

# EU Emission Trading Scheme (ETS)

## Design and evolution of a trading market



Andrew Hedges  
Partner  
Norton Rose LLP  
30 March 2010

## Norton Rose Group

- Full business service international legal firm with industry focus
- Market leader in the fields of energy and natural resources, **climate change**, project and structured finance, corporate finance, banking and financial institutions
- Deacons Australia (now Norton Rose Australia) joined the Group from 1 January 2010
  - 3000+ staff
  - 1800+ fee earners
  - 30 offices (13 offices in Asia Pacific region)
  - 23 countries
- Top 15 global law firms by number of partners and employees
- One of the best-resourced legal practice in the Asia Pacific region

## Our Climate Change Team

***“Top Tier Climate Change Practice – Chambers Global 2010”***

***“Best Law Firm, Europe 2009 : Renewables Finance – Environmental Finance Magazine***

- Leading light in the climate change legal arena and emissions trading for a number of years
- The team consists of over thirty-five core carbon specialists, split between London, Beijing, Tokyo, Sydney, Melbourne, Singapore, Bangkok, Dubai, Amsterdam, Athens, Paris, Milan, Moscow & Warsaw offices
- The team is supported by a range of other lawyers with expertise in our clean energy project finance, capital markets, funds, tax, and financial regulatory teams to assist as required on projects

## Overview

- Brief summary of EU ETS
- Design elements of a successful emission trading scheme
  - How EU ETS changed to address identified problems
- Market-driven components of EU ETS
  - Understanding legal aspects of the market

**EU Target - 20% reduction by 2020**

**Emissions Trading Scheme**

- Covered sectors = ~46% of emissions
- Locked in path or reducing caps through to 2020

**Renewable Energy Directive**

- 20% renewables by 2020
- National Plans - June 2010
- Growth = wind, solar and biomass

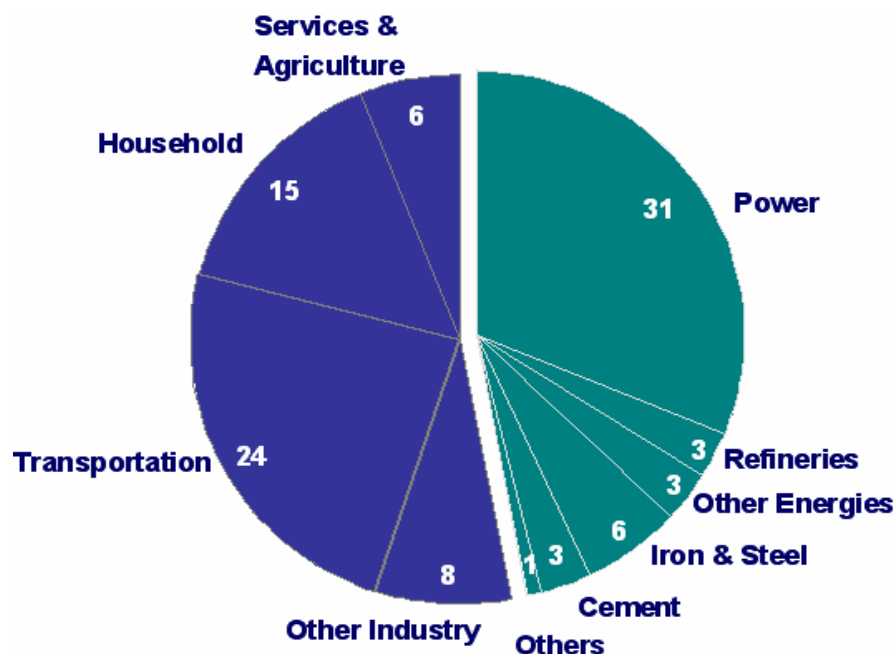
**Technology Plans and R&D:**

- CCS
- Offshore Wind
- Biofuels
- Energy Networks

**Large Combustion Plant Directive**

- phase out of older power stations

# EU ETS and European Emissions

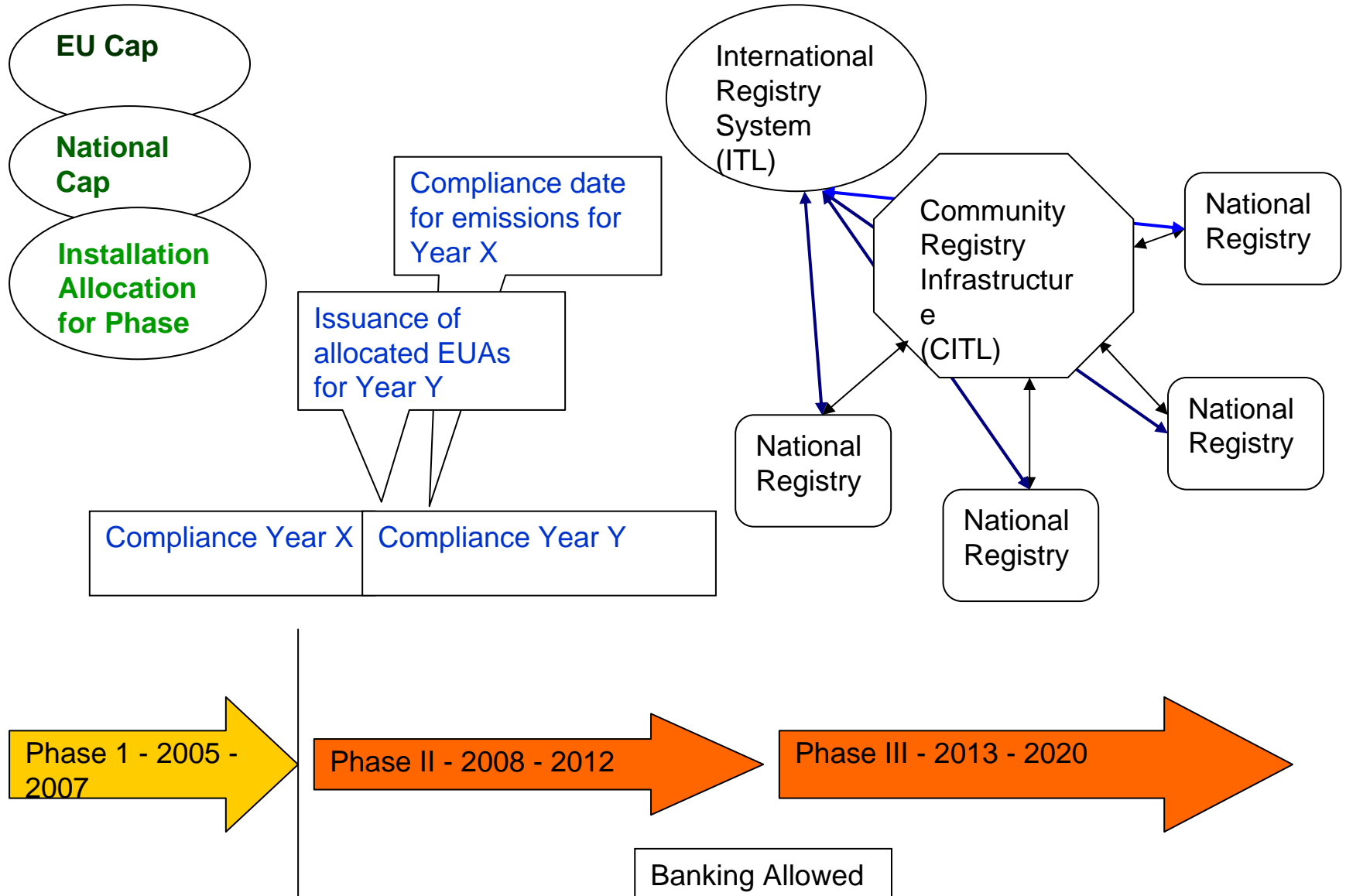


Main Sectors:

- Power and heat generation
- Iron and steel
- Mineral oil refineries
- Mineral industry (cement, glass, ceramics)
- Pulp and paper sectors

~12,000 industrial installations covered by Scheme

# How does it work?



## Successes of the EU ETS:

- Reduced Emissions
  - Phase I = up to 5% of covered sector emissions
- Reflective Market Prices for Carbon
  - Price volatility but market quickly reflects economic / information changes
- Changes to Power Generation
  - coal to gas switch in power generation choices
  - New build coal proposals replaced by CCGT
- Key driver of successful development of CDM

## My experience with a power utility...

- **First focus** was: (i) understanding the emissions profile of our power stations; (ii) working closely with sector allocation negotiations
- **Second focus**: understanding what allowances were; how they could be traded; financial services regulation; accounting and tax treatment
- **Third focus**: implementing a trading strategy in conjunction with other commodities (power and gas); altering dispatch criteria for coal / gas
- **Fourth focus**: exploring the use of acquiring international offsets (eg CERs) for lower cost

# Design Elements of a Successful Emission Trading Scheme

1. Comprehensive in scope
2. Capable of creating scarcity
3. Predictable in application
4. Robust in regulation and enforcement
5. Technically capable

# 1. Comprehensive in scope

- Ensuring a deep market by a comprehensive coverage of key sectors and installations responsible for the pollution
- Deep market equals:
  - Prevention of market manipulation
  - Reduce leakage in the same region
  - Generate reliable price indicator
- EU ETS – First phase ‘learning by doing’ BUT achieved success by coverage of all key sectors
- Phase III – More sectors (petrochemicals, ammonia, aluminium, aviation)

## 2. Capable of creating scarcity

- Objective of an emissions trading scheme
- Phase I & II relied on National proposals to generate overall cap
- Result:
  - Phase II proposals not deep enough
  - European Commission had to fight for tighter caps
- Phase III:
  - Locked in overall caps that step-down
  - Banking = future scarcity influences current phase market decisions

### 3. Predictable in application

- EU ETS - No ex-post adjustments to allowances following the allocation = investment certainty
- EU ETS – No price caps and floors so have economically efficient carbon price
- Ongoing Issue – predictable allocation decisions
- Phase III answer –
  - Significant auctioning
    - 100% for power sector (some exceptions for transitional countries)
    - 20% for industrials (unless exposed to leakage)
    - Benchmarking for those receiving free allocation

## 4. Robust regulation and enforcement

- Market confidence:
  - Capable and powerful regulator not subject to political interference
  - Phase III – centralised role for European Commission in allocation of allowances
- High financial penalty for non-compliance
  - EU ETS €100/tonne penalty plus on-going obligation to surrender
- Robust monitoring and verification of emissions
  - Phase III – new regulations for (i) monitoring and reporting; (ii) verification of emissions

## 5. Technically capable

- A commodity created by regulation
- No physical representation
- Very important for trading markets to have confidence in technical registry systems
  - Example: Issues with connection of EU system to international system impacted on market confidence
- Phase III – Simplification of registry systems through greater role for a central European registry

# Understanding the market for emissions trading in Europe

- Two types of trade
  - Spot transactions
  - Forward transactions
- Two market segments
  - Over-The-Counter (OTC) market
  - Exchange market

## Two market segments – OTC Market

- Transactions negotiated and entered into between two parties
- Common contractual templates – elect from three main industry framework agreements
- Three conceptual layers:
  - Overarching contractual terms
  - Provisions governing the physical delivery and receipt of allowances
  - Specific terms agreed for individual transactions

## Master Agreement

- Printed Form
- Doesn't change
- Terms which aren't specific to types of transactions
  - Boilerplate clauses

## Schedule

- Emissions specific provisions
- Tailor printed form to parties' needs
- Applies to all transactions unless amended in Confirmation

## Confirmation

- Specific terms of each individual transaction
- E.g. Delivery amounts and payment dates

## Two market segments – Exchange Trading

- A number of regulated electronic trading platforms
- Standardized contracts determined by the exchange
- Real-time anonymous matching of buyers and sellers
- Removal of credit and default risk through clearing mechanisms
- Dominant exchange for futures contracts – ECX
- Dominant exchange for spot contracts - Bluenext

## Lessons from the EU ETS

- All issues do not need to be resolved upfront
  - Possible to start an ETS and evolve over time
- Key theme is certainty:
  - Regulation - Trading system with carbon price driven by economic and physical factors
  - Market players – Ensuring self-regulated market practices create trustworthy transactions

**Thank You & Question Time**

**[andrew.hedges@nortonrose.com](mailto:andrew.hedges@nortonrose.com)**



FINANCIAL INSTITUTIONS • ENERGY • INFRASTRUCTURE AND COMMODITIES • TRANSPORT • TECHNOLOGY

The logo features a stylized brown house-like shape above the letter 'N'.

**NORTON ROSE**