

Tax Aspects of Greenhouse
Gas Emission Trading
Schemes

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Tax Aspects of Greenhouse Gas Emission Trading Schemes

Background

- Climate change as a key political issue
- The Kyoto Protocol
- The EU Action plan
- The COP 15 meeting in Copenhagen
 - Expected to result in lowered emissions and adjustments of the legal framework

Solutions?

- Taxes vs. Cap and trade
 - Taxation as an significant instrument in environmental issues
 - Environmental taxes and tax incentives
- Cap and Trade
 - Imposes limitations on maximum emission rates while issuing tradable permits (quotas)
 - Agreed in the Kyoto protocol and the EU Quota directive (European Trading System)

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- The rise of a new financial market with new financial instruments
 - Referred to in Fortune magazine as:
 - "The most bizarre, complex and controversial new industry of the 21. century".
- The Kyoto protocol and EU directive are legal innovations implying substantial legal challenges
- Pricing on CO2 quotas and credits determined on demand and supply

Only little focus on tax implications of CO2 quota regulation and trading

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- **The Kyoto protocol**

- The Kyoto Protocol to the United Nations Framework In Climate Change, 1998.
- First international agreement with binding reductions on greenhouse gasses
- Reduction with 5% in average (8% in the EU, 21% for Denmark)
- Also includes special rules for monitoring, verification and reporting
- Went into force 1 January 2008 (2005-2008 being a testperiod)

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- CO2 emitters, or other companies, organisations or states can carry out projects in other countries in order to obtain CO2 credits.
- Joint Implementation (JI)
 - JI implies for the affected parties (states) that they may reach their reduction targets by carrying out projects in other industrialised countries.
 - JI stipulated in art. 6
 - JI credits are not to be used until the second term from 2008-2012.
- Clean Development Mechanism (CDM)
 - CDM concerns similar actions as above in relation to developing countries and the legal framework hereof.
 - CDM credits may already be used for the period 2005-2007.
 - CDM stipulated in art. 12
- The participants in the JI and CDM schemes obtain credits in the form of CERs (Certified Emission Reductions) or ERUs (Emission Reduction Units) which the domestic Authorities can “trade” with CO2 quotas to be used in the National quota systems (and within the EU).

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Article 6 of the Kyoto Protocol:

1. For the purpose of meeting its commitments under Article 3, any Party included in Annex I may transfer to, or acquire from, any other such Party emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:

(a) Any such project has the approval of the Parties involved;

(b) Any such project provides a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur;

(c) It does not acquire any emission reduction units if it is not in compliance with its obligations under Articles 5 and 7; and

(d) The Acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting commitments under Article 3.

2. The Conference of the Parties serving as the meeting of the Parties to this Protocol may, at its first session or as soon as practicable thereafter further elaborate guidelines for the implementation of this Article, including for verification and reporting.

3. A Party included in Annex I may authorize legal entities to participate, under its responsibility, in actions leading to the generation, transfer or acquisition under this Article of emission reduction units.

4. If a question of implementation by a party included in Annex I of the requirements referred to in this Article is identified in accordance with the relevant provisions of Article 8, transfers and acquisitions of emission reduction units may continue to be made after the question has been identified, provided that any such units may not be used by a Party to meet its commitments under Article 3 until any issue of compliance is resolved.

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Article 12 of the Kyoto protocol (in abstract):

2. The purpose of the clean development mechanism shall be to assist parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.

3. Under the clean development mechanism:

(a) parties not included in Annex I will benefit from project activities resulting in certified emission reductions; and

(b) Parties included in Annex I may use the certified emission reductions accruing from such project activities to contribute to compliance with the part of their quantified emission limitation and reduction commitments under Article 3, as determined by the Conference of the Parties serving as the meeting of the parties to this Protocol.

9. Participation under the clean development mechanism, including activities mentioned in paragraph 3 (a) above and in the acquisition of certified emission reductions, may involve private and/or public entities, and is to be subject to whatever guidance that may be provided by the executive board of the clean development mechanism.

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- The regulation of these mechanisms is quite general and does not include clarification of several issues in detail.
- See in general about this <http://ji.unfccc/> and <http://cdm.unfccc.int/index.html>.
- Obtained CO₂ credits will then be converted into CO₂ equivalents equal to one ton CO₂ emitted based on the JI/CDM scheme's saved emission of greenhouse gasses.
- CER and ERU are electronic units issued by an international register (Executive Board Registry) administered by the UNFCCC Secretariat on behalf of the CDM executive board. Each CER and ERU represents 1 ton CO₂ equivalent.
- Until the market of CER and ERU has become fully operational, credits have been purchased on forward contracts.
 - Traded over-the-counter using Emission Reduction Purchase Agreements (ERPAs), and the market for resale through the Secondary Emission Reduction Purchase Agreements (SERPAs).

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- **Carbon Funds**

- Several "carbon funds" have been established by means of which parties join forces in the development of JI or CDM projects in other countries.
- The majority of the contributors in carbon funds typically have substantial emissions of CO₂ due to their production and are covered by the CO₂ quota legislation.
- The establishment and internal rules of Carbon Funds appear from Instrument Establishing The Prototype Carbon Fund from the International Bank for Reconstruction and Development.
 - E.g. Danish Carbon Fund established to obtain CO₂ credits to be allocated among the participants (the Ministry of Foreign Affairs of Denmark, the Danish Ministry of the Environment and a number of private companies, see www.danishcdm.um.dk).

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- **The EU Quota directive**

- The Kyoto protocol has been supplemented with an EU wide Cap and Trade system
- Introduced under the EU Quota directive (directive 2003/87)
- Article 3 a) of the directive includes a definition of a quota as:
 - “a right to, for a specified period of time, emit one ton carbon dioxide equivalent which is only valid for meeting the requirements of this directive and which can only be transferred in accordance with the provisions in this directive.”
- Quotas are allocated for a three-year period in accordance with article 11 of the directive. Under article 13(3) non-returned quotas are annulled four months after the beginning of each year.
- The companies covered by the directive are referred to as “quota companies” and they are primarily heavy emitters of greenhouse gasses.

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The EU Linking directive

- With the link directive (or linking directive) rules were introduced in 2004 on how to implement the rules in the Kyoto Protocol on JI and CDM into the quota directive scheme.
- To be used for the directive, CDM credits are referred to as CERs (Certified Emission Reductions) and JI credits as ERUs (Emission Reduction Units).
- The Linking directive implies that all quotas and credits have the same status so that $1 \text{ EUA} = 1 \text{ CER} = 1 \text{ ERU}$, which may all be traded within the system.

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The Energy taxation directive

- In the scope of indirect taxes the energy taxation directive exists which also refers to the Kyoto Protocol in its preamble.
- The directive which may be viewed as EU's duty contribution to comply with the Kyoto Protocol also includes minimum rates to energy products.
- Quota companies will typically be subject to CO₂ taxes
 - Double regulation.
- Such companies will have an incentive to reducing CO₂ emissions equal to the quota price plus CO₂ tax, but outside the quota system the incentive will only equal the CO₂ tax.

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In general on tax aspects

- In order to ensure efficiency of the Cap and Trade system tax issues should not create obstacles
- Obvious area to harmonize within the EU
- After some years of trade significant uncertainties still exist regarding the tax treatment of emission rights in different countries and JI and CDM projects
- Uncertainty regarding Financial reporting in the repeal of IFRS standard regarding "Emission rights".
- Risk of double taxation
- Tax planning opportunities

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Danish law as an example

- Specific quota legislation has existed since 2004
- Treating CO2 quotas as a specific (intangible) asset
 - Other countries treat CO2 quotas as inventory, intangibles or stock
- Tax Assessment Act (Ligningslovens) § 7 Y and Tax depreciation act (afskrivningsloven) § 40 A.
- Scope
 - So-called single-use quotas (defined against consecutive quotas)
 - Include CO2 quotas, which are defined as:
 - "Legal authorization to emit a ton of CO2 in a given period"

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- Tax consequences
 - Deduction (AFL § 40 A)
 - Deduction of the purchase price in the year of the application in the production
 - No deduction of free CO2 quotas
 - Taxation from allocation (LL § 7 Y)
 - CO2 quotas allocated free of charge are tax exempt for the recipient
 - Introduced in order to avoid arbitrary taxation
 - Does not apply to transfers free of charge to other companies or individuals
 - such transfers are considered a sale and purchase
 - Taxation of gains and losses from sale or expiration
 - Taxable income
 - Applies to CO2 quotas allocated free of charge as well as purchased CO2 quotas

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- Gain/loss computed as difference between the sales price and the acquisition price
 - Fixed at nil for CO2 quotas allocated free of charge
 - Sales price set to nil when quotas is used in production or if the quota expires
 - Application of FIFO principle
 - Great importance in cases where the purchaser has been allocated the first acquired quota free of charge (i.e. with a purchase price of nil) – profits equal sales price
- Allocation of sales price to CO2 quotas in joint transfers with other assets (AFL § 45)
- TfS 2006.434 SR:
 - Transfer of plant mid-term of an allocation period
 - Which quotas represent a value (all allocated quotas for the whole period or only actually issues quotas)
 - Danish Tax Board: allocation of part of total sales price to CO2 quotas which were not used at the time of the transaction.

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- Tax succession in CO₂ quotas
 - In family and close employee transactions (KSL § 33)
 - In estates of deceased (DBL § 36)
 - In conversion of privately held business into a corporation (VOL)
 - Pension schemes (PBL § 15 A)
- No tax succession in CO₂ quotas
 - In share transactions (mergers, exchange of shares etc.)
 - Uncertain treatment regarding divisions and transfer of assets (in accordance with merger directive art. 2i)

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- Trade with surplus quotas
 - Delivery in december irrespective of time of agreement
 - Is this a forward contract for tax purposes?
- Transfer pricing issues
 - Danish transfer pricing legislation applies to the transfer of CO2 quotas between related parties
 - Market prices?
 - Certain publically available pricing databases
 - Specific issues regarding JI and CDM project transaction
 - Functional analysis of project structure, including supply chain analysis
- Deduction of penalties
 - Not allowed under Danish law
 - Allowed in some other countries

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- Tax issues related to JI and CDM projects
 - Tax law classification of CO₂ credits (CER or ERU)
 - Comparable to quotas? Or options?
 - Transfer pricing issues – hard to find comparables regarding JI/CDM projects
 - Allocation of CO₂ credits from foreign government?
 - Taxation in project state?
- Carbon funds
 - Classification of Carbon Fund (what is a "trust fund")
 - Classification of participants contribution to carbon fund?
 - Tax treatment of CO₂ credits allocated through a carbon fund?

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- CO2 quotas and credits under double tax treaties
 - Uncertain tax treatment
 - PE in project state?
 - Capital gain under art. 13?
- Conclusion
 - Greenhouse Gasses are on the international policy agenda
 - Tax issues needs to be adressed as the legal instruments give rise to several uncertainties

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