



*Comparability:  
Recognising the “other” GHG mitigation policies*

Julia Reinaud

24/6/11

Ferdi – IDDRI Conference



## COMPARABILITY

There are different objectives underlying the search for comparability:

- **Comparing like products treatments** (Article III of GATT);
- Defining whether countries implement **policies that are comparable in their effectiveness to deal with GHG** (Article XX)

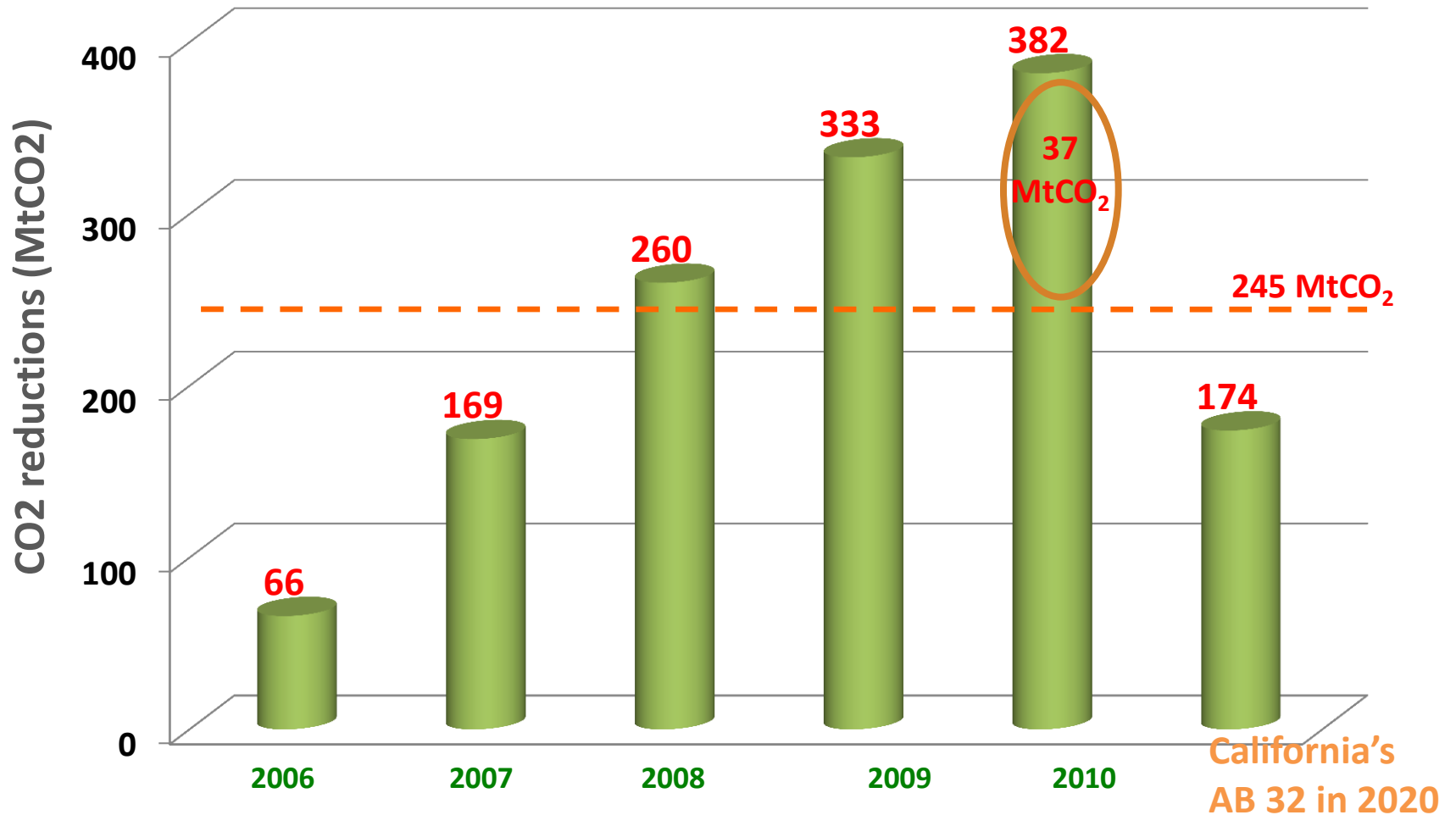
## COMPARING EFFECTIVENESS OF INDUSTRIAL GHG POLICIES

- Different countries use different policy instruments
  - Europe: Emissions Trading – a variable price on CO<sub>2</sub>
  - US: Clean Air Act (regulation) with voluntary agreements
  - China: 11<sup>th</sup> and 12<sup>th</sup> Five Year Plan policies
  - India: Perform Achieve Trade – Tradable Energy saving certificates
- ✓ *How to recognise and compare GHG efforts in other countries that do not use a GHG tax?*
- ✓ *What is the shadow price of GHG emissions?*

## INDUSTRIAL POLICIES LAUNCHED IN CHINA (EXAMPLES)

- Top-1000 Energy Efficiency Program
  - Energy-saving agreements signed with the 1000 largest energy-consuming companies. Almost half (~45%) of China's industrial sector energy use
  - One-third of China's total energy use
- 22 National Standards of Maximum Allowable Energy Use of Industrial Products
- Small plant closures
- Structural adjustment

## Top-1,000 Enterprises Energy Efficiency Program





# India - Example : Target Setting



Plant Name	Production (in Tonnes)				Estimated SEC (in MTOE/ ton)				Relative SEC	Total Energy consumption (in MTOE)	% Target	To be Energy Saving
	2005-06	2006-07	2007-08	Average production (MT)	2005-06	2006-07	2007-08	Average SEC				
Plant1	3,62,793	3,68,867	3,78,157	3,69,939	1.275	1.272	1.277	1.274	<b>1.000</b>	4,71,455	<b>X</b>	4714.55x
Plant2	3,58,954	3,58,734	3,59,213	3,58,967	1.364	1.365	1.362	1.364	<b>1.070</b>	4,89,546	<b>1.07X</b>	5238.14x
Plant3	76,867	2,07,741	2,50,981	1,78,530	1.569	1.355	1.276	1.400	<b>1.098</b>	2,49,920	<b>1.10X</b>	2749.12x
Plant4	66,347	73,008	99,406	79,587	1.425	1.452	1.408	1.428	<b>1.121</b>	1,13,679	<b>1.12X</b>	1273.2x
Plant5	NA	NA	37,635	37,635	NA	NA	1.780	1.780	<b>1.397</b>	66,995	<b>1.40X</b>	937.93x
<b>Total</b>										<b>13,91,594</b>		<b>14912.9 X</b>

## FURTHER “FOOD FOR THOUGHT”

- Definition of carbon leakage in EU ETS does not recognise action in other countries... “% of non-EU Trade Intensity”
- In some cases, regulation are more effective than a GHG tax
- International environmental law also sets out some core principles
  - “Common but differentiated responsibilities” (CBDR)
  - No sectoral-specific obligation

THANK YOU!

[Julia.Reinaud@iipnetwork.org](mailto:Julia.Reinaud@iipnetwork.org)

Low, Marceau, Reinaud (2010): The Interface between the Trade and Climate Change Regimes: Scoping the Issues, WB Conference, June 2010

Reinaud (2008): Issues behind Competitiveness and Carbon Leakage – Focus on Heavy Industry“, IEA Information Paper, IEA/OECD Paris.

[http://www.iea.org/textbase/papers/2008/Competitiveness\\_and\\_Carbon\\_Leakage.pdf](http://www.iea.org/textbase/papers/2008/Competitiveness_and_Carbon_Leakage.pdf)

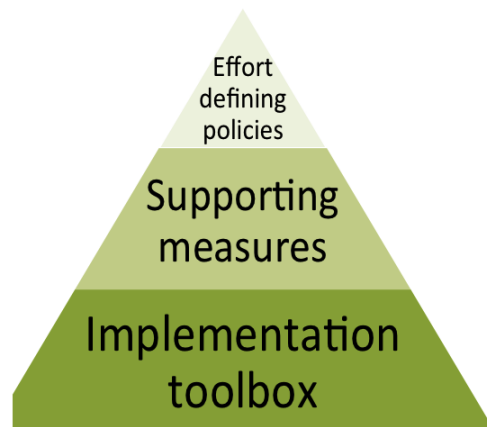
Reinaud (2009): Trade, Competitiveness and Carbon Leakage: Challenges and Opportunities, Chatham House

Reinaud and Goldberg (forthcoming), Effective policy packages to maximise energy efficiency in the industry sector: Sharing best practices from six countries, Institute for Industrial Productivity



# APPENDICES

# OVERVIEW OF CHINA'S INDUSTRIAL POLICIES



## Effort defining policies:

- Targets under the 11th and 12th Five Year Plans
- CN-1: Top-1000 Energy-Consuming Enterprise Program
- CN-3: Industrial energy performance standards

## Supporting measures:

- CN-1: Mandatory assignment of energy managers
- CN-1: Mandatory energy consumption data reporting
- CN-1: Mandatory energy audits
- CN-2: Elimination of backward technology
- CN-4: Ten Key Projects
- CN-5: Financial Rewards for Energy-Saving Technical Retrofits
- CN-6: Differential Electricity Pricing for Industry
- CN-7: Energy efficiency appraisals for new large industrial projects

## Implementation toolbox:

- CN-1: Information systems, trainings, standard for energy management & auditing, training
- CN-5: Guidelines for validation, list of qualified ESCOs, energy performance contracting standard
- etc.

## CHINA: EXAMPLE OF PRODUCTS STANDARDS

Type of feedstock	Energy consumption per unit product in existing Chinese facilities <sup>1</sup> [kgCE/t_ammonia]	Energy consumption per unit product in new/advanced Chinese facilities <sup>2</sup> [kgCE/t_ammonia]	International best available technology for ammonia production <sup>3</sup> [kgCE/t_ammonia]
High quality anthracite coal	≤1 980	≤1 500	1433
Low quality anthracite coal, coke and coal	≤2 200	≤1 800	
Natural gas, coke oven gas	≤ 1 650	≤ 1 150	956