

■ ■ ■ PCC Carbon Solutions



Duisburg, 2008

1. PCC Group Presentation

2. Emissions Market

3. PCC Carbon Solutions

- EUA – CER Swap
- EUA Repo transaction
- Portfolio Management

4. Summary

5. Contact

PCC SE – Management



Managing Directors

- Dr. rer. oec. (BY) Alfred Pelzer
- Ulrike Warnecke
- Executive Vice President & CFO :
Dietmar Kessler

Board of Directors

- Waldemar Preussner
(Chairman)
- Dr. rer. oec. (BY) Alfred Pelzer
(Vice Chairman)
- Reinhard Quint (Member)
Member of the Management Board of ThyssenKrupp Services AG



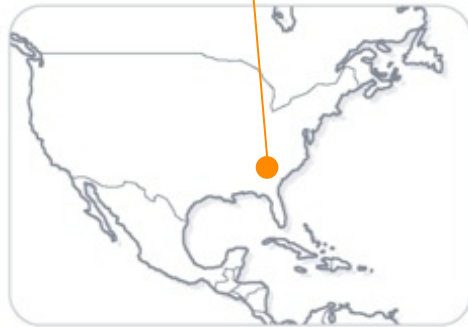
PCC Headquarters in Duisburg (Germany)

PCC Locations at a Glance*



USA, SC

Piedmont
(Greenville County)



Latvia

Ventspils

Finland

Helsinki

Poland

Brzeg Dolny
Chorzów
Gliwice
Gdynia
Jaworzno
Kędzierzyn-Koźle
Rybnik
Ślasków
Szczecin
Warsaw
Zabrze

Russia

Moscow
Kaliningrad
Novocherkassk

China

Beijing



Germany

Duisburg (Headquarters)
Berlin
Leipzig
Lünen
Offenburg
Schwedt

Czech Republic

Český Těšín
Prostejov

Slovakia

Košice

Slovenia

Ljubljana

Croatia

Zagreb

Bosnia-Herzegovina

Sarajevo

Macedonia

Skopje

Serbia

Beograd

Ukraine

Dnipropetrovsk
Kiev
Lviv
Mukachevo

Hungary

Miskolc

Romania

Ploiesti
Râmnicu Vâlcea

Bulgaria

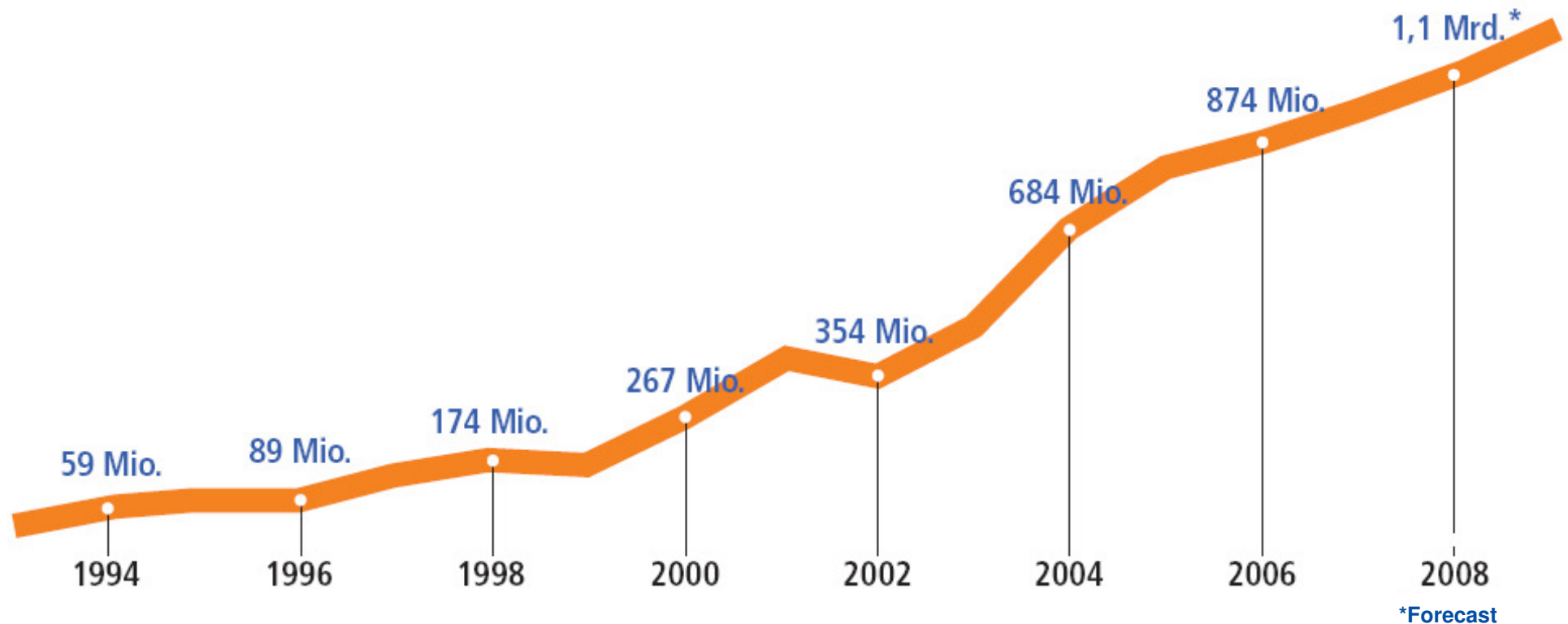
Sofia

*subsidiaries,
representative offices,
regional offices

Development of Sales PCC Group



consolidated in EUR million/billion



PCC Group Divisions



Chemicals

- Production and conversion of chemical raw materials
- Trading of chemical raw materials
- Trading of coke and anthracite



Energy

- Development of power generation projects
- Trading of electrical energy, gas, steam coal and **emission rights**
- Supply of electrical energy and gas



Logistics

- Railway transport
- Road transport
- Services
- Transloading terminals in
 - Poland
 - Ukraine
 - Russia



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Emissions Market

- **1997 Kyoto Protocol defined framework and corresponding mechanisms for achieving overall reduction in GHG emissions**
 - ❖ **Emission Reduction Units (ERUs) from Joint Implementation (JI) projects**
 - ❖ **Certified Emission Reduction (CERs) from Clean Development Mechanism (CDM) projects**
 - ❖ **Emission Trading**
- **CERs and ERUs are fungible for compliance purposes within European Emissions Trading Scheme (EU-ETS)**



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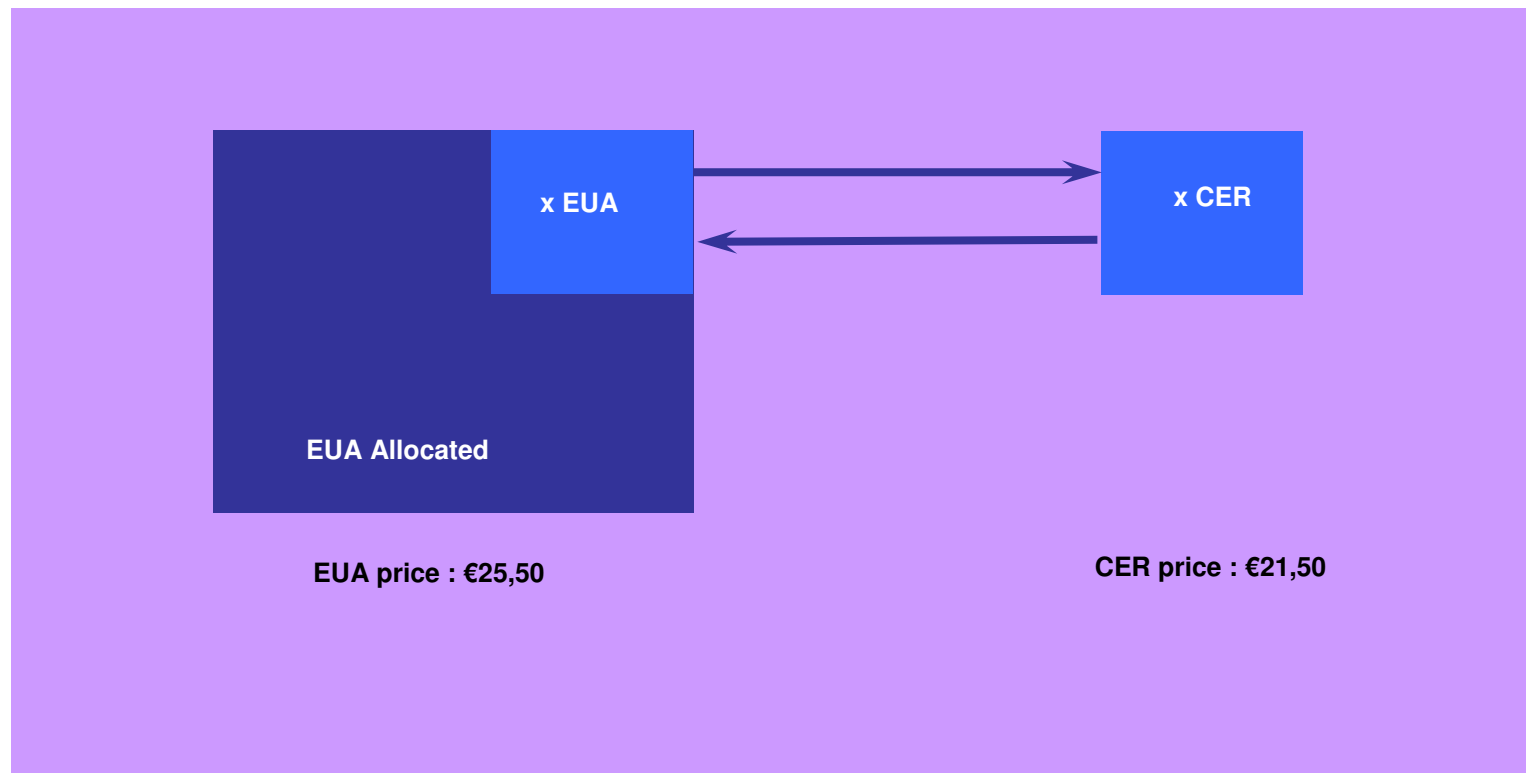
- **PCC offers a diversified range of services to optimise compliance position of EU Allowances (EUAs) holders.**
- **It is possible to choose between a single transaction approach and a complete portfolio management, according to the specific requirements of each company.**
 - **CERs/ERUs - EUAs Swap**
 - **EUAs Repo Transaction**
 - **Portfolio Management**
- **Compliance position value can be guaranteed over whole portfolio management period.**

EUA – CER Swap (1)



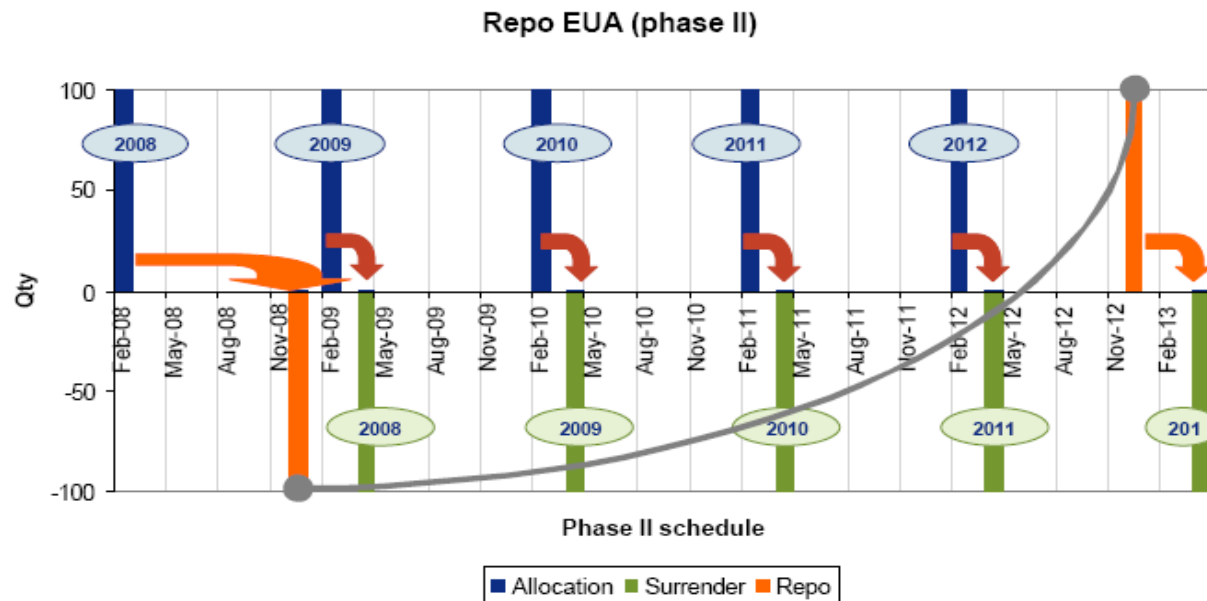
- The EU linking directive allows companies to surrender besides EUAs also emission reduction credits to cover their emissions.
- These can be Certified Emission Reductions (CERs) from Clean Development Mechanism projects (CDM) and Emission Reduction Units (ERUs) from Joint Implementation projects (JI).
- PCC offers competitive pricing for swapping EUAs against CERs/ERUs for the second emissions trading phase.
- This will guarantee Allowance holders to monetise important price spread between two products.

EUA – CER Swap (2)

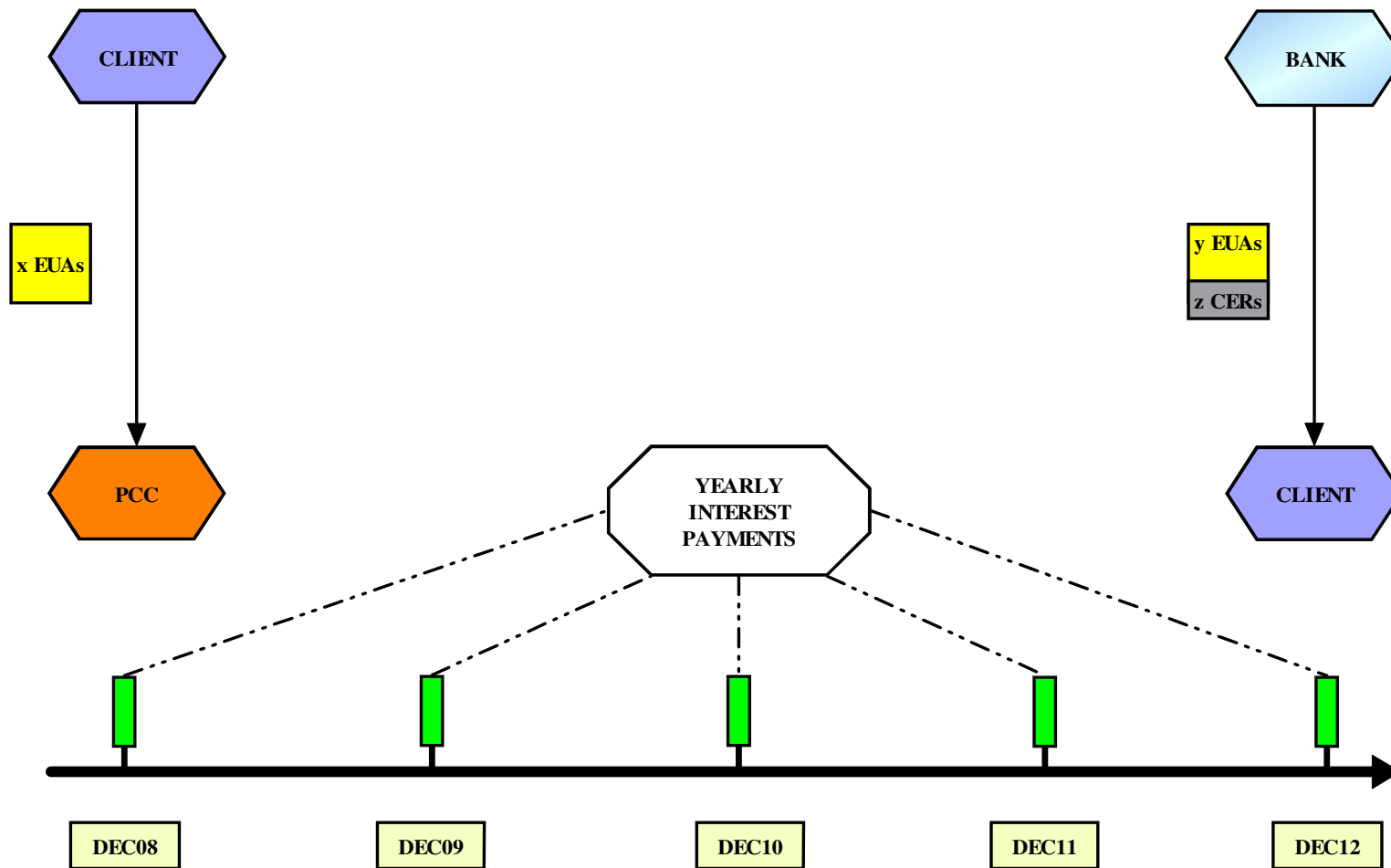


EUA Repo transaction (1)

- Sell spot and repurchase forward. Surrender for compliance year Y rights borrowed from year Y+1 and so on.
- PCC borrows clients allocations and generates benefit due to best combination of spot and forward transactions.



EUAs Repo transaction (2)



Portfolio Management (1)

- **PCC can combine the different optimisation sources into a single service providing potential additional synergies and opportunities. In this case PCC acts as portfolio manager mandated to realise best return on compliance position.**

- **PCC as Portfolio Manager will offer following additional services :**
 - **Market access service**
 - **Hedging service**
 - **Reporting service**
 - **Market analysis service**

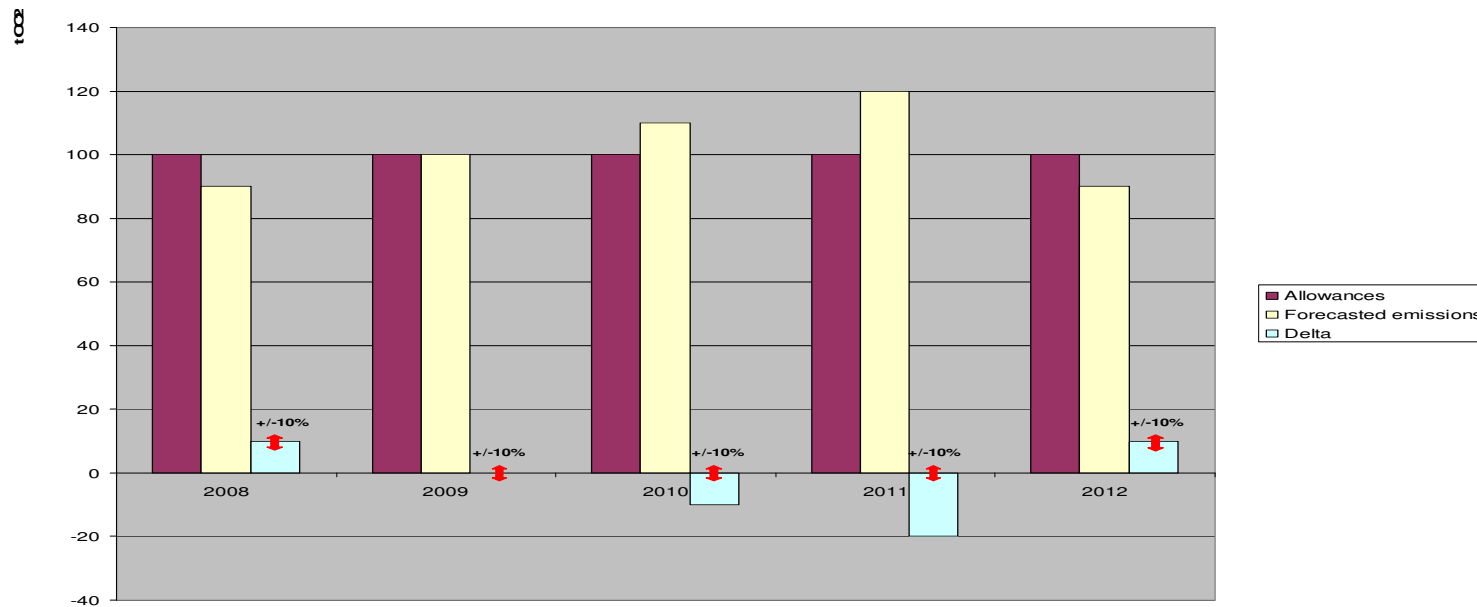
Portfolio Management (2)

■ Market access service

Possibility to realise spot transactions at market price.

■ Hedging service

Possibility to secure net portfolio value at a certain time for a specific horizon and to benefit of a 10% free corridor around forecasted position.

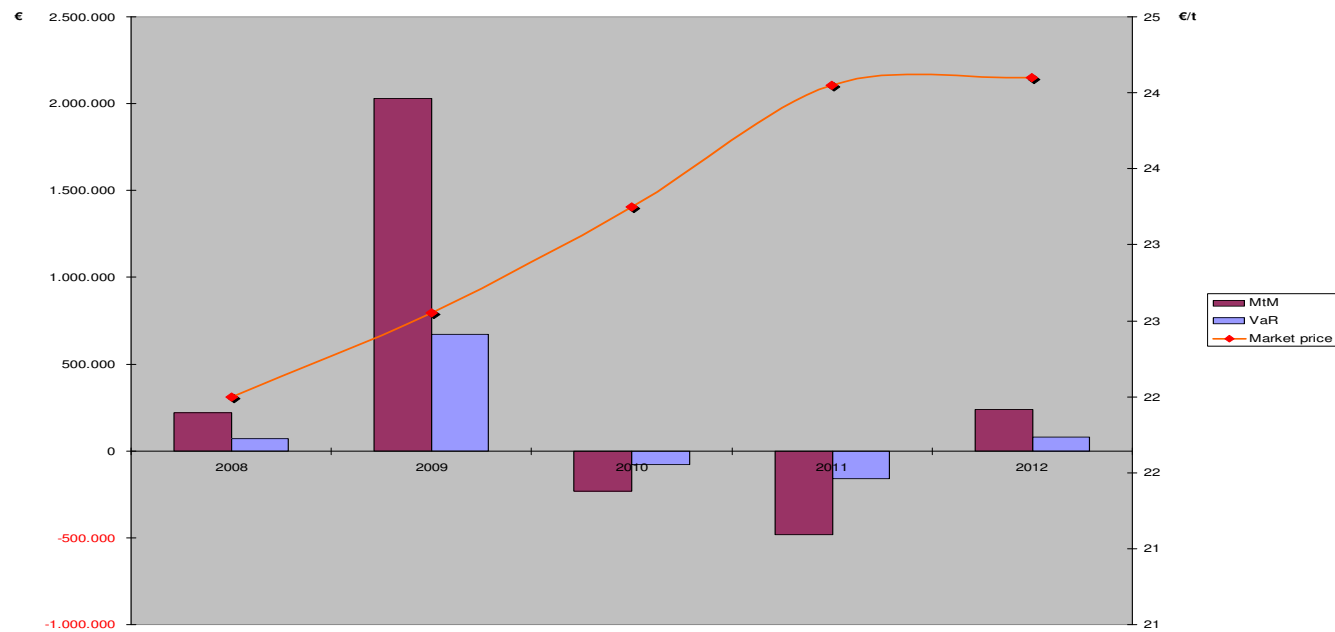


Portfolio Management (3)



■ Reporting service

Position update on a monthly basis and respective MtM (marked to market) and Value at Risk evolution reporting.



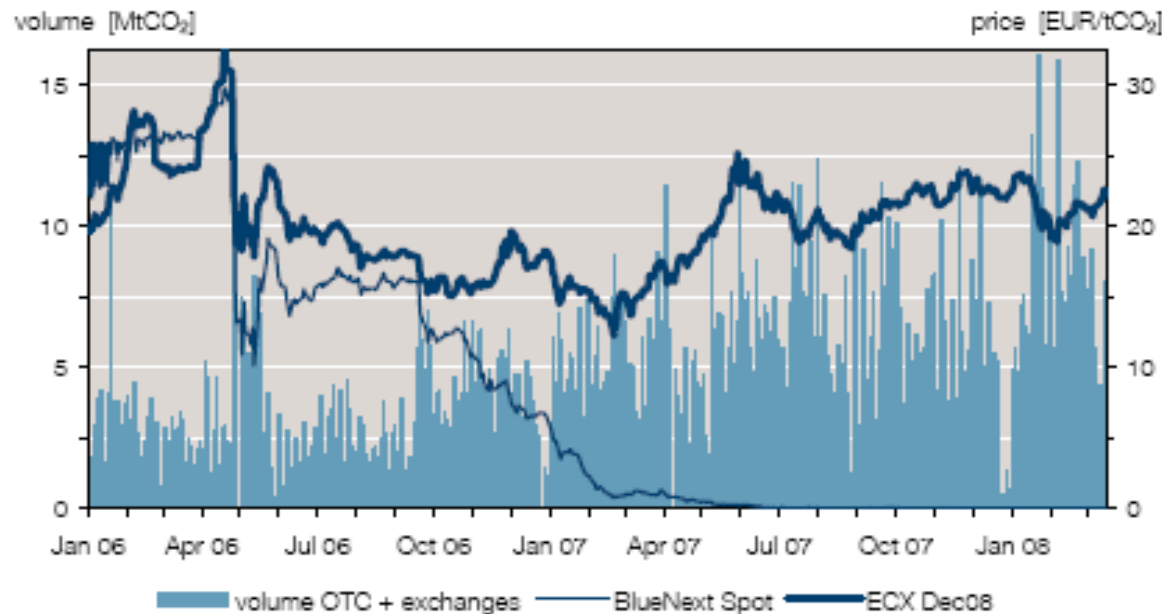
Portfolio Management (4)

■ Market analysis service

Monthly market report accompanied by strategy advices on forecasted net position.

Price drivers evolution overview.

Primary and secondary CERs and ERUs evolution and opportunities assessment.



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- b) EUA Repo transaction
- c) Portfolio Management

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Summary



PCC as a competent partner:

- provide a range of custom-made solutions
- offer competitive pricing
- be your coordinator in the Emissions Market

Contact



PCC Energy Trading GmbH
Baumstraße 42
47198 Duisburg
Germany

Axel Spahr
Telefon: +49 [0]2066 2019-963
Fax: +49 [0]2066 2019-990
E-Mail: a.spahr@pcc.eu

PCC SE
Moerser Straße 149
47198 Duisburg
Germany

Tobias Beckmann
Telefon: +49 [0]2066 4693-241
Fax: +49 [0]2066 2019-990
E-Mail: t.beckmann@pcc.eu