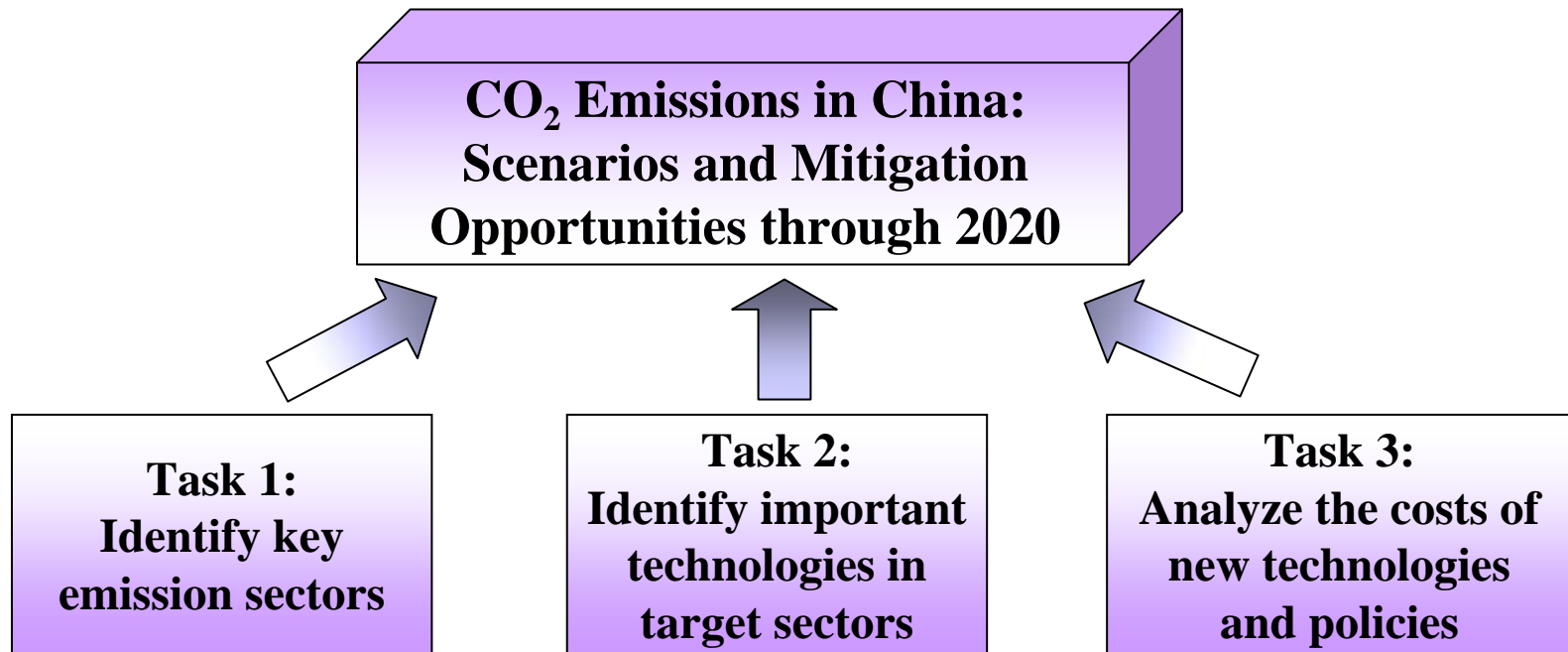


## Questions behind sectoral approaches for China

- Are there some **no-lose or low-cost mitigation opportunities** existing in China's specific sectors? What will be the costs for more aggressive sectoral targets?
- Are there any opportunities for **technology transfer or financial aids** from international community to adopt more aggressive targets? **What technologies** will be priorities for transfer? **How much** finance will be demanded?
- What are the **comprehensive effects** of sectoral approach to China, in terms of sector's competitiveness, environment (GHG, other pollutants), economy (GDP, trade), social cost (employment, regional balance), etc.?

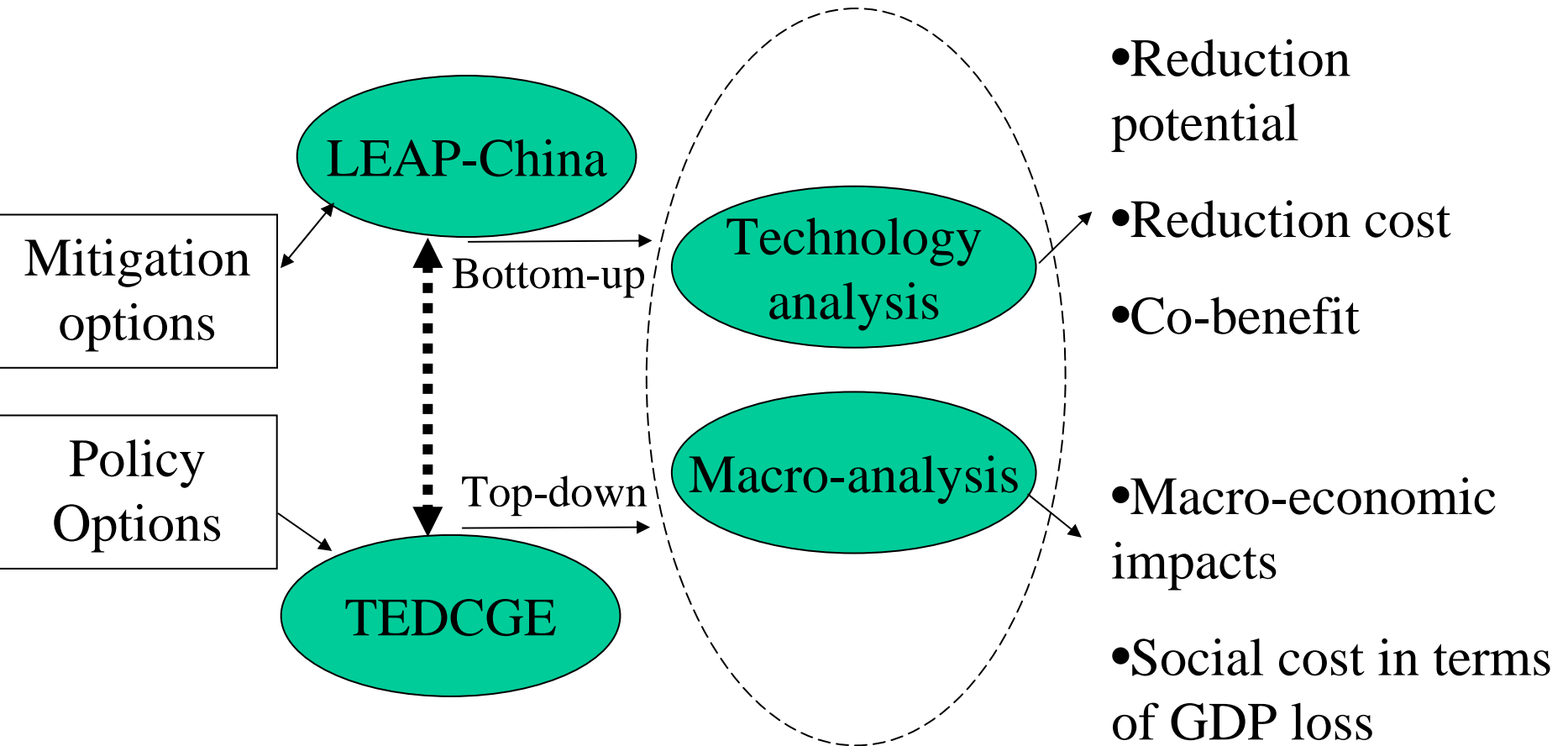


# An example of study for the questions





# Methodological framework





# Data demand

## ◆ Plant-specific data:

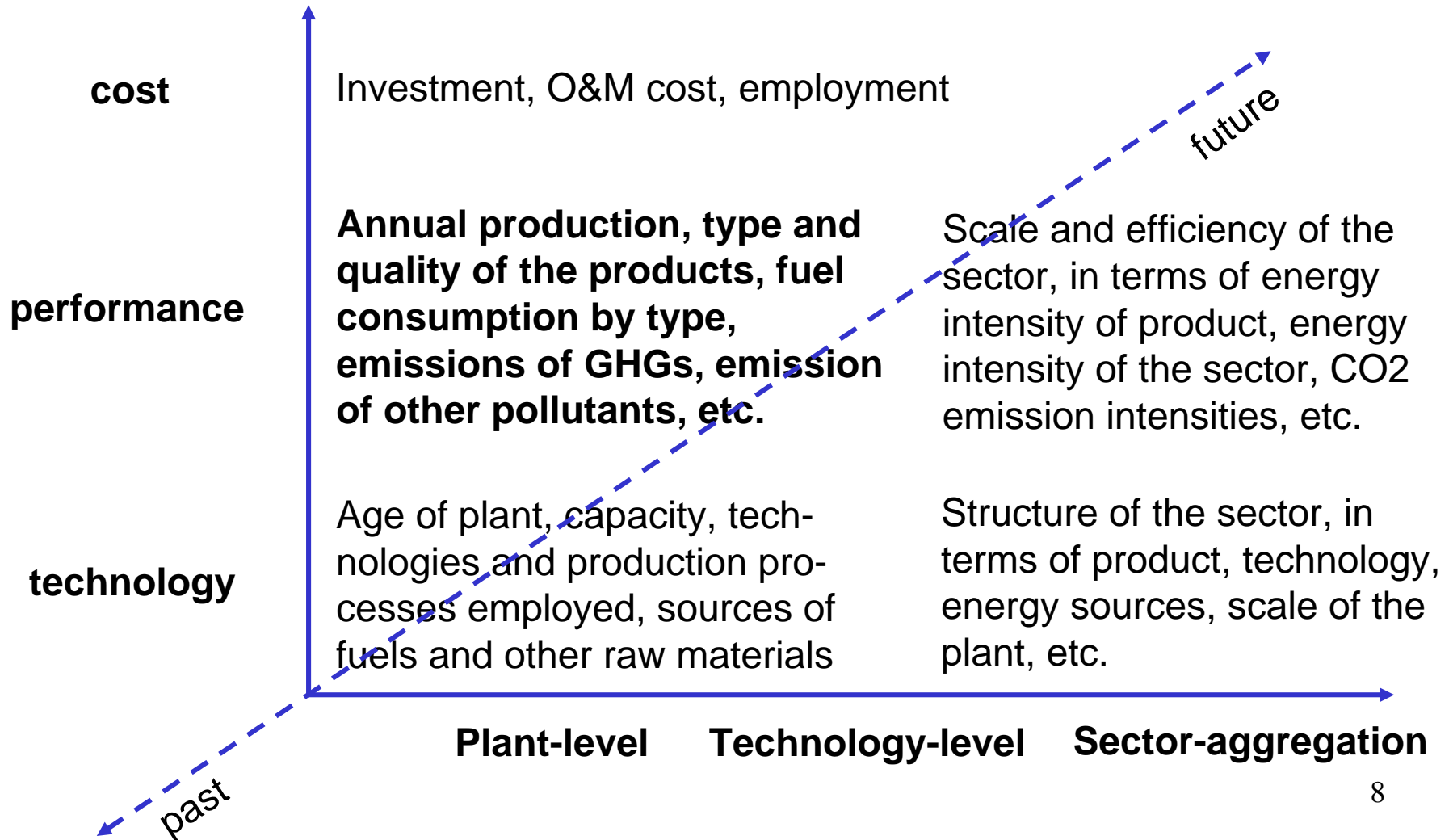
- ◆ Technical details, such as location of the plant, age of plant, capacity, technologies and production processes employed, sources of fuels and other raw materials, ownership status, etc.;
- ◆ Performance details, such as current or recent annual production, type and quality of the products, fuel consumption by type, emissions of CO<sub>2</sub> and (where appropriate) other GHGs, emission of other pollutants, etc.;
- ◆ Cost details, such as investment, O&M cost, employment, etc.

## ◆ Sector-aggregated data:

- ◆ Total production;
- ◆ Structure of the sector, in terms of product, technology, energy sources, scale of the plant, geographic distribution, etc.;
- ◆ Efficiency of the sector, in terms of energy intensity of product, energy intensity of the sector, CO<sub>2</sub> emission intensities, etc.



# Dimension of the demanded data

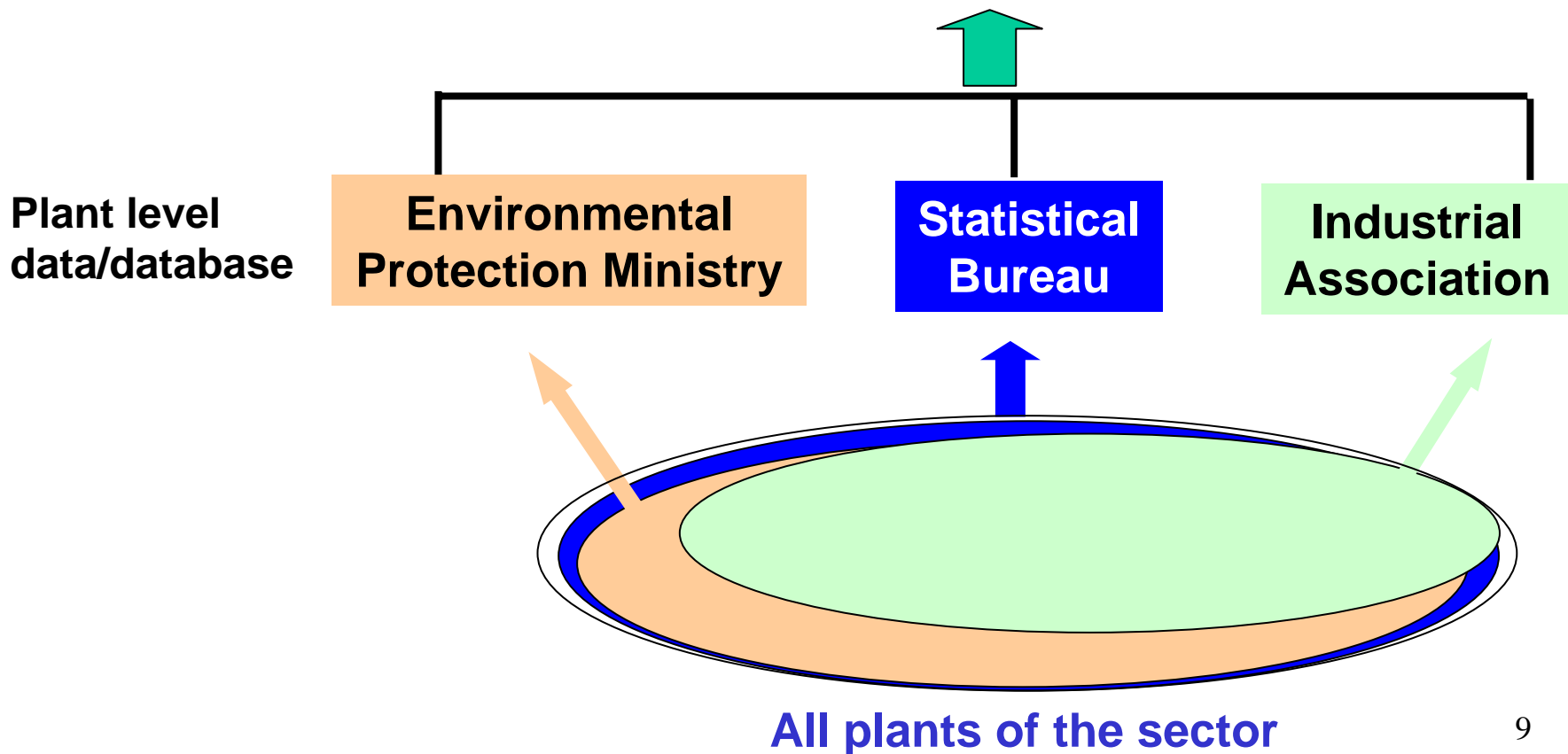




# Where are the data ?

**Sector  
aggregated data**

**Public available data  
e.g., national/local/sectoral statistic yearbook**





# Reporting Table on purchase, consumption, and stock of energy

企业法人代码

企业详细名称：

200 年 季

能源名称	计量单位	代码	年初库存量	1 至本季购进量		1 至本季消费量					期末库存量	采用折标系数	参考折标系数
				实物量	金额(千元)	合计	1. 工业		2. 非工业生产	合计中：运输工具消费			
							生产消费	用于原材料					
甲	乙	丙	1	2	3	4	5	6	7	8	9	10	丁
原煤	吨	01											0.7143
洗精煤	吨	02											0.9
其他洗煤	吨	03											0.2-0.7
煤制品	吨	04											0.5-0.7
焦炭	吨	08								—			0.9714
其他焦化产品	吨	09								—			1.1-1.5
焦炉煤气	万立方米	10	—							—	—		5.714-6.143
高炉煤气	万立方米	11	—							—	—		1.286
其他煤气	万立方米	12	—							—	—		1.7-12.1
天然气	万立方米	13	—								—		11-13.3
液化天然气	吨	14											1.7572
原油	吨	15								—			1.4286
汽油	吨	16											1.4714
煤油	吨	17											1.4714
柴油	吨	18											1.4571
燃料油	吨	19											1.4286
液化石油气	吨	20											1.7143
炼厂干气	吨	21											1.5714
其他石油制品	吨	22								—			1-1.4
热力	百万千焦	23	—							—	—		0.0341
电力	万千瓦时	24	—								—	1.229	1.229
其他燃料	吨标准煤	25										1	1
能源合计	吨标准煤	30	—	—	—			—		—	—	—	—

补充资料：一、上年同期：1. 综合能源消费量(31) \_\_\_\_\_ 吨标准煤； 2. 工业总产值(32) \_\_\_\_\_ 万元；

二、本期：1. 综合能源消费量(33) \_\_\_\_\_ 吨标准煤； 2. 工业总产值(34) \_\_\_\_\_ 万元。



# Problems in the existing data

- ◆ Public available data sources:
  - ◆ No plant-specific data available
  - ◆ Limited data with high aggregation
- ◆ Internal plant level data:
  - ◆ Confidential kept by law, unavailable
  - ◆ Uncertain quality as reported by enterprise without monitoring and verification
  - ◆ Not enough for sectoral approaches



## In summary...

- ◆ Existing data is not enough to support sectoral approaches
- ◆ Existing plant-level data might not be easily accessible or available
- ◆ Capacity building will be needed



## Open issues from a data availability perspective

- ◆ What data would be needed for implementation of a specific sectoral approach? Is it available?
- ◆ How would reporting work in practice? Which methods/systems would be applicable to acquire the data? Do they exist already?
- ◆ What resources and capacities would be necessary to meet the gaps in MRV?



**Thank you  
for your attention !**