

CLIMATE AND CORPORATIONS - RIGHT ANSWERS OR WRONG QUESTIONS?

CARBON DISCLOSURE PROJECT DATA -
VALIDATION, ANALYSIS, IMPROVEMENTS

Axel Hesse, SD-M



In cooperation with:



Abstract

This discussion paper analyses in general and in three exemplary cases how questionnaires of the “Carbon Disclosure Project” (CDP) and corporation’s answers might be modified to achieve added-value for financial analysts and institutional investors from the information provided. In addition, possible methods and ways of organization for the validation of financially material issues are listed briefly.

Imprint

Author:

Axel Hesse, Consultant
Internet: <http://www.SD-M.de>
E-mail: Hesse@SD-M.de



Publisher:

Germanwatch
Bonn Office
Dr. Werner-Schuster-Haus
Kaiserstr. 201
53113 Bonn
Germany
Ph. +49 228 60492-0, Fax -19



Berlin Office
Voßstr. 1
D-10117 Berlin
Germany
Ph. +49 30 288 8356-0, Fax -1

E-mail: info@germanwatch.org
Internet: <http://www.germanwatch.org>

This publication was written in the framework of a cooperation project with Heinrich Boell Foundation. Contact: Jörg Haas, haas@boell.de, ph. +49 (0)30-28534-187.

February 2006

Purchase order number: 06-5-01

This publication is available on the internet at:
<http://www.germanwatch.org/rio/cdp-ah06.htm>

Content

1	Introduction	4
2	General questions	5
2.1	From “awareness raising” to “materiality raising”	5
2.2	Annual examination of similar material questions	5
2.3	Disclosure of material information	6
2.4	General and/or sector-specific CDP questions	6
2.5	Comparability	7
2.6	Links to environmental or annual reports	7
3	Plausibility of CDP3 answers and methods for the validation of material issues	9
3.1	General assessment of climate change as a commercial risk/opportunity - the case of lobbying from chemicals corporations	9
3.1.1	Material issues	9
3.1.2	Plausibility of the answers	10
3.1.3	Improvements for the future	11
3.2	General assessment of climate change as a commercial risk/opportunity - the case of lobbying from automobile corporations	11
3.2.1	Material issues	11
3.2.2	Plausibility of the answers	12
3.2.3	Improvements for the future	12
3.3	The case of emissions reductions in the automobile industry	13
3.3.1	Material issues	13
3.3.2	Plausibility of the answers	14
3.3.3	Improvements for the future	16
3.4	Possible methods and organization for the validation of material issues	18
4	Conclusions.....	18

1 Introduction

The “Carbon Disclosure Project” (CDP) provides a secretariat for the world’s largest institutional investor collaboration on the business implications of climate change. CDP was launched in 2000 to gather the information necessary for investors to evaluate the winners and losers from a future impacted by climate change and responses to climate change. CDP has issued its fourth information request (CDP4) on behalf of 211 institutional investors with assets of \$31 trillion under management to the Chairmen of 1,800 of the largest quoted companies in February 2006. The corporation’s responses to the third request and the CDP3 report based on them were launched in September 2005¹.

In the CDP3 report the company responses were evaluated. 60 “best in class” respondents were selected for the “Climate Leadership Index 2005” (CLI). For example, the components from the automobile sector are BMW, DaimlerChrysler, Ford, Honda and Toyota². The leading German commercial newspaper “Handelsblatt” summarized the results from the CDP3 report: BMW and DaimlerChrysler were classified as “leaders”. “Leaders” are corporations which lead their sector with regard to climate protection³. It is commonly known that the majority of cars from BMW or Daimler Chrysler have a high fuel consumption, so it may be questioned whether it is justifiable to assign them the position as “leaders” in this context. And David Wyss, chief economist for Standard & Poor’s, stated that automobile manufactures with more energy efficient models are in a better position to defy competition. One could ask: Did the companies give the right answers? Or did the CDP ask the wrong questions?

This paper serves as a basis for a validation and analysis of CDP3 data from the answered questionnaires and of the results in the CDP3 report from the perspective of a financial analyst or institutional investor. The author discusses examples for answers from the corporations which seem at least at first sight not plausible. Are answers utilizable for the integration in the financial analysis? How could possible improvements of questionnaires, raw data and analytical frameworks add value for financial analysts and institutional investors in the future?

In part 2 of this paper possible general questions are discussed: Could the CDP transform itself from “awareness raising” into “materiality raising” in the next stage (see 2.1)? Should the CDP data be analysed on an annual basis (see 2.2)? Does all material information from the answered questionnaires have to be disclosed publicly (see 2.3)? Should CDP continue to ask general questions and/or start to ask sector-specific (see 2.4)? Are the answers to CDP comparable for financial analysts and investors (see 2.5)? Are links to environmental or annual reports useful (see 2.6)?

Parts 3.1 to 3.3 analyse three examples of material issues and at least at first sight not plausible company answers in CDP3 questionnaires. Possible methods and organization for the validation of material issues are named in 3.4. Conclusions are given in 4.

¹ See CDP: Press Releases, URL: http://www.cdproject.net/press_release.asp.

² See Innovest, CDP: Carbon Disclosure Project 2005, page 15.

³ See Bergius, S.: “Hässlich” ist, wer nicht antwortet, in: Handelsblatt, 12.12.2005, page 34.

2 General questions

2.1 From “awareness raising” to “materiality raising”

“The 155 Signatories to the Carbon Disclosure Project’s third information request (CDP3) represent over \$21 trillion in assets, a doubling from CDP2 (95 investors with \$10 trillion in 2004) and quadruple that of CDP1 (35 investors with \$4.5 trillion in 2003). This increased interest from the investment community, coupled with a record-high 71% disclosure rate to the CDP information request sent to the Financial Times Global 500 companies on 1st February 2005, points to a continued elevation of climate change as a critical shareholder value issue in the minds of investors and corporations alike.”⁴

Six years after CDP was launched in 2000 one could argue that the initial task “awareness raising” for the importance of climate change as a critical shareholder value issue is fulfilled successfully: About three quarters of current value of assets managed by the investment industry worldwide belong to CDP signatories (US\$ 31 trillion of US\$ 42 trillion⁵). And more than 70% of the corporations answered the CDP3 questionnaire.

A lot of information is available now. But is the information appropriate for financial analysts and institutional investors to evaluate the winners and losers from a future impacted by climate change (regulation)? Or should more emphasis be given to “materiality raising” in the next phase of CDP? If answered questionnaires named financial implications, an evaluation designed to meet the needs of CDP signatories would be more efficient and effective. For example, WestLB analysed a “Market Value at Risk” for the stock markets worldwide of 210 to 915 billion US\$ for the realisation of a scenario with a stabilised CO₂ concentration of 450 ppm⁶ which is strived for by science and EU climate policies. CDP might ask the corporations - especially in sectors with long term investment cycles like utilities or aviation - for the individual financial opportunities and risks of this scenario.

2.2 Annual examination of similar material questions

“This is the third CDP information request (CDP3); for previous respondents, please highlight developments and trends since CDP2.”⁷

This quotation from the CDP3 questionnaire indicates the intention to analyse development trends. This could be useful as long as the questions ask for material issues to financial analysts and institutional investors and the answers allow a trend analysis.

An annual examination parallel to the annual reporting season is adequate because this emphasises material implications and allows the answering corporations to use the information provided - in extracts - for the annual reports as well. Consequently, the questionnaire period from 1 February to 31 May as in 2005 might be brought forward two months in the future. The UK government gave similar guidance:

⁴ Innovest, CDP: Carbon Disclosure Project 2005, page 4.

⁵ See Watchman, P. e.a., Freshfields Bruckhaus Deringer: A legal framework for the integration of environmental, social and governance issues into institutional investment, October 2005, page 6.

⁶ See WestLB Panmure: Von Economics zu Carbonomics, June 2003, page 6. - ppm = parts per million.

⁷ Innovest, CDP: Carbon Disclosure Project 2005, page 152.

“Environmental information should be published at the same time as Annual Reports and Accounts, and relate to the same accounting period. Reporting should be consistent with other types of company reporting as far as possible.”⁸

2.3 Disclosure of material information

Most of the answered CDP3 questionnaires are available for the public via the CDP website http://www.cdproject.net/responses_cdp3.asp (“permission granted”), but some are not (“permission declined” or “awaiting permission”). But an important principle for reporting is transparency, particularly the level of public disclosure⁹.

A dutch SRI forum “Vereniging van Beleggers voor Duurzame Ontwikkeling” (VBDO) questioned if listed companies were aware that they were not dealing with the need to inform investors equally. Filling in questionnaires on sustainability and giving this information only to the senders was not equivalent to sharing this information with all shareholders¹⁰. - If the CDP answers contain financially material information which might have an impact on stock prices, this information has to be made accessible at the same time to all (potential) investors worldwide. - The adequate place for financially material information is the annual report (see 2.6).

Another question to be answered from CDP signatory investors might be if corporations which do not want to make their answers available for the general public should further have the opportunity to be included in the “Climate Leadership Index”.

2.4 General and/or sector-specific CDP questions

In the CDP1, CDP2 and CDP3 questionnaires CDP asked only general questions but no sector-specific (like in CDP4). This was useful for the stage of “awareness raising” and the comparable analysis of general improvements during these years. But this restriction does not have to be laid-down for the future, too. The problem with the general questions is that the value-added might decrease for the processes and decisions of financial analysts and institutional investors. General answers often are not concrete enough.

In fact, the analysis trends lead to sector-specific evaluations, at least supplementing general questions (see for example GRI sector supplements, <http://www.globalreporting.org/-guidelines/sectors.asp>). In times of “questionnaire fatigue”, Butz of Pictet’s sustainable-investment team suggests industry-specific sustainable “key impact factors”, particularly from an investor's pragmatic point of view¹¹. The UK government suggests to select five or fewer relevant environmental key performance indicators (KPI) - no sector needs to report on more than ten. For most companies greenhouse gas emission is the most significant KPI and the government expects business to tackle its climate change impacts and to report its financial implications¹².

⁸ DEFRA, Trucost: Environmental Key Performance Indicators - Reporting Guidelines for UK Business, London, 24.1.2006, page 17.

⁹ See DEFRA, Trucost: Environmental Key Performance Indicators - Reporting Guidelines for UK Business, London, 24.1.2006, page 15.

¹⁰ See <http://www.vbdo.nl> and <http://www.eurosif.org/pub2/lib/2004/03/news1/sect03c.shtml> [23.2.2006].

¹¹ Butz, C.: Less can be more, Geneva, March 2005.

¹² See DEFRA, Trucost: Environmental Key Performance Indicators - Reporting Guidelines for UK Business, London, 24.1.2006, pages 8, 12 and 66-74.

It should be discussed whether general questions will be asked in the future and/or if sector-specific questionnaires (like in CDP4) will be extended. Examples for sector-specific indicators are provided in part 3 of this survey.

2.5 Comparability

One important technique for analysis is comparison of data over periods like months or years. This was possible for the results of CDP1, CDP2 and CDP3 across and inside sectors because of the general asked questions. But in relation to 2.4 one could question the added value of such comparisons across sectors for the future.

The more sector specific questions will be asked in the future, the more concrete the answers from corporations will be, the better comparability will be possible and the easier evaluation of plausibility and analysis of material implications for financial analysts and institutional investors should be. The UK government gave guidance on comparability:

“The Government is seeking to stimulate the provision of **comparable, comprehensive and quantitative data**, whilst avoiding the problem of over-prescriptive guidance leading to ‘boilerplate’ or ‘cut and paste’ responses. As far as possible, all companies should be able to report data in a comparable format, **so users of reports can assess the performance of a single company over time and relative to its competitors**. It is important that companies avoid using bespoke KPIs to hide poor environmental performance; the narrative part of a report provides the opportunity for a company to discuss any tensions which exist between providing comparable data and reporting company-specific KPIs.”¹³

2.6 Links to environmental or annual reports

“If you already publish the relevant information, please indicate for each question how this can be accessed.”¹⁴

This request from the CDP3 questionnaire was frequently fulfilled. Mostly links to environmental reports were provided. Links to annual reports were seldom. For example in the automobile sector, exceptions were the companies from France, where environmental information has to be reported in annual reports since 2003. In Denmark, Sweden and Norway similar regulations are in force even longer¹⁵. This trend to more sustainability information in annual reports will continue. In Europe especially due to the EU “accounts modernisation directive” (AMD). In the reasons for this directive one can read:

“The **annual report** and the consolidated annual report are **important elements of financial reporting**. Enhancement, in line with current best practice, of the existing requirement for these to present a fair review of the development of the business and of its position, in a manner consistent with the size and complexity of the business, is necessary to promote greater consistency and give additional guidance concerning the information a ‘fair review’ is expected to contain. **The information should not be restricted to the financial aspects of the company's business. It is expected that, where appropriate, this should lead to an analysis of environmental and social aspects necessary for an understanding of the company's development, performance or position.** This is consistent also with Commission Recommendation 2001/453/EC of 30 May 2001 on the recognition, measurement and disclosure of environmental issues in the annual accounts and annual reports of companies.

¹³ DEFRA, Trucost: Environmental Key Performance Indicators - Reporting Guidelines for UK Business, London, 24.1.2006, page 17.

¹⁴ Innovest, CDP: Carbon Disclosure Project 2005, page 152.

¹⁵ See Hesse, A.: Das Klima wandelt sich - Integration von Klimachancen und -risiken in die Finanzberichterstattung, 2nd edition, Bonn, Berlin 2004, page 37. <http://www.germanwatch.org/rio/si-ber04.htm>

However, taking into account the evolving nature of this area of financial reporting and having regard to the potential burden placed on undertakings below certain sizes, Member States may choose to waive the obligation to provide non-financial information in the case of the annual report of such undertakings.”¹⁶

Accounting directive 78/660/EEC was amended as follows:

“14. Article 46 shall be amended as follows:

(a) paragraph 1 shall be replaced by the following:

‘1. (a) The annual report shall include at least a fair review of the development and performance of the company's business and of its position, together with a description of the principal risks and uncertainties that it faces.

The review shall be a balanced and comprehensive analysis of the development and performance of the company's business and of its position, consistent with the size and complexity of the business;

(b) To the extent necessary for an understanding of the company's development, performance or position, the analysis shall include both financial and, where appropriate, non-financial key performance indicators relevant to the particular business, including information relating to environmental and employee matters;

(c) In providing its analysis, the annual report shall, where appropriate, include references to and additional explanations of amounts reported in the annual accounts.’”¹⁷

And Accounting directive 83/349/EEC was amended as follows:

“10. Article 36 shall be amended as follows:

(a) paragraph 1 shall be replaced by the following:

‘1. The consolidated annual report shall include at least a fair review of the development and performance of the business and of the position of the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

The review shall be a balanced and comprehensive analysis of the development and performance of the business and of the position of the undertakings included in the consolidation taken as a whole, consistent with the size and complexity of the business. **To the extent necessary for an understanding of such development, performance or position, the analysis shall include both financial and, where appropriate, non-financial key performance indicators relevant to the particular business, including information relating to environmental and employee matters.**

In providing its analysis, the consolidated annual report shall, where appropriate, provide references to and additional explanations of amounts reported in the consolidated accounts.’”¹⁸

The AMD was converted in Germany for example via the “Bilanzrechtsreformgesetz” (BilReG) at the end of 2004 and led to two changes in the accounting law “Handelsgesetzbuch” (§§ 289, 315 HGB). The changes affect the “Lageberichte” in annual reports

¹⁶ EU: DIRECTIVE 2003/51/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2003 amending Directives 78/660/EEC, 83/349/EEC, 86/635/EEC and 91/674/EEC on the annual and consolidated accounts of certain types of companies, banks and other financial institutions and insurance undertakings, page L 178/17.

¹⁷ See above, page L 178/18.

¹⁸ See above, page L 178/20.

for 2005 for the first time. These are published in 2006¹⁹. In the UK the information has to be provided in the business review in the “directors’ report”²⁰.

Regarding to CDP this should lead to the publication of quantified environmental key performance indicators (KPIs) related to climate change in annual reports of the examined corporations. New in this development is the fact that “relevant” - or financially “material” - and quantified information should be provided. In the long term, CDP signatories should find the material key information they need in the annual reports, not in environmental/sustainability reports any longer. Accordingly, one objective for further CDP questionnaires could be to encourage the examined corporations to disclose the material information in the annual reports quantitatively and provide the link in the CDP questionnaire. Environmental reports often do not explicitly show the materiality of the provided information. The use of KPIs will help companies manage and communicate the links between environmental and financial performance²¹. - Relevant information regarding CDP could be **opportunities** as well as regulatory, physical, litigation, competitiveness and reputational **risks** due to climate change²².

3 Plausibility of CDP3 answers and methods for the validation of material issues

Sustainability reporting practices have improved over the last years but are still in an early phase. A lot of plausible answers are given in answered CDP questionnaires. But sometimes the plausibility of answers to material questions is doubtful. In this chapter **three examples for at first sight not plausible answers** are analysed and possible improvements are suggested.

3.1 *General assessment of climate change as a commercial risk/opportunity - the case of lobbying from chemicals corporations*

3.1.1 Material issues

Energy is a major cost factor for chemicals corporations²³. Emissions trading is one factor that contributes to rising energy prices²⁴. The financial materiality of this issue is obvious.

19 See Hesse, A.: Das Klima wandelt sich - Integration von Klimachancen und -risiken in die Finanzberichterstattung, 2nd edition, Bonn, Berlin 2004, page 40.

²⁰ See DEFRA, Trucost: Environmental Key Performance Indicators - Reporting Guidelines for UK Business, London, 24.1.2006, page 9.

²¹ See DEFRA, Trucost: Environmental Key Performance Indicators - Reporting Guidelines for UK Business, London, 24.1.2006, page 4.

²² See IIGCC, Mercer Investment Consulting, Carbon Trust: A climate for change - A trustee’s guide to understanding and addressing climate risk, page 10-11. For a sector-specific overview see Hesse, A.: Das Klima wandelt sich - Integration von Klimachancen und -risiken in die Finanzberichterstattung, 2nd edition, Bonn, Berlin 2004, pages 9-18.

²³ BASF: CDP3, page 1. - All “CDP3” quotations are abbreviations for the answered questionnaires from companies evaluated for the Carbon Disclosure Project report 2005. The questionnaires could be found on the internet: http://www.cdproject.net/responses_cdp3.asp.

²⁴ See Innovest, CDP: Carbon Disclosure Project 2005, page 76.

But the CDP3 answers of chemicals corporations do not clearly disclose their standpoint in the case of lobbying the emissions trading legislation. This is examined with examples from Bayer and BASF below.

3.1.2 Plausibility of the answers

BASF and Bayer achieved large amounts of emissions reductions during the last years:

“We want to reduce our specific greenhouse gas emissions by a further 10 percent by 2012 compared with 2002. [...] Between 1990 and 2002 we reduced GHG emissions by 38 percent in absolute terms. Between 2002 and 2004 we reduced emissions per metric ton of sales product by 1.4 percent.”²⁵ (BASF)

“The aim of Bayer’s program to reduce greenhouse gases is to lower the CO₂ equivalent of greenhouse gases by 50 % between 1990 and 2010 throughout the Group as a whole. Emissions of greenhouse gases were already reduced by over 60 % between 1990 and 2004. In 1990, greenhouse gas emissions amounted to the equivalent of 15 million metric tons of CO₂. In 2004, they came to the equivalent of only 4.2 million metric tons of CO₂. In total, the investments (including small measures) reached a sum of €700 million. [...]

These measures for conserving resources and reducing greenhouse gases will reduce production costs in the long-term. In addition, the risks that might result from future legislation on the reduction of emissions, increases in the price of energy and emissions trading are being reduced.”²⁶

Bayer clearly names a potential material risk of future legislation on the reduction of emissions. A similar estimation can be found in BASF’s answer:

“**We do see a possible risk in the EU proposal for trade with emission allowances for companies/installations**, especially for their growth in Europe, since the proposal contains burdens for CO₂ for industrial plants. **This might have negative effects on the competitiveness of European industry since we have only locally restricted burdens.** Nevertheless for BASF itself, climate change **also offers opportunities**: Competitive advantage by means of our Verbund, by means of our highly energy-efficient processes and by means of products that help reduce CO₂ emissions.”²⁷

At least in the short term the risks seem to outweigh the opportunities. But **the political standpoint in the lobbying process in favor or against (EU) emissions trading is not clearly mentioned.** BASF argues in general that “global efforts are necessary”²⁸. Bayer states that

“**the political implementation of ideas on climate protection leads to a risk of overburdening energy-intensive production operations**” [and] “**Bayer is working on the assumption that the regulations for reducing greenhouse gas emissions will be tightened even further.** It has therefore developed a graduated strategy to enable it to make up for short-term shortages in emissions allowances and to further reduce the CO₂ risk in the future.”²⁹

In fact, Bayer and BASF take a clear standpoint against an (international) widening of the (EU) emissions trading regime in a paper of the German Industry Association (BDI)³⁰.

²⁵ BASF: CDP3, page 5.

²⁶ Bayer: CDP3, page 7.

²⁷ BASF: CDP3, page 1.

²⁸ BASF: CDP3, page 3.

²⁹ Bayer: CDP3, pages 2 and 4.

³⁰ These quotations are in German and can be found in the draft of an internal BDI position paper. BDI: Entwurf - Wettbewerbsfeld globaler Klimaschutz: deutsche Kernkompetenzen optimal nutzen, pages 7 and 18, online on the internet: <http://www.duh.de/download/ci/BDI-Posi.pdf>.

3.1.3 Improvements for the future

But these positions and activities were not disclosed in the answered CDP3 questionnaires. This should be done **transparently** within the answers to future questionnaires. If chemical corporations **lobby for or against political issues** of climate change regimes, they have to **explain their reasons to their investors** and which financial implications they estimate with or without the new political regulation. In the case of emissions trading, **risks and opportunities have to be compared financially**. Risks might be investment costs or rising energy prices, opportunities could be reduced emissions reductions costs through international emissions trading, “Clean Development Mechanism” or “Joint Implementation” projects as well as energy-efficient products, e.g.:

“BASF produces a range of products that allow CO₂ emissions to be reduced. Examples are our heat insulation materials, our fuel additives, and our plastics for automotive engineering. Our plastic EPS alone reduced CO₂ emissions by 138 million tons in 2003 through improved heat insulation. Our fuel additives reduced CO₂ emissions by 22 million tons in 2003. By comparison, BASF emitted 24 million tons of CO₂ equivalent. We use our eco-efficiency analysis to assess the CO₂ emissions of our products over their entire lifecycle.”³¹

In general and particularly regarding climate change policy, **CDP might add the following political examination in future questionnaires to the corporations:**

- code of conduct of lobbying
- corporate governance policy and objectives on political lobbying and donations
- established clear policies on avoiding conflicts of interest
- company donations to groups relevant in the climate debate and how shareholder approval is sought.

3.2 *General assessment of climate change as a commercial risk/opportunity - the case of lobbying from automobile corporations*

3.2.1 Material issues

A similar lobbying example that at least at first sight foils the disclosed strategy can be found within the automobile industry:

In 2002 the climate protection law “A.B. 1493” for the automobile sector was agreed in California³². About 60% of CO₂ emissions in California are derived from the transport sector, about 40% belong to cars and trucks. **In September 2004 the law was put in concrete terms via a decree which came into force on 1 January 2006. The decree sets decreasing average emissions standards for new vehicle fleets for the years 2009 to 2016**³³.

³¹ BASF: CDP3, page 3.

³² See <http://www.arb.ca.gov/cc/cc.htm> [7.2.2006].

³³ See van de Sand, I., Bals, C.: Deutsche Autoindustrie klagt gegen Klimaschutzgesetz Kaliforniens, Germanwatch Hintergrundpapier, 10.4.2005, pages 4-6. <http://www.germanwatch.org/rio/auto2005.htm>

In December 2004 the international “Alliance of Automobile Manufactures” instituted proceeding against the decree. CDP3 respondents of the alliance are BMW, DaimlerChrysler, Ford, General Motors, Toyota and Volkswagen³⁴. One of the reasons for the action is that

“no later than early 2005, the automobile industry will have to make intensive capital investments in the A.B. 1493 rule in order to be ready to produce the technologies envisioned by the CARB staff by the calendar year 2008.”³⁵

The financial materiality of this issue is obvious.

3.2.2 Plausibility of the answers

In fact, not one of the CDP3 respondents have mentioned the material Californian case in the answered questionnaires. For example, Ford names European, US and Australian emissions reduction targets, but not the Californian legislation³⁶. GM argues generally for voluntary initiatives instead of government mandates:

“GM believes the development and global implementation of new, cost-effective energy technologies in all sectors, such as renewable hydrogen, is the most effective way to improve energy efficiency and reduce greenhouse gas emissions. This approach is best facilitated by relying on **voluntary initiatives and market-orientated measures, **not government mandates**. [...] We will **continue to work with all governmental entities** for the development of technically sound and financially responsible **environmental regulations**.”³⁷**

BMW argues that global - not regional - targets have to be set:

“Nevertheless, to achieve any sustainable emission reduction **global targets have to be set. It does **not** make sense to define very **strong emission reduction targets within the European Union and other major CO₂ emitting countries do not participate** on such objectives. The emissions do not know any countries frontiers. **If the emission reduction targets of the European Union would be much stronger than of other regions the danger is very high to lose our competitiveness on the global market.**”³⁸**

Not mentioning the Californian case keeps financial analysts and institutional investors as CDP signatories “in the dark” about material financial risks for current and future financial years.

3.2.3 Improvements for the future

The conclusion for this case is similar to 3.1.3. Particularly regarding climate change policy, **CDP might add the following examination of political / legal issues in future questionnaires to the corporations:**

- pending legal action against or pro climate change related legislation
- code of conduct of lobbying
- established clear policies on avoiding conflicts of interest

³⁴ See van de Sand, I., Bals, C.: Deutsche Autoindustrie klagt gegen Klimaschutzgesetz Kaliforniens, Germanwatch Hintergrundpapier, 10.4.2005, page 6.

³⁵ Complaint, paragraph 85, cited from a letter from German NGOs to German automobile corporations, BUND e.a., Klage gegen kalifornisches Klimaschutzgesetz, 21.3.2005, page 3. - CARB = Californian Air Resources Board.

³⁶ Ford: CDP3, page 14.

³⁷ General Motors: CDP3, pages 1-2.

3.3 *The case of emissions reductions in the automobile industry*

3.3.1 Material issues

One can argue that **one environmental key performance indicator is most important for the automobile industry**: the average fuel consumption per driving distance (or the equivalent CO₂ emissions) of all sold vehicles of an automobile corporation, the so-called “**fleet consumption**”. This is the most cost-efficient proxy for the environmental performance of the whole company, especially in times of more and more emissions regulations, rising oil prices and fuel-economical customers - also in the more and more important emerging economies. Surprisingly, the fleet consumption value is **often not disclosed by automobile corporations** due to “business secret” or “high competition” in the sector. This raises the question of the value of the other environmental information provided³⁹. The fleet consumption as an investment selection criterion will most probably produce an out-performance in an increasingly carbon-constrained future.

The statement by David Wyss, chief economist for Standard & Poor’s, mentioned already in the introduction underlines this argument: Automobile manufactures with more energy efficient models are in a better position to defy competition. For example, one important reason for the current large problems of Ford and General Motors is the US customers’ trend to buy more fuel-efficient vehicles⁴⁰.

In 1965 60 million cars were on the streets globally, 800 million in 2005. BP projects 2000 million in 2050⁴¹. While the European and US vehicle markets might stagnate at high levels, the largest increase of new sold cars will be in the emerging countries. And for example in China big tax breaks were announced for fuel-efficient cars end 2005. The government tries to reduce oil consumption and pollution with these incentives⁴².

Even if new, less carbon-intensive fuels (e.g. biomass or hydrogen) were more important in the future, still car producers with the lowest energy-efficiency will have a competitive advantage.

Volkswagen names the challenge in its answered CDP questionnaire:

“In its Environmental Outlook 2001, the Organisation for Economic Cooperation and Development (OECD) attributes **5.5 percent of anthropogenic CO₂ emissions to the motor car**. Volkswagen is assuming that **this share will increase worldwide**.”⁴³

A similar statement comes from Peugeot, even if the amount for the challenge doubled:

“Due to the social and economic consequences on future generations, the **greenhouse effect** mobilises the scientific, political and industrial worlds. The **automobile contribution to this phenomenon is about 10% of the emissions linked to the human activities**. [...]”

³⁸ BMW: CDP3, page 1.

³⁹ Butz, C.: Less can be more, Geneva, March 2005, page 10.

⁴⁰ See Simon, B.: GM and Ford suffer new sales setback, in: Financial Times, 2.12.05 and Marlow, H., Detroit Motor Show - Deutsche Hersteller legen wieder zu, in: Handelsblatt, 23.1.06, page 28.

⁴¹ See <http://www.zukunftspodium.com> [22.11.2005].

⁴² See. Fu Jing: Buyers of small cars to enjoy big tax breaks, in: China Daily, 9.11.2005.

⁴³ Volkswagen, CDP3, page 1.

For these reasons, the greenhouse effect has been identified by PSA Peugeot Citroën as one of the principal challenges that all actors have to take up for future generations.”⁴⁴

Apart from these more general statements, automobile corporations stress that the **use phase** of their products has the most important impact for the carbon challenge:

“We believe that technology development aimed at **reducing carbon dioxide(CO₂) emissions during vehicle use is of prime importance.**”⁴⁵ (Nissan)

“The **majority of the CO₂-emissions** of our products across their entire life cycle (**up to 90 or even 95%**), is due to the product use.”⁴⁶ (Daimler Chrysler)

In a life cycle CO₂ impact analysis for a mid-size car, **Ford** weights the fuel consumption during the use phase with **88.9%**⁴⁷, **Peugeot** with an average of **83%**⁴⁸.

Financial analysts and institutional investors are especially interested in estimations about the **financial implications - the materiality - of these facts**. Sustainable Asset Management (SAM) and the World Resources Institute (WRI) found varying value exposures due to carbon constraints for automobile corporations in 2003: From **US\$ 25 per vehicle for Honda up to US\$ 650 for BMW** (Porsche was not rated)⁴⁹. In 2005 SAM and WRI analysed in more detail the **possible implications of the ACEA Agreement**, a voluntary agreement by the European Automobile Manufacturers Association and the European Commission to reduce carbon dioxide (CO₂) emissions rates of passenger vehicles sold in the European Union to a fleet average of 140 grams of CO₂ per kilometer (gCO₂/km) by 2008. If the industry fails to meet the 2008 target, the Commission is expected to adopt formal regulations to reduce CO₂ emissions from new passenger vehicles. Individual company commitments to bring the industry to this target are unknown due to the **lack of transparency about the agreement and the fleet consumption** of some corporations. This led to the subtitle of the study: “Are investors driving blindly?” BMW and Daimler-Chrysler faced the largest variability with respect to possible costs (Porsche was not rated)⁵⁰. On the assumption that automobile corporations included in the ACEA agreement will have to reach the same corporate average for CO₂ emissions from new passenger vehicles, WestLB found incremental costs for Peugeot (42 Euros per vehicle), **BMW (329 Euros), Daimler Chrysler (335 Euros) and Porsche (2132 Euros)**⁵¹.

3.3.2 Plausibility of the answers

Regarding the materiality of fleet consumption and related reduction measures, **most of the CDP3 answers do not offer the information needed from financial analysts or institutional investors**. This questions the plausibility of the answers and could lead to the advice to ask precisely for the fleet consumption and its financial implications.

⁴⁴ Peugeot: CDP3, page 1.

⁴⁵ Nissan: CDP3, page 1.

⁴⁶ Daimler Chrysler: CDP3, page 6.

⁴⁷ Ford: CDP3, page 10.

⁴⁸ See Peugeot: CDP3, page 9.

⁴⁹ SAM, WRI: Changing Drivers, October 2003, page 1.

⁵⁰ SAM, WRI: Transparency Issues With The ACEA Agreement, March 2005, pages 1 and 10.

⁵¹ WestLB: Die Quadratur des Kreises, Dezember 2005, page 7.

Peugeot⁵² and BMW name emissions in grams of CO₂ emitted per kilometre driven for all models, but not the sold-weighted absolute fleet consumption. BMW⁵³ and Daimler Chrysler only provide relative emissions reduction rates for the fleet⁵⁴. Daimler Chrysler states an absolute fuel consumption value only for the model “Smart”:

“The smart car is by far the most successful three liter car passenger car in the market place.”⁵⁵

Possibly, this brand will be sold soon⁵⁶. This would increase the fleet consumption.

BMW analyses the ACEA agreement with its absolute reductions achieved so far, but does not disclose BMW’s own absolute fleet consumption in comparison:

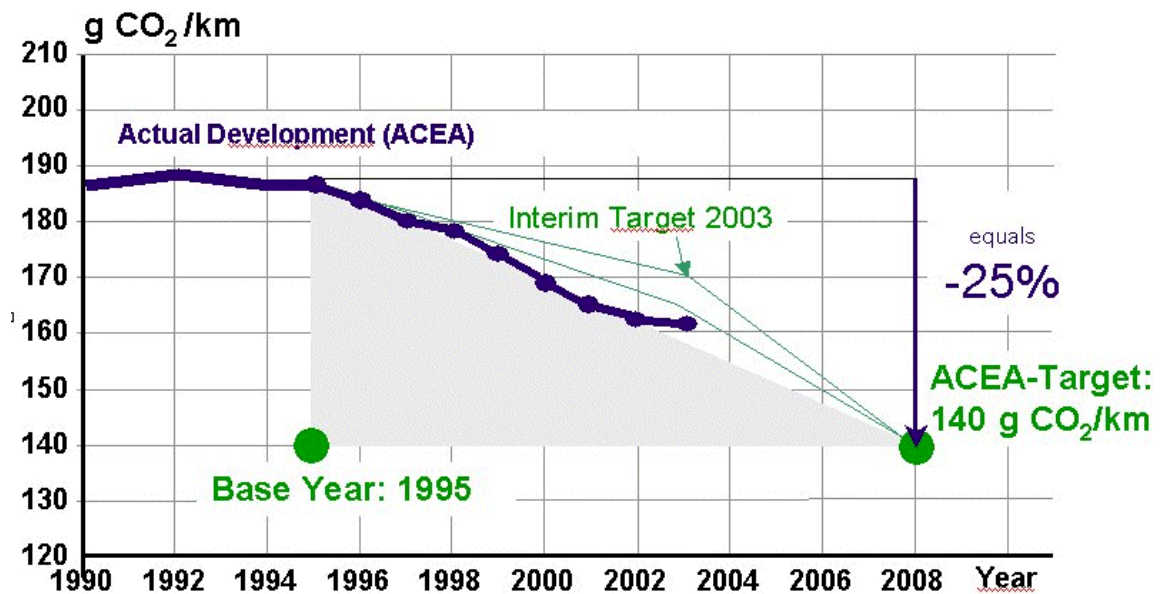


Figure: CO₂ emissions of the ACEA fleet in the BMW CDP3 Questionnaire

Source: BMW, CDP3, page 10.

Peugeot talks about costs associated with emission reductions but currently has problems to measure them:

“PSA Peugeot Citroën undertakes various actions to carry out **reduction of the CO₂ emissions** of its industrial plants and **of its cars**. With respect to the **costs associated** with achieving these reductions, it is **difficult to systematically separate**, in a project, what is specific to the emission reduction from the rest. Even if certain projects such as the MCP gearbox have an assessed cost, **PSA considers that it is not relevant to give information in view of the fact that it is difficult for automobile industry to split in the program environment and non environment expense for product design, and there is no common standard to measure it.**”⁵⁷

⁵² See Peugeot: CDP3, page 8.

⁵³ See BMW: CDP3, pages 5 and 8-9.

⁵⁴ See Daimler Chrysler: CDP3, pages 1 and 6.

⁵⁵ Daimler Chrysler: CDP3, page 6.

⁵⁶ hz/mwb: Daimler-Aktionär Kuwait plädiert für Smart-Verkauf, in: Handelsblatt, 26.1.2006, page 18.

⁵⁷ Peugeot: CDP3, page 10.

3.3.3 Improvements for the future

Estimations for cost ranges could be appropriate and a value-added for financial analysts and investors, like BMW published:

„Short- and mid-term strategy of BMW Group

The strategy consists of the improvement of engine and transmission efficiency as well as reducing rolling resistance, weight and aerodynamic drag. The costs vary by the different technologies. To save one ton of carbon dioxide, the cost range from 100€ to 1000€⁵⁸

Measurement of CO₂ emissions from the product is part of government compliance reports in the USA. Ford states **sales-weighted fleet consumption** at least for the US market. Even if the amounts increased since 1999 and are high in comparison to the European market, the way of disclosure is exemplary:

Table: Ford U.S. CO₂ tailpipe emissions per vehicle (combined sales weighted car and truck fleet average CO₂ emissions)

Grams per kilometer

2004	2003	2002	2001	2000	1999
240	234	237	238	229	233

Source: Ford, CDP3, page 10.

Each automobile corporation should disclose the material information "sales-weighted fleet consumption" to investors and the general public. The most transparent form might be a graph like the one from Volkswagen below which compares the **development of fleet consumption over time and to (the average of) all competitors in a market region**, for example from ACEA:

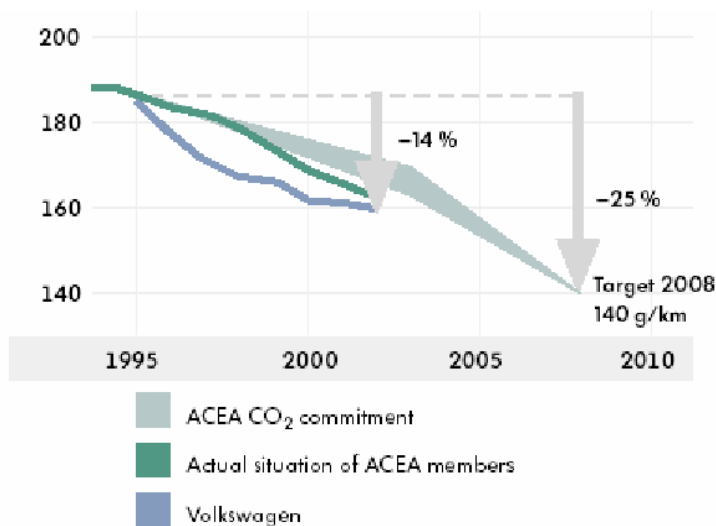


Figure: Drop in ACEA's and VW's emissions (in g/km) due to falling fleet consumption

Source: Volkswagen, CDP3, page 5.

⁵⁸ BMW: CDP3, page. 10.

Renault is one of the automakers with the lowest CO₂ emissions in the world. Renault's publication of fleet consumption is another example of best practice which could be demanded from CDP as a publication standard in the future:

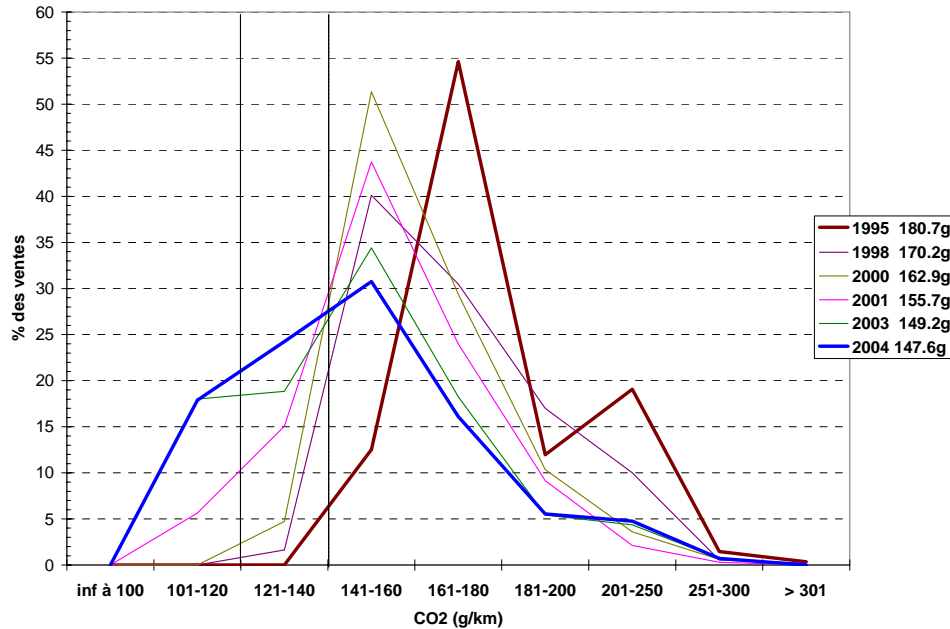


Figure: Breakdown of Renault's sales volumes by CO₂ classification

Source: Renault, CDP3, page 1.

Renault estimated in a **life cycle CO₂ impact analysis** the fuel consumption during the use phase with about 80% but stated that **external verification will be necessary**:

“For several years Renault has been making precise **measurements of** the environmental flows in its vehicle **manufacturing phase and use phase**. Flows on other life phases such as extraction of raw materials, production of materials and treatment of ELVs are **still at the stage of estimates**. **Complete and accurate knowledge of the environmental impact of vehicles over their life cycle is crucial for future decisions** [...]. **External verification will be necessary** in the future to guarantee the reliability of this information, which is extremely complex to collect and analyze.”⁵⁹

Finally, Toyota shows an example how **environmental and financial accounting could go hand in hand**. The competitive advantage of reductions in the fuel consumption is shown to investors and customers. But the invested amount seems implausibly high:

“Toyota’s **spending on environment-related research and development** in FY2003 was **166.1 billion yen** (including the amount spent on cleaning exhaust emissions). The cost-reduction **benefits of this spending were translated into fuel cost savings for customers, which amounted to 1.8 billion yen in FY2003.**”⁶⁰

In **conclusion**, it might be useful to **develop a disclosure standard for the sector** which provides - externally verifiable - a life cycle CO₂ impact analysis and sales-weighted vehicle fleet consumption data for the main market regions. Based on these data, estimated ranges for arising financial risks and opportunities due to climate change regulation regarding fleet consumption should be disclosed.

⁵⁹ Renault: CDP3, pages 3-4.

⁶⁰ Toyota: CDP3, page 3.

3.4 Possible methods and organization for the validation of material issues

The evaluation of answered CDP questionnaires could be embedded through

- more independent studies evaluating CDP data,
- a moderated feedback forum on the CDP website,
- sell-side brokers,
- in-house research of investors,
- external service provider / investment consultants⁶¹.

4 Conclusions

Some results in the 2005 report from the “Carbon Disclosure Project” (CDP) are at least at first sight not plausible. Did the companies give the right answers? Or did the CDP ask the wrong questions? Or could information - which is not disclosed so far - make the results plausible?

In part 2 of this survey some general questions for the CDP were discussed: The phase of “awareness raising” for climate change is not over yet, but the added value for financial analysts and institutional investors becomes less evident from year to year. A new focus could be raising awareness for financially material issues:

- The material CDP information should be published from participating corporations in the annual reports or at least in a CDP report at the same time as the annual reports.
- All CDP information might be financially material and has to be disclosed to financial analysts, institutional investors and the general public.
- Good arguments were found for a switch from general to sector-specific CDP questions (like in the CDP4 questionnaire).
- CDP should seek for comparable, comprehensive and quantitative data with sector-specific key performance indicators, whilst avoiding over-prescriptive guidance, so users of CDP reports can assess the performance of a single company over time and in relation to its competitors.
- If companies give links to information disclosed in other publications this preferably should be links to annual reports instead of environmental reports. It is in the nature of the CDP that in the long run all CDP information is financially material and will be integrated in annual reports.

⁶¹ See IIGCC, Mercer Investment Consulting, Carbon Trust: A climate for change - A trustee’s guide to understanding and addressing climate risk, page 15.

In part 3 of this survey the author analysed three examples where financially material risks or opportunities due to climate change were, although this is at first sight not plausible, disclosed in answered CDP3 questionnaires: The case of lobbying from chemicals corporations against further constraints from emissions trading regimes, the lawsuit of automobile corporations against California's climate protection law and the predominant non-disclosure of the sales-weighted fleet consumption in this sector.

As consequences for the future, CDP respectively its signatory investors might discuss

- how some of the questions could be rephrased, so that more financially material and sector-specific information could be provided,
- if a question about political lobbying and legal action against or pro climate change legislation should be added to the questionnaires,
- how sell-side brokers or in-house research of investors could be able to check the plausibility of answered CDP questionnaires,
- to order more independent "plausibility studies",
- to commission independent "plausibility checks" from external service provider/investment consultants,
- the installation of a moderated feedback forum on the CDP website.

Germanwatch

We are an independent, non-profit and non-governmental North-South Initiative. Since 1991, we have been active on the German, European and international level concerning issues such as trade, environment and North-South relations. Complex problems require innovative solutions. Germanwatch prepares the ground for necessary policy changes in the North which preserve the interests of people in the South. On a regular basis, we present significant information to decision-makers and supporters. Most of the funding for Germanwatch comes from donations, membership fees and project grants.

Our central goals are:

- Effective and fair instruments as well as economic incentives for climate protection
- Ecologically and socially sound investments
- Compliance of multinational companies with social and ecological standards
- Fair world trade and fair chances for developing countries by cutting back dumping and subsidies in world trade.

You can also help to achieve these goals and become a member of Germanwatch or support us with your donation:

Bank für Sozialwirtschaft AG
BIC/Swift: BFSWDE31BER
IBAN: DE33 1002 0500 0003 212300

For further information, please contact one of our offices

Germanwatch - Berlin Office

Voßstraße 1
10117 Berlin, Germany
Ph.: +49 (0) 30 - 28 88 356-0
Fax: +49 (0) 30 - 28 88 356-1

Germanwatch - Bonn Office

Dr. Werner-Schuster-Haus
Kaiserstraße 201
53113 Bonn, Germany
Ph.: +49 (0) 228 - 60492-0
Fax: +49 (0) 228 - 60492-19
E-mail: info@germanwatch.org

or visit our website:

www.germanwatch.org