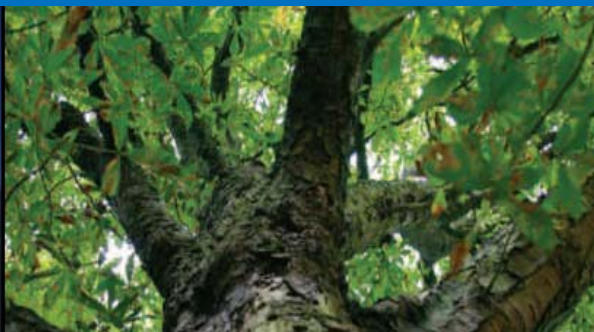


Corporate and Project Risks in the Global Carbon Markets

Michael Wilkins
Managing Director
Global Carbon Markets
Standard & Poor's

January 7, 2010



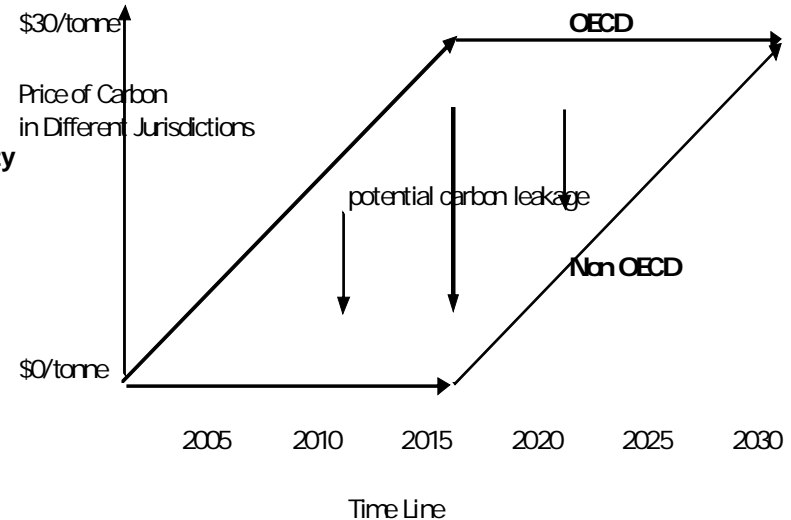
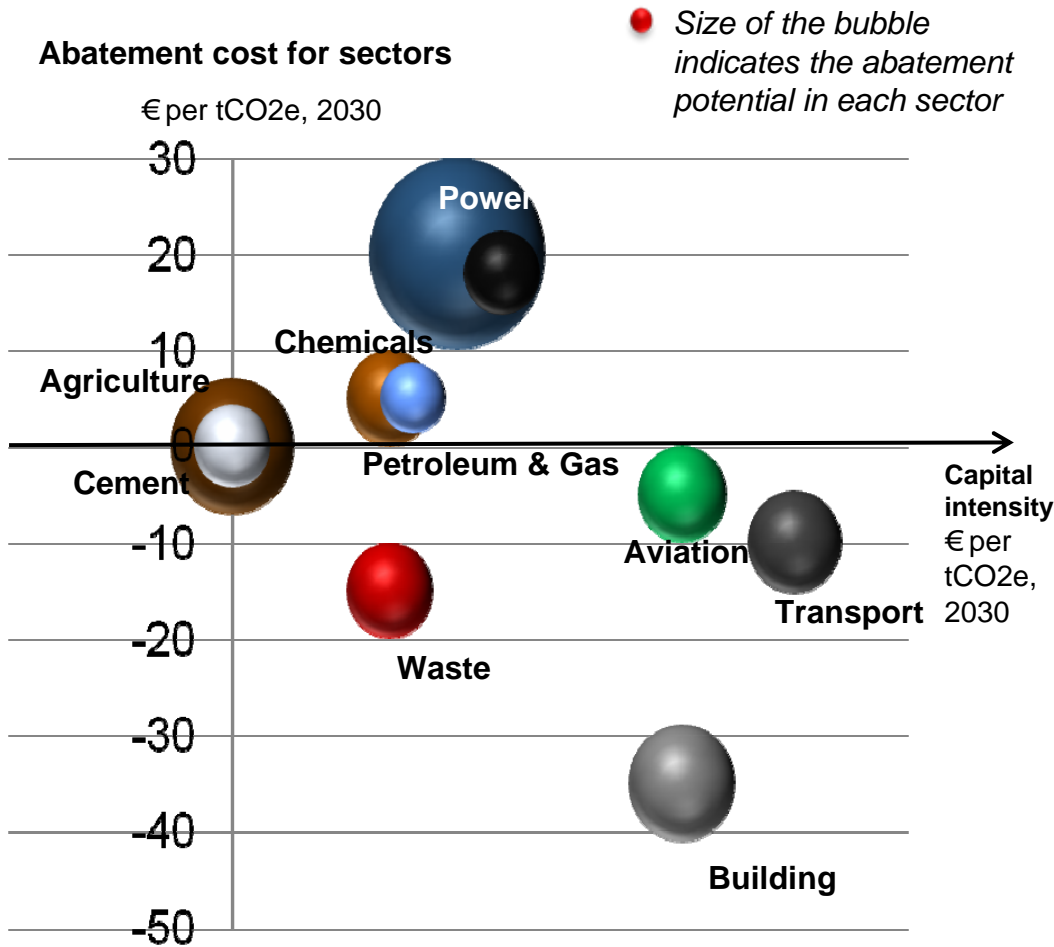
Carbon Exposure Risks for Corporates

Offsets Project Delivery Risks

Impact of COP15 on Climate Change Policy Expectations:

	Copenhagen Accord	Impact On Expectations
TYPE OF AGREEMENT	Non-binding declaration	No change
DEADLINE FOR TREATY	None	More uncertainty
DEADLINE TO IMPLEMENT	None	More uncertainty
2020 EMISSIONS TARGETS	Codifies national pledge	No change
2050 EMISSIONS TARGETS	Codifies national pledge	No change
CLIMATE AID PLEDGE	\$30 billion / year 2010-12	No change
CARBON MARKET REFORM	No agreement	More uncertainty
GLOBAL GHG COVERAGE	Tentative agreement	More certainty

Financing carbon exposure mitigation for different sectors



Potential for leakage until a global carbon price exists

Source: Global GHG Abatement cost curve v2.0

Ability of Different Sectors to Pass Through Carbon Costs

Power & Heat:

Can pass some of the allowance costs to consumers, but full recovery is unlikely.

Under free allowance allocation, this can lead to windfall profits for entities with lower STMC (short term marginal cost)/renewables in their portfolio.

Oil and Gas:

Will likely be able to pass on most costs to consumers.

€ 15/EUA will mean an increase in pump price of 0.035€/litre.

Other industries (Chemicals, Cement, Pulp and Paper):

Very dependent on international competition and associated risk for "carbon leakage".

A large amount will initially have "free" allowances.

Operational efficiency is likely to become the key determinants for managing carbon exposure.

**In the long run, most costs will be passed
on to consumers**

Carbon Exposure of Aviation Sector

EU, US, and non-European carriers may have to purchase allowances of \$1 billion by 2012

[based on carbon price around €14.4t / CO₂e]

Delta Air Lines Inc.

3.5 millions tonnes of carbon allowances.

United Air Lines Inc.

3.3 million tonnes of carbon allowances.

American Airlines Inc.

likely to face a large bill.

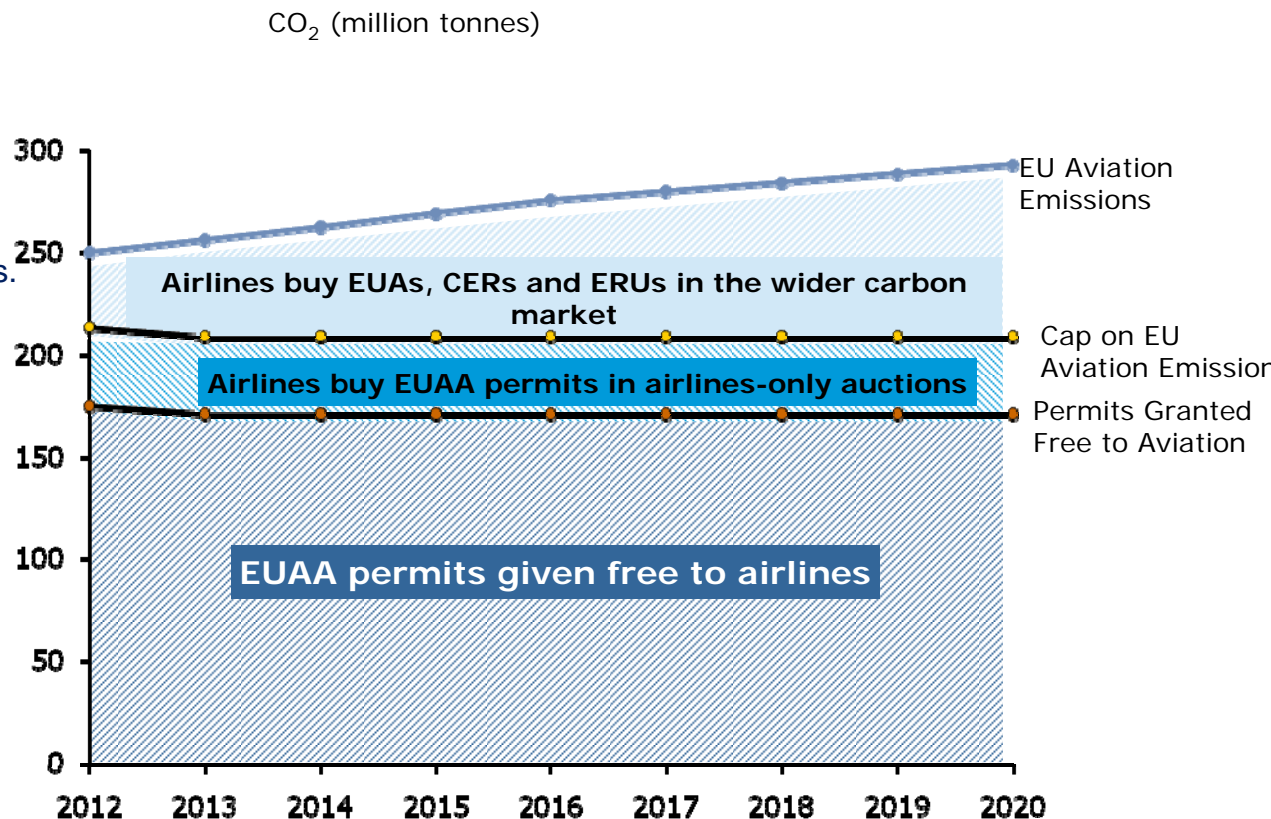
British Airways PLC

3 million tonnes of carbon allowances.

1 billion shortfall added to EU ETS to 2020 from aviation

Will aviation be drawn into global scheme, withdrawn from EU ETS?

Source: Point Carbon

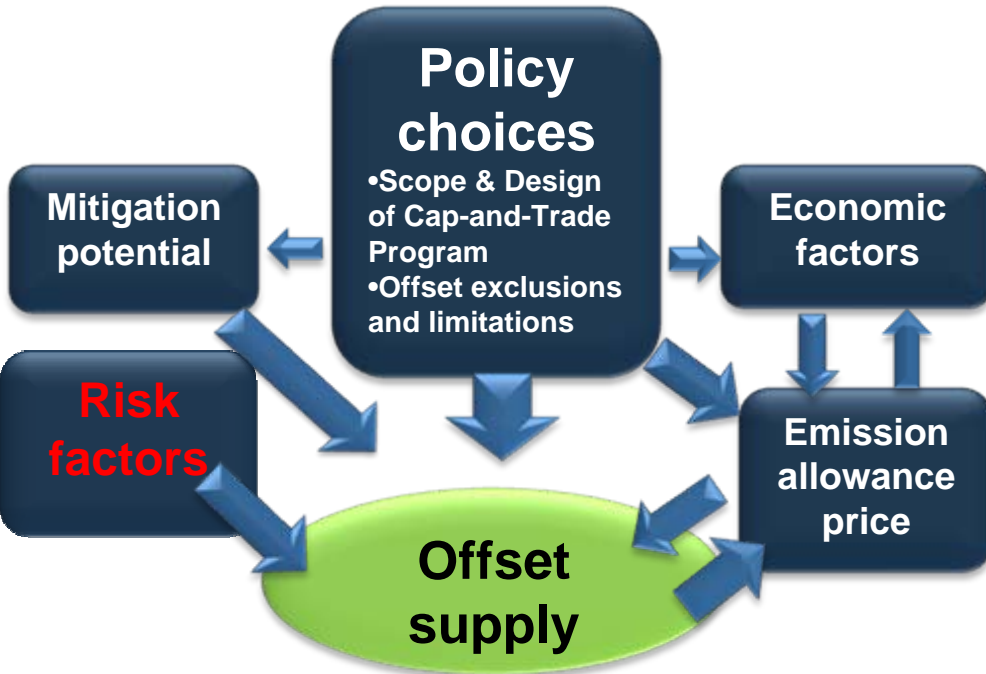




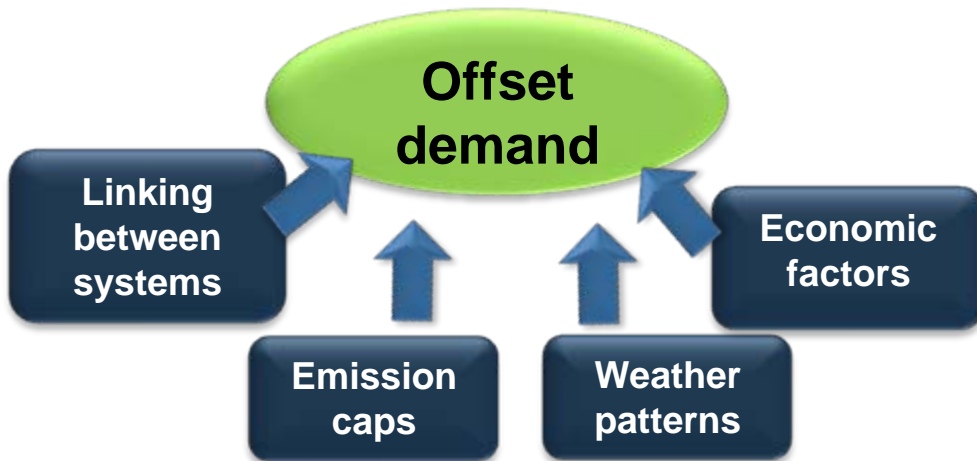
Carbon Exposure Risks for Corporates

Offsets Project Delivery Risks

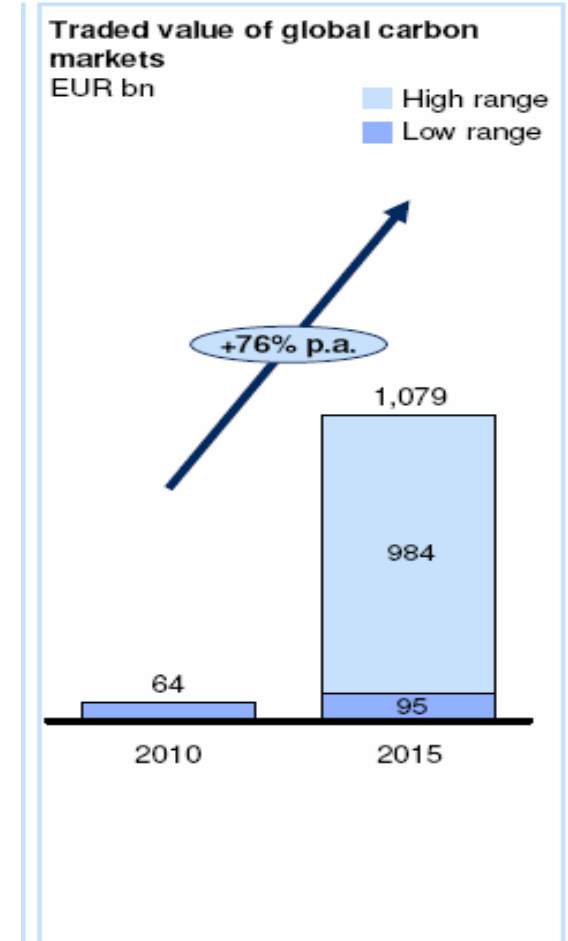
Supply/Demand of Offsets in the Global Carbon Markets



Source: Centre for Resource Solutions



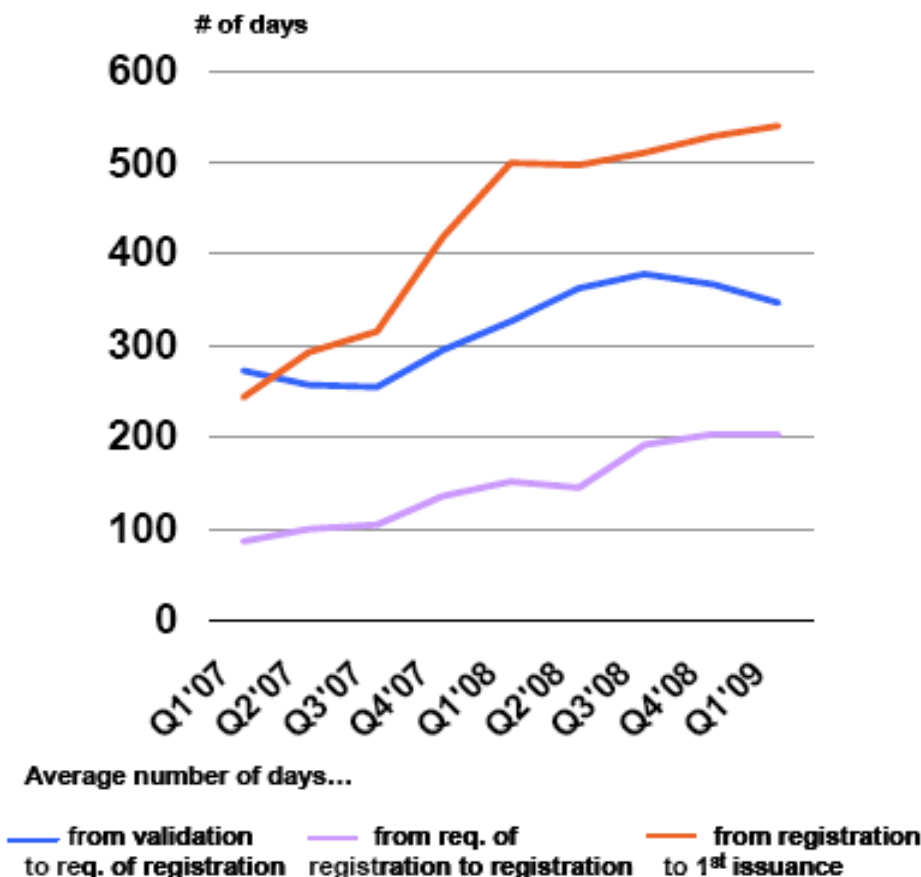
Shortfall determines the carbon price



Source: McKinsey Carbon Market Analysis

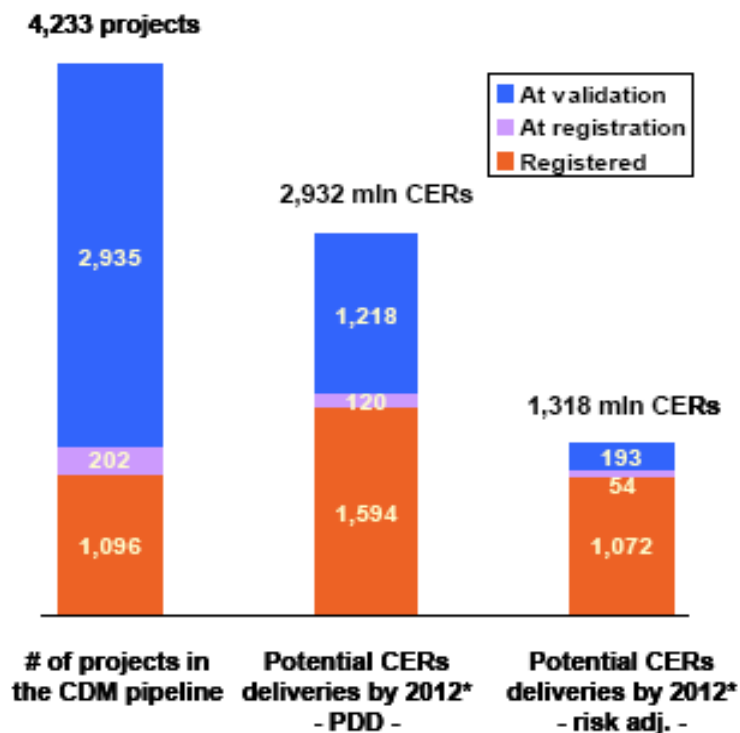
Key Risk Factors Affecting the CDM (1)

**Growing timelags
at each step of the CDM project cycle**



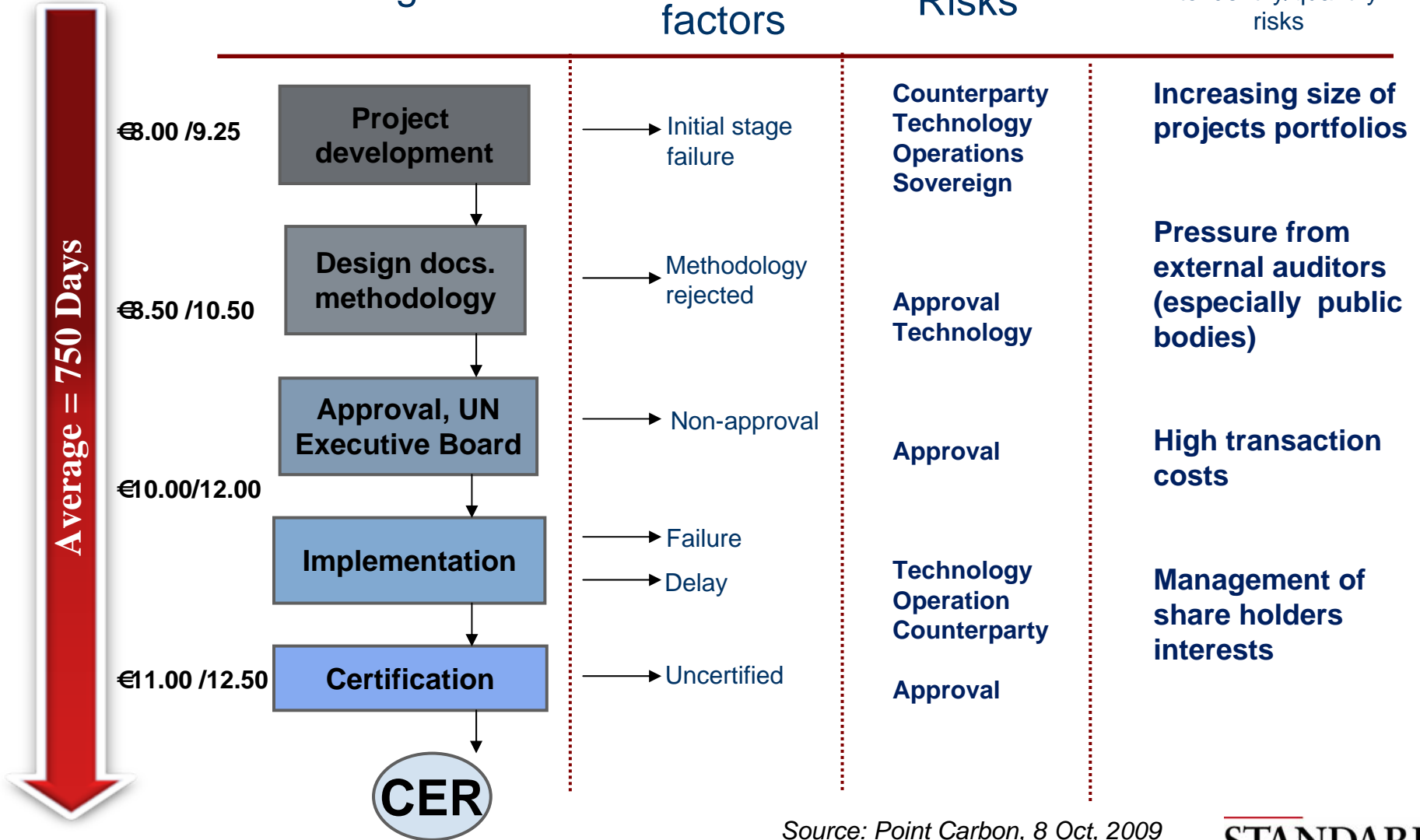
Source: UNEP/RISOE CDM pipeline, data up to end of Mar 09

More than 50% of CERs deliveries evaporate, notably due to delays



*: does not include potential new projects entering the pipeline after Mar 09

Key Risk Factors Affecting the CDM (2)



Source: Point Carbon, 8 Oct, 2009

STANDARD & POOR'S

www.standardandpoors.com

All rights reserved. No part of this information may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of S&P. S&P, its affiliates, and/or their third party providers have exclusive proprietary rights in the information, including ratings, credit related analyses and data, provided herein. This information shall not be used for any unlawful or unauthorized purposes. Neither S&P, nor its affiliates, nor their third party providers guarantee the accuracy, completeness, timeliness or availability of any information. S&P, its affiliates or their third party providers and their directors, officers, shareholders, employees or agents are not responsible for any errors or omissions, regardless of the cause, or for the results obtained from the use of such information. S&P, ITS AFFILIATES AND THEIR THIRD PARTY PROVIDERS DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE. In no event shall S&P, its affiliates or their third party providers and their directors, officers, shareholders, employees or agents be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the information contained herein even if advised of the possibility of such damages.

The ratings and credit related analyses of S&P and its affiliates and the observations contained herein are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or make any investment decisions. S&P assumes no obligation to update any information following publication. Users of the information contained herein should not rely on any of it in making any investment decision. S&P's opinions and analyses do not address the suitability of any security. S&P does not act as a fiduciary or an investment advisor. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of each of these activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P's Ratings Services business may receive compensation for its ratings and credit related analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.standardandpoors.com (free of charge) and www.ratingsdirect.com (subscription), and may be distributed through other means, including via S&P publications and third party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.

Copyright© 2009 by Standard & Poor's Financial Services LLC (S&P) a subsidiary of The McGraw-Hill Companies, Inc.8