

Domestic Tradable Quotas (DTQs)

Presentation for

Low CVP conference

Workshop 1: Including road transport within EU ETS

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MANCHESTER
1824

The University of Manchester

Tyndall°Centre
for Climate Change Research

Two questions

1. What?

2. Why?

1. What?

2. Why?

DTQs...

- are a national “cap and trade” scheme
- cover all greenhouse gas emissions from **energy use**
- allocate emissions rights to **energy end-users**
(i.e. individuals, firms and other organizations)

4 elements of DTQs

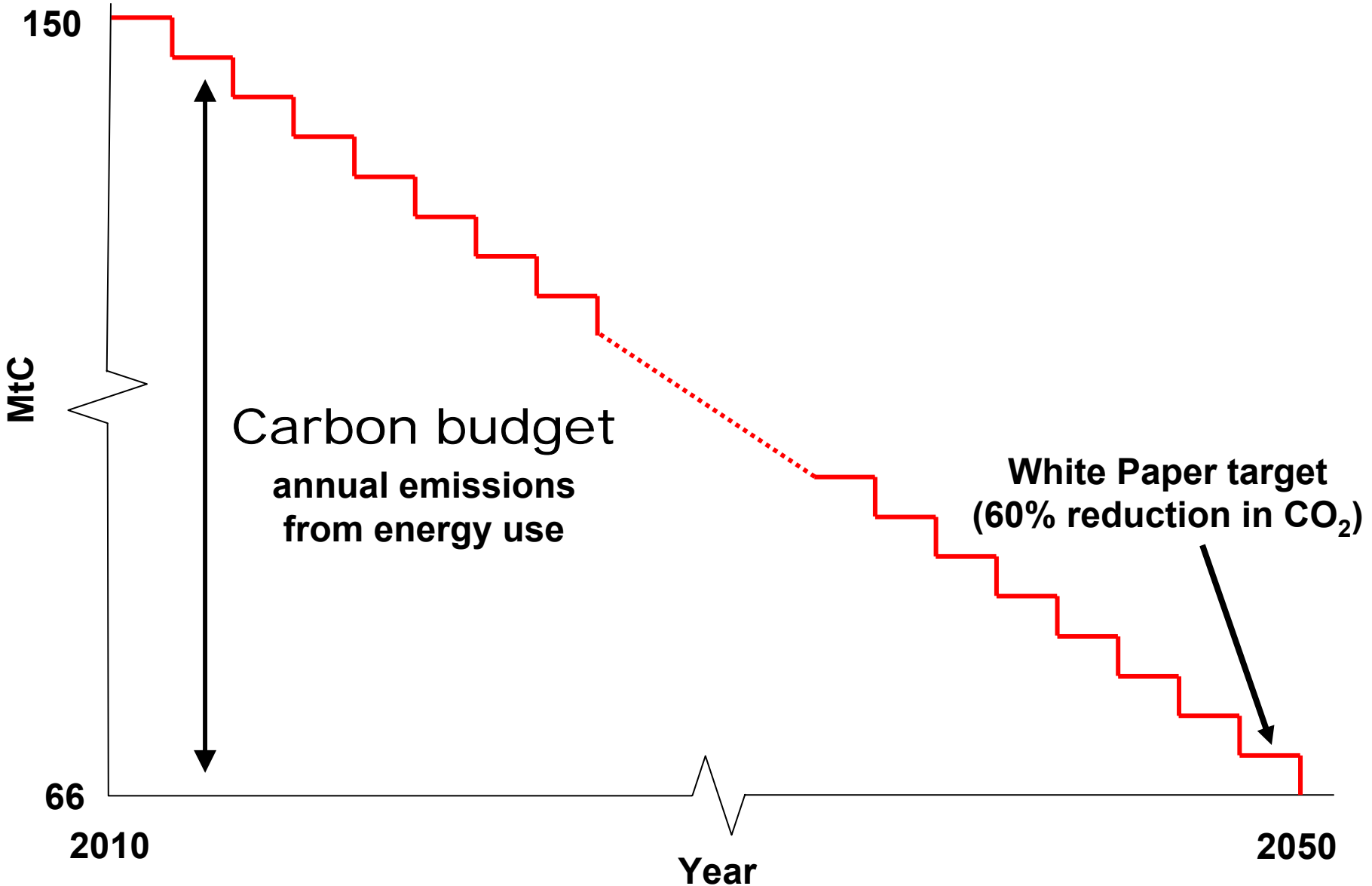
- 1. Setting the carbon budget**
- 2. Allocating carbon units**
- 3. Surrendering carbon units**
- 4. Trading carbon units**

1. Setting the carbon budget

2. Allocating carbon units

3. Surrendering carbon units

4. Trading carbon units



1. Setting the carbon budget

2. Allocating carbon units

3. Surrendering carbon units

4. Trading in carbon units

Allocation

- Each carbon budget divided into **carbon units**
- Carbon units are **emissions rights**
- 1 carbon unit = 1kg CO₂ equivalent
- Units divided between individuals and organizations

Individuals

% carbon units to individuals

equal to

% energy emissions from individuals'

direct purchase of fuel and electricity

(Currently approx 40%)

Units allocated FREE and on EQUAL PER CAPITA basis

Organizations

- Remaining units **auctioned** to organizations

1. Setting the carbon budget
2. Allocating carbon units
- 3. Surrendering carbon units**
4. Trading in carbon units

Surrendering

- **Units surrendered whenever fuel/electricity purchased**
- **Quantity surrendered relates to carbon content**
- **Surrendering made easy by means of...**

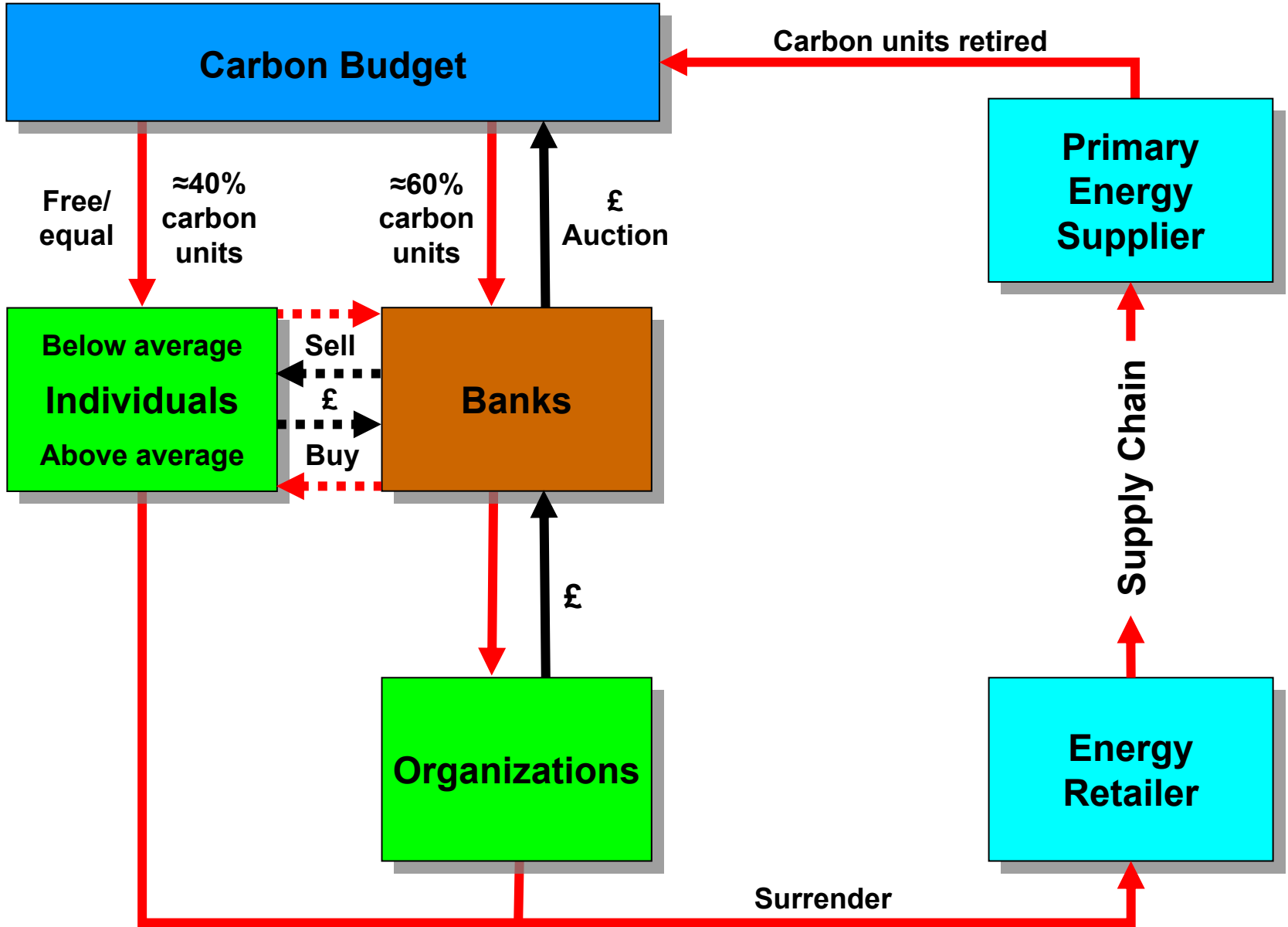
...a carbon card



1. **Setting the carbon budget**
2. **Allocating carbon units**
3. **Surrendering carbon units**
4. **Trading carbon units**

Trading

- **Every individual gets “average” quantity of units**
- **Below-average emitters have surplus units**
- **Above-average emitters require additional units**
- **Banks make money on “bid and offer” spread**



1. What?

2. Why?

Assessment criteria – the 3Es

1. Equity ...Is it fair?

2. Effectiveness ...Will it meet its target?

3. Efficiency ...Will it keep costs down?

1. Equity

2. Effectiveness

3. Efficiency

Equity

“Every human is entitled to release into the atmosphere the same quantity of greenhouse gases”

Royal Commission on Environmental Pollution

DTQs is based on this equal per capita principle

1. Equity

2. Effectiveness

3. Efficiency

Requirements

- **Technologically and administratively feasible**
- **Publicly acceptable**
 - *Perceived as fair*
 - *Sufficiently easy to use and understand*

1. Equity

2. Effectiveness

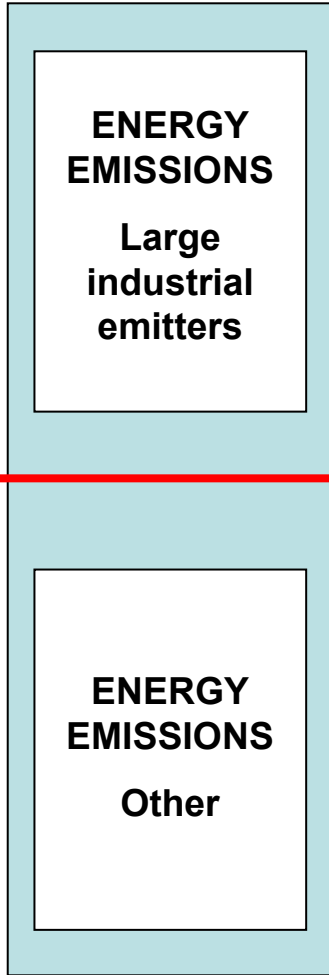
3. Efficiency

Efficiency

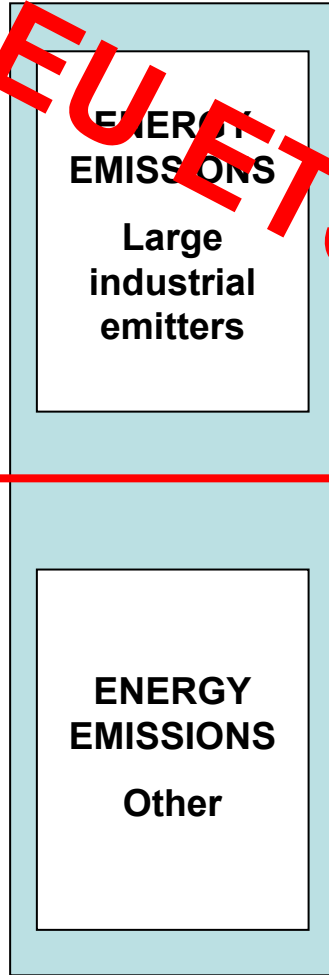
- **Enrolment based on ID card keeps cost low**
- **Fraction penny/litre petrol to fund garage infrastructure**
- **Fraction penny/unit traded to fund trading infrastructure**

DTQs and EU ETS

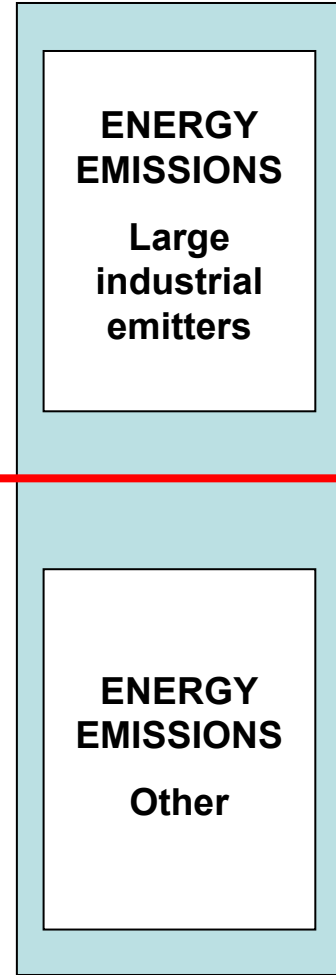
COUNTRY A



COUNTRY B

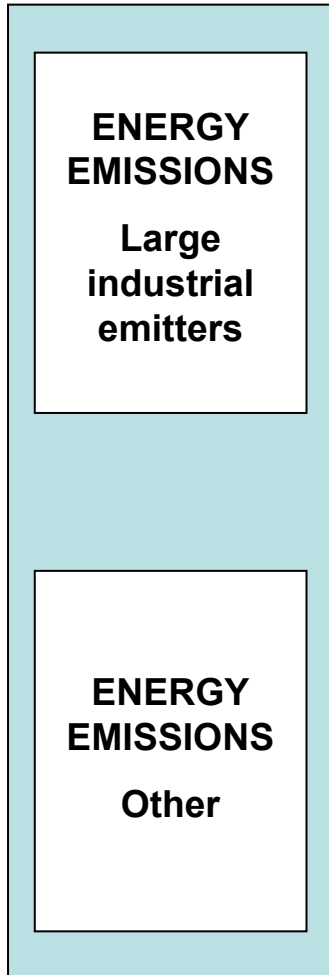


COUNTRY C

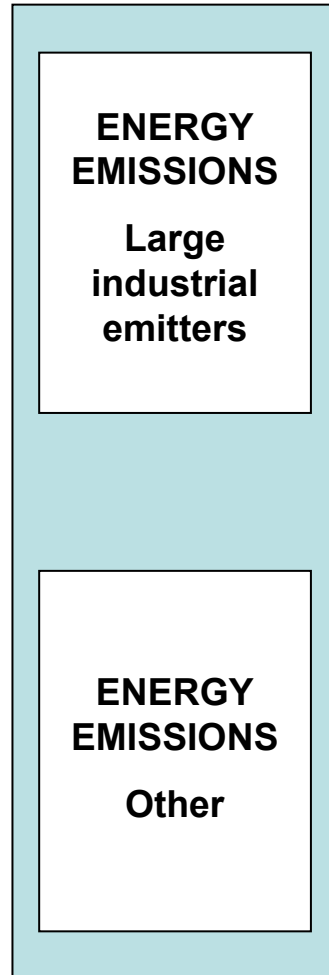


EU ETS

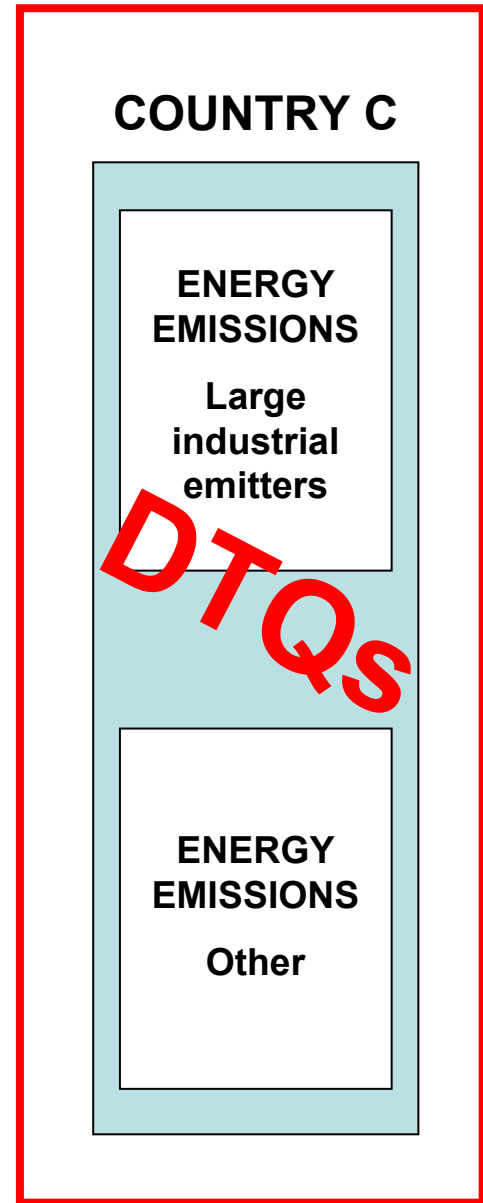
COUNTRY A



COUNTRY B



COUNTRY C



COUNTRY A

**ENERGY
EMISSIONS**

**Large
industrial
emitters**

**ENERGY
EMISSIONS**

Other

COUNTRY B

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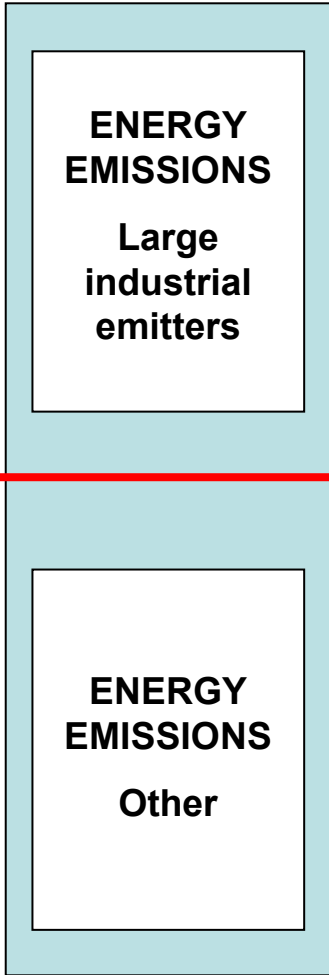
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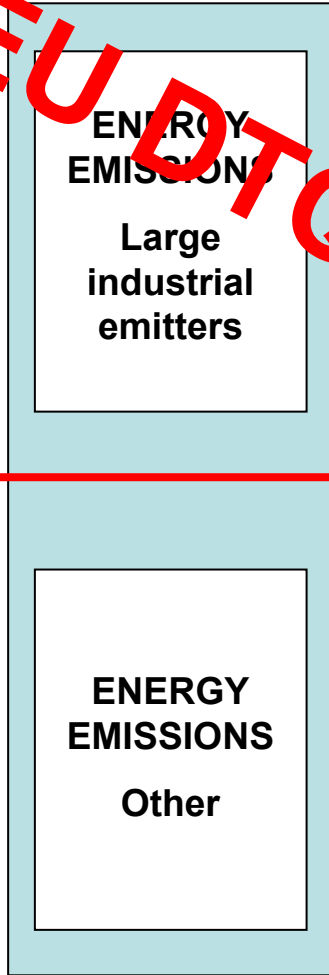
Other

EU ETS

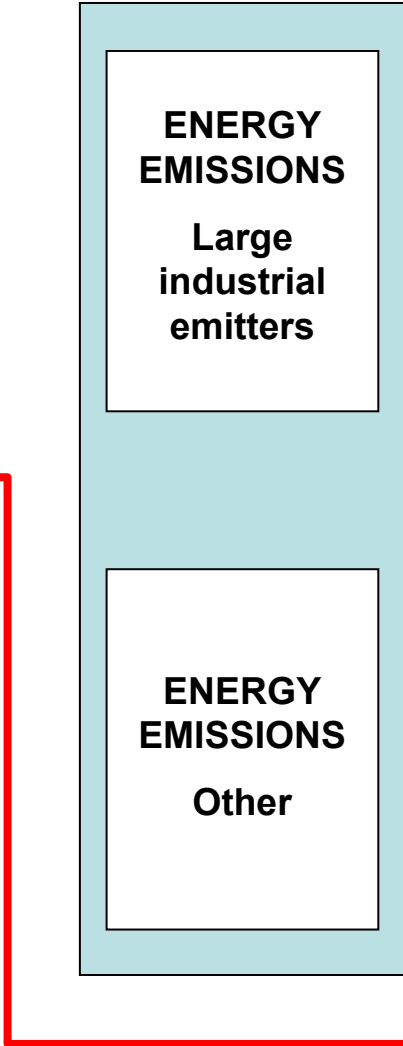
COUNTRY A



COUNTRY B

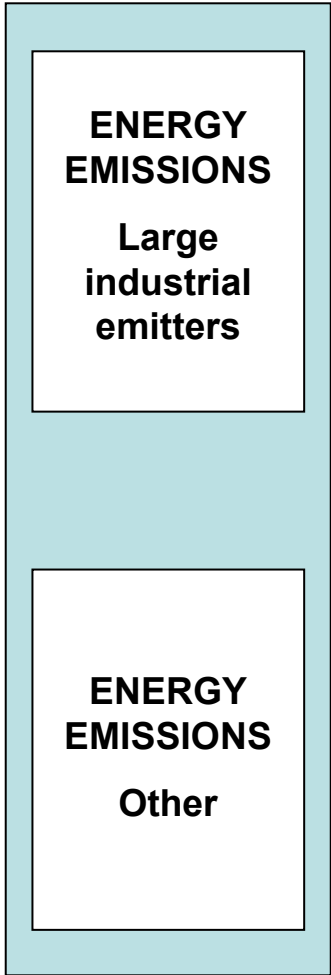


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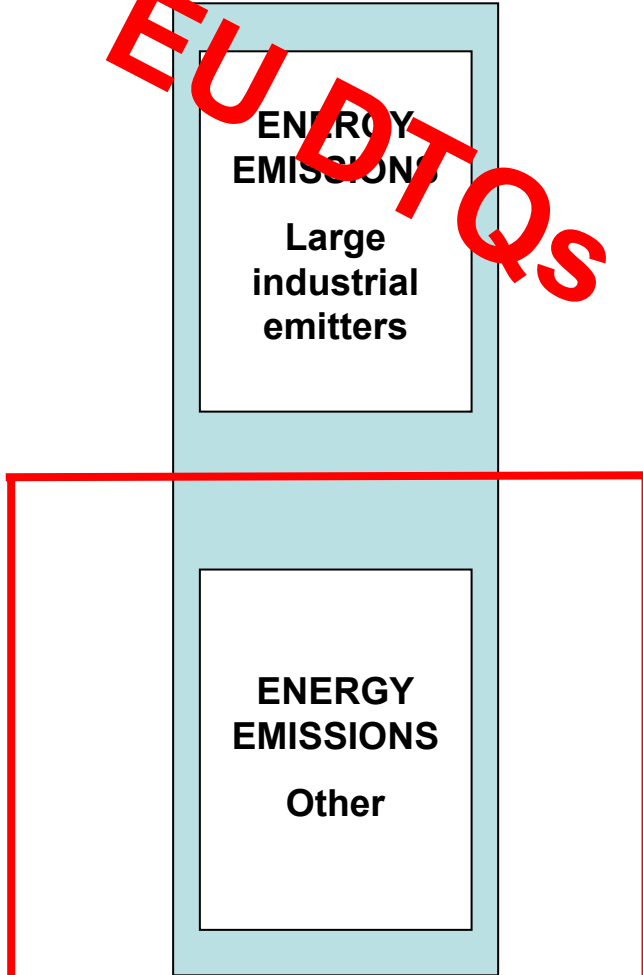


EU DTQS

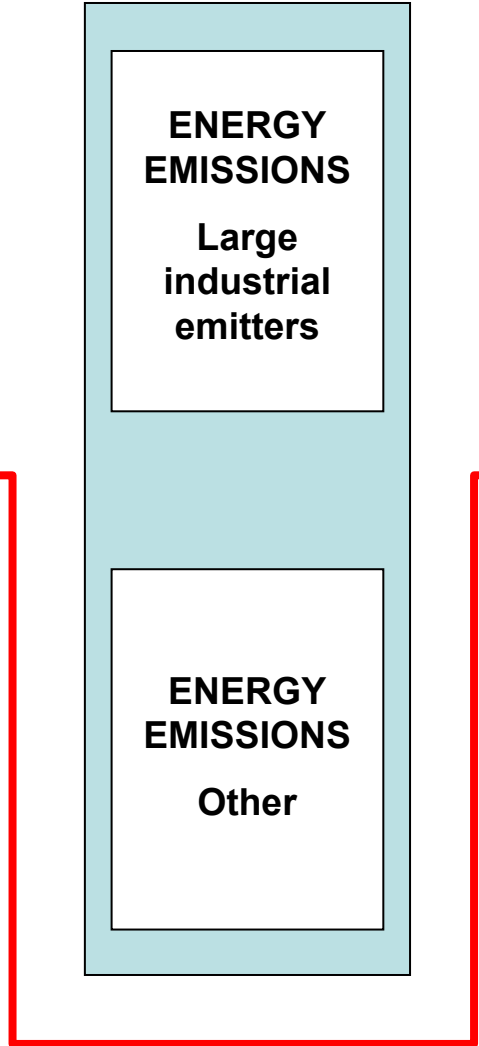
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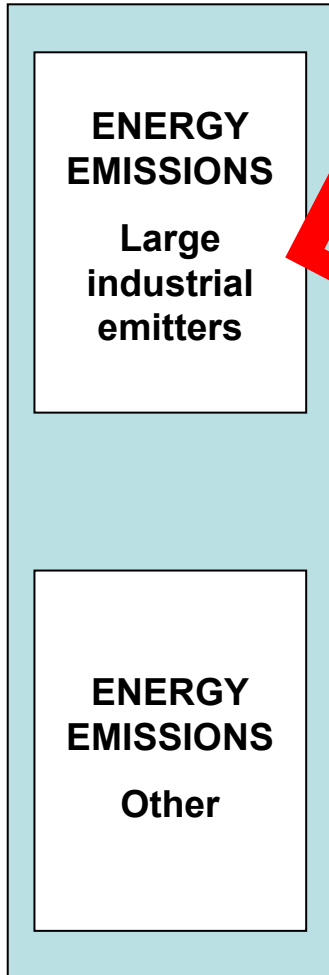


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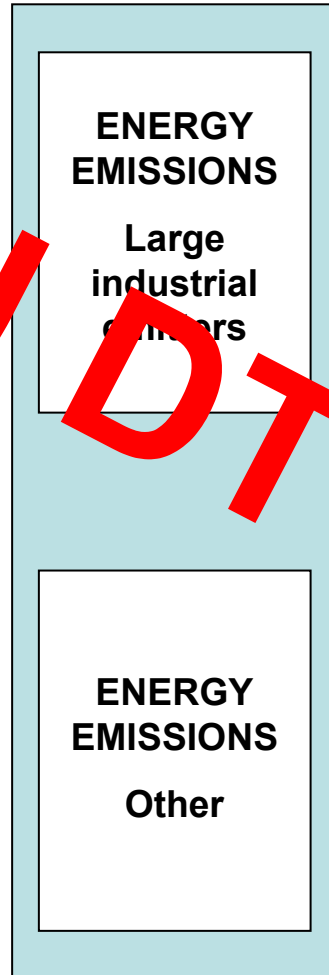


EU DTQS

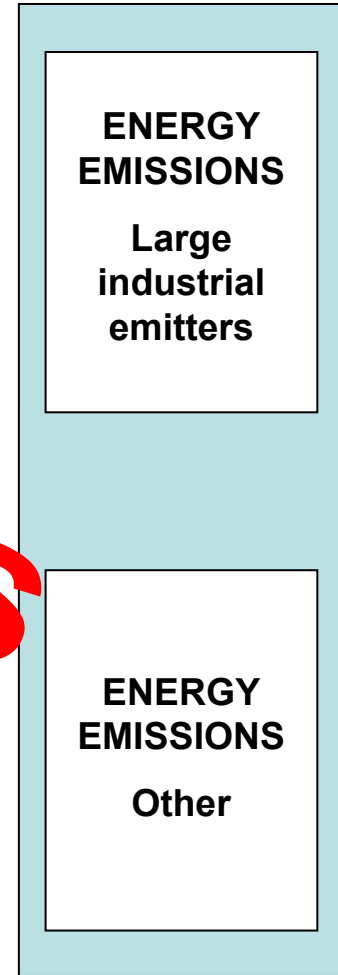
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**EU
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