



Comparative analysis of sustainability policies regarding forestry in selected multinational home improvement and wood furniture companies



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Abstract

This study touched a specific and sensitive question: the implementation of sustainability policies regarding forestry of leading companies in a forestry-related sector. Due to a lack of reference and previous researches, it appeared that this was the first time such a kind of study was carried out. Five companies including Home Depot, Carrefour, B&Q, IKEA and Wal-Mart were chosen for this study based on the following conditions: they are multinationals, they have long tradition in business in forest selected sector and they are major global competitors in the retailer market for home improvement and wood furniture. In this study different approaches such as survey with questionnaires, sustainability report analysis, web impression analysis, communication friendliness analysis and Google search statistic were used for getting data.

The study found that the two US-based companies (Home Depot and Wal-Mart) are worse not only in providing, presenting the information regarding forestry but also in communicating with researcher. Based on analyses of different approaches it was proved that all selected companies have clear sustainability policies and sustainability reports regarding forestry as an obligatory part in their activities. While study could indicate that three EU-based companies (Carrefour, B&Q, IKEA) have implemented key policies in their supply chains (e.g. start-up requirements to wood suppliers, compulsory documents for clarifying wood sources and procedure of auditing) as efforts to prevent illegal timber, it could not conclude that two US-based companies have the same motivation due to the lack of information and communication from them. All selected companies have used certified raw material and planned to use majority of certified wood products in the business, and FSC scheme was preferred by these companies because of its credibility.

Some more interesting findings are being paid attention. Firstly, all informants chosen for survey were not full ready for such a kind of sensitive topics. Secondly, while companies avoided presentation of negative information on themselves, it was easy to find ebullient debate about their involvement in illegal logging. Thirdly, the study results showed the difference between two groups companies in dealing with sustainability regarding forestry: three EU-based companies performed better than their two US-based competitors, and this picture was comparable to what have been found by other previous researches investigating sustainability in general in these

groups. Since the topic was quite sensitive and specific for everyday business in selected multinationals, there were a great deal of issues to be discussed regarding the methodology and reliability of data.

Keyword: sustainability policy, forestry, multinational, Home Depot, Carrefour, B&Q, Kingfisher, IKEA, Wal-Mart, certification

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The topic touched a specific but sensitive corner in everyday business of biggest retailers in home improvement and wood furniture. The five selected multinationals have promised for a long time to set up policies and increase their responsibility to sustainable forestry and nature conservation. It is a right time to investigate and evaluate how they have fulfilled their commitments in reality.

Despite a narrow and sensitive focus, the topic was rather broad for a MSc thesis. I have experienced difficulties during conducting the study such as orientation for study, methodology and references. I nevertheless received the help and encouragement from my examiner - Professor Ola Sallnas and my supervisor - Doctor Vilis Brukas. I want to express great gratitude to these two excellent teachers.

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List of abbreviations

CIFOR	Center for International Forestry Research
CIRAD	Centre for International Cooperation in Agricultural Research for Development
CSR	Corporate social responsibility
DIY	Do It Yourself
DJSI	Dow Jones Sustainability Index
FAO	Food and Agriculture Organization
FAQ	Frequently Asked Questions
FLEGT	Forest Law Enforcement, Governance and Trade
FSC	Forest Stewardship Council
FTS	Forest Tracing System
GRI	Global Reporting Initiative
HCVF	High Conservation Value Forests
IWAY	The IKEA Way on Purchasing Home Furnishing Products
NGO	Non-governmental Organizations
QUEST	QUality, Ethics and SafeTy
RWE	Round Wood Equivalent
SAP	Systems Applications Products
SRI	Social Responsibility Investing
TFT	Tropical Forest Trust
UNCED	United Nations Conference on Environment and Development
WSCA	Wood Supply Chain Audit
WWF	World Wildlife Fund

I. Introduction

I.1. Background

Wood is an excellent material from an environmental perspective. It is a renewable resource and can be recycled. The history of human being has strongly been connected to the culture of using this material. With its use value and characteristics, wood has been used widely since the past for construction, heating and hunting. In modern world despite other alternative sources of material, wood is still highly demanded everywhere around the world for similar and wider purposes. The increasing demand from a population explosion, along with the conversion of forestland to agriculture leads to a decrease in storage of world wood. This is probably one of reasons for climate change which affects the lives of human on the earth.

Like other natural resources, forests have been exploited to satisfy the needs of billions of people. The net loss of forest area, although being offset by forest plantation and natural expansion of forest, is still at a high rate. The net change in forest area in the period 2000-2005 is estimated at – 7,3 million hectares per year compared to -8,9 million hectares in the period 1990-2000 (FAO, 2005). Looking at the sale of wood furniture in all big retailers such as Home Depot, Wal-Mart, B&Q, etc., people may wonder from where they got a huge amount of wood for furniture and other wooden details while mass media informs that the global forests are now under seriously threat or emergency. Therefore, disappearance of vast forests could be blamed for quick expansion and prosperity of big forestry-related industries in the world.

The World Summit in Rio de Janeiro, Brazil (1992) had put an important milestone in history in terms of formulating solutions to a sustainable development of world's environment and forests. In this Summit, five major agreements on global environmental issues were signed. Two of these (The Framework Convention on Climate Change and The Convention on Biological Diversity) were formal treaties whose provisions are binding on the parties and other agreements were non-binding statements (Agenda 21, The Rio Declaration Statement on Forest Principles). Statement on Forest Principles pledges parties to more sustainable use of forest resources. The term of sustainable development consist of 3 factors: economic, social and environmental values. The

sustainability is reached only when three values are balanced in the same context at the same moment. The idea of sustainable development has been being transferred actively to different levels of administration and different fields of everyday life including business in forestry-related sector (CIESIN, 2007).

In the global wood market, supplies always hardly satisfy demands. This could somehow lead to negative activities such as illegal logging and smuggling. It is hard to know how much wood was cut illegally but it is strongly believed that illegal logging supplies an amount of wood which is much more than that from all legal sources. In 2004, about 1, 6 billion cubic meters of industrial roundwood was used, of which about 120 million (7 percent) was exported. About 55 percent was accounted for primary wood products and primary paper products; the remainder was accounted for secondary products (such as furniture or books). Forest products trade reached a total value of US\$327 billion.

On a global scale, the forest products trade has taken place mainly within Europe, within North America and among Asia and Pacific, Europe and North America. Europe is the largest importer and exporter with import value of US\$ 158 billion and export value of US\$184 billion. The Russian Federation became big exporter of roundwood with 42 million cubic meters (35 percent of global trade). China has become a big importer since the wood-processing industries have developed rapidly (FAO, 2007). According to the Figure 1 the demand of industrial roundwood is increasing rapidly and would reach to 5 billion cubic meters in 2010.

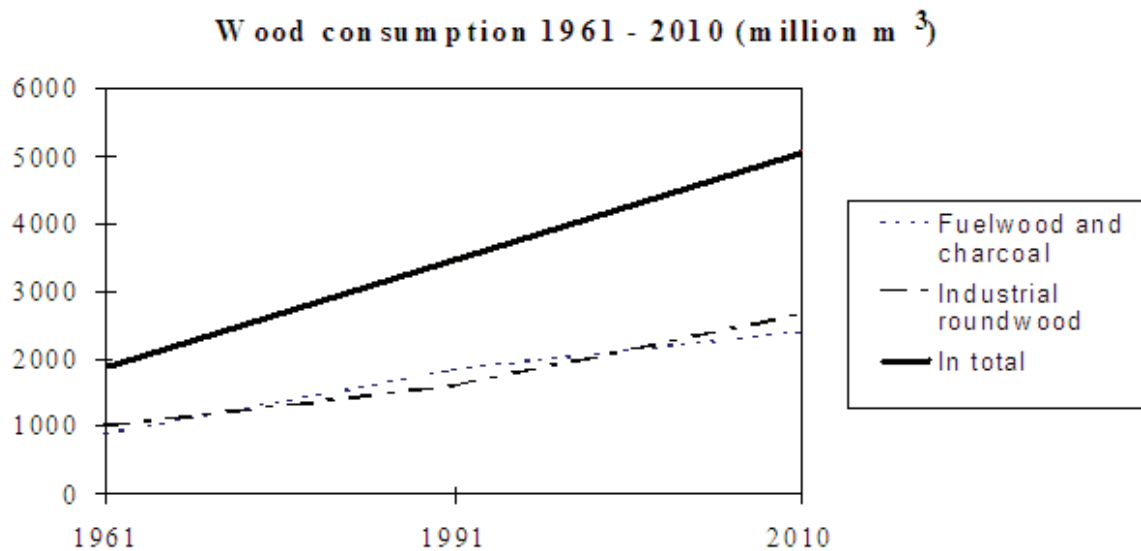


Figure 1. Wood consumption 1961 – 2010 (million cubic meters)

Source: Löfmark, M. 2001

In the report “Forest Industries in the 21st”, WWF (2001) has ranked the world’s wood consuming companies. The report showed that the top 50 consuming companies purchase 10% of the annual wood harvest. *Table 1* shows the ranking (rankings blackest) of Home Depot (1), IKEA (3), Kingfisher (including B&Q and Castorama) (10). The ranking was mainly based on the recorded consumption and published data from several companies but the methodology section in the report is unfortunately not provided. The data provided in the reports is out of date since the world’s business is growing rapidly but it still publicizes the pattern of how the wood has been being consumed over the world.

It is believed that when the forests are managed sustainably then the wood resource is renewable and thus everlasting. But it is often met discussion on whether consumers use too much wood and this leads to forest destruction (Resource Conservation Alliance, 2003). In modern world, the demand and attitude of consumers are important. For a long time, no other issues than natural conservation and ecological problem have emerged. . The world communication gives consumers more information about what is really going on around the world and increases people’s

awareness. So people not only buy the things, they are convinced to buy the things that came from sources which do not conflict with other environmental and social values.

Table 1: The 50 most wood consuming companies in the world

Rang of estimation (million cubic meters of Roundwood equivalent (RWE))	Names of companies
More than 10	<u>Home Depot</u> , Lowes
From 10 to 5	<u>IKEA</u> , Kimberly-Clark, Proctor & Gamble, St Gobain
From 5 to 2.5	Antalis (Arjo Wiggins Appleton), Building Materials, Gamet, <u>Kingfisher (including B&Q and Castorama)</u> , Pinhault Group, Sumitomo Forestry, Wickes
From 2.5 to 1.5	Axel Springer, Bertlesmann, Champion Enterprises, Fleetwood Enterprises, Georgia Pacific (including Fort James), H Bauer, Knight Ridder, Leroy Merlin, Matsushita, News Corporation, OBI, Praktiker Wirichs, Sekisui House, Skanska, Tetra Laval (including Tetra Pak), Travis Perkins, Yuasa
Less than 1.5	Advance Publications, Burda, D.R. Horton, Daily Mail & General, Daiwa House, Hachette, Kaufman & Broad Home, Nichimen, Misawa Homes, Mitsui Home, New York Times, Nobia Nordisk, Noda, Oakwood Homes, Putte, Sekisui Chemical, Times Mirror, VNU, Wolohan Lumber, Yomiuri

Source: Modified from WWF/ Jame Hewitt 12 2000

The world's forests are important because the functions and services they provide to regional and global environments, including balancing water cycles, storing carbon and housing a vast proportion of the world's bio-diversity are extremely essential. In companies involved in forest-related sector, the business cannot perform as before especially when all their consumers realized the picture of degrading world forests. Business shall have overall positive impacts on people and environment by supporting the effort of sustainable development in forestry. Forest should

continue contributing to humans' lives but in a sustainable way that has as less impact as possible for the sake of next generations. Business in the forest-related sector should support the idea of sustainable development by attempting to sell the wooden products that come from well-managed forests. Business is not only driven by the low, competitive price but also the image, reputation it brings to its consumers. For this purpose, companies should have very clear as well as strict policies in forestry. Companies' ambition is to make social and environmental issues an integrated and natural part of their daily business (IKEA, 2003).

Business in modern world has changed rapidly from maximizing monetary profit to sustainability which includes economic value, social value and environmental value. It was found that "financial reporting alone no longer satisfies the needs of shareholders, customers, communities, and other stakeholders for information about overall organizational performance" (GRI Portal, 2007). A report of sustainability issues is different from annual reports or any other financial reports. Companies have made a lot of efforts to issue their own sustainability report (IKEA: Social and Environment Responsibility Report, Carrefour: Responsibility Report, B&Q/Kingfisher: B&Q's Social Responsibility Review and Kingfisher's Corporate Social Responsibility Summary Report) but "Without a similarly accepted framework for sustainability reports, such reports could lack the features that could make them broadly useful: credibility, consistency, and comparability... also simplifies report preparation and assessment, helping both reporters and report users gain greater value from sustainability reporting" (GRI Portal, 2007). Currently, several companies have used GRI Framework as guidelines or commentary for their sustainability reports.

I.2. The issue

It is hard to find the connection between the growth of business in the forest-related sector and degradation of forests since not so many researches in this field were carried out. On one hand, people think it is quite logical to prove that business satisfies the demand by increasing the volume of production causing illegal logging. On other hand, business claims that by having the sustainability policy especially regarding forestry, increasing volume of production leads to promotion of sustainable forestry. This idea somehow was expressed in sustainability reports or environmental policies of several companies (Home Depot, IKEA, Kingfisher...). According to WWF, the forest industry, which harvests 1.6 billion cubic meters of wood every year, is

inextricably linked to the images of forest destruction. Some wood used by producers are undoubtedly from destroyed forests. When this is exposed it causes a serious damage to the industry's image (WWF, 2001). The question is whether retailers are sure that the forest industry provides them with non-conflicted products?

Some global famous sustainability indexes are likely focusing on sustainability in general with their criteria. For instance, criteria for Social Responsibility Investing (SRI) were developed by JSE Limited, and The Dow Jones Sustainability Indexes (DJSI) was launched in 1999 to track the financial performance of the leading sustainability-driven companies worldwide. The Dow Jones Sustainability World Index (DJSI World) covers the top 10% of the biggest 2,500 companies in terms of economic, environmental and social criteria. This index was first published on 8 September, 1999 (SAM Indexes GmbH, 2006). Since these indices were designed to evaluate the sustainability performance of companies in general, finding relevant information regarding forestry from the companies is a big challenge. The target of companies is always to make sure that consumers (or public in general) have the right to know how green their wooden furniture is. In fact, the consumers hardly have a chance to access all information about implementation of sustainability in wood sourcing of companies. In order to convince consumers, the companies should take into account the way they communicate with people for improving the reputation of companies.

Although there were some researches into social and environmental responsibility and/or closely related aspects of multi-national companies, Ascolese (2003) has pointed out the different emphases on corporate sustainability of European and US-based multinationals in his report. In 2005, Pearce and Doh (2005) carried out the research "The high impact of collaborative social initiatives" focusing on how companies can extract the maximum benefit from the resources available for social projects, while respecting obligations to increase shareholder value? Based on their research, the authors say that CSR (corporate social responsibility) activities work best for both the company and society when they are managed strategically and in collaboration with commercial and noncommercial partners. In 2007, Laura O. Hartman, Robert S. Rubin and K. Kathy Dhanda paid attention to the communication of CSR in United States and European Union multinational corporations (Laura et al. 2007).

I.3. Aim of work

Many companies dealing with flooring, wooden furniture and details claimed to have had clear sustainability policies as an important part in their business for a decade (For instance, IKEA since 2000, Home Depot - 1999, B&Q - 1991 and Carrefour – 1998). This study focused on rather specific and sensitive aspects of sustainability in these cross-border corporations - sustainability regarding forestry - with an initial aim of investigating and evaluating their implementation of sustainability policies regarding forestry in the real picture behind the business. Since they are all very big and their influence on world forestry is quite huge, it is worth to find out whether they also take the adequate responsibility to nature conservation, or in other words, whether they follow seriously what they have promised.

I.4. Research questions

The aim of study was specified by the following research questions:

- What does the company's policy include, e.g. forest certification, minimum requirements, and social issues?
- How does the surveyed company follow up its policy?
- How does the surveyed company communicate its performance?
- How does the company include the sustainability policy in its marketing efforts (e.g. FSC branding, off-product communication, and claims about requirements)?

I.5. Hypotheses

This study carried out a comparative analysis of five big companies. Three hypotheses were proposed to be tested, as follows:

H1. All selected companies have clear sustainability policies and sustainability reports regarding forestry as an obligatory part in their activities.

H2. All selected companies have implemented key policies in their supply chains such as start-up requirements to wood suppliers, compulsory documents for clarifying wood sources and procedure of auditing. These can be considered efforts to prevent illegal timber.

H3. All selected companies have used certified raw material and planned to use majority of certified wood products in the business. The forest certification FSC was preferred by these companies because of its credibility.

I.6. Analytical framework

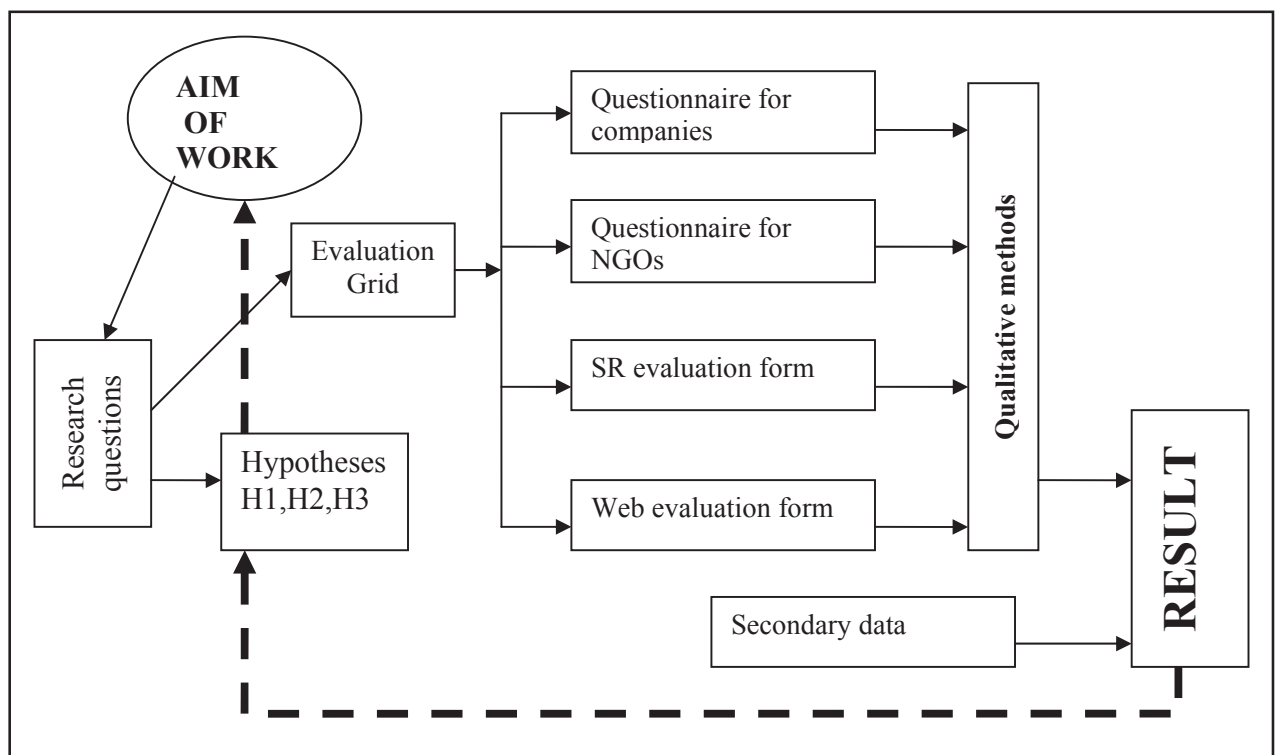


Figure 2. Analytical framework for conducting study

The working process began with identifying the aim of study in investigating the motivation and performance in sustainability regarding forestry of the five selected companies. From this starting point, the aim was translated into four research questions (see I.4. Research questions) to guide the further steps. Three hypotheses (see I.5. Hypotheses) were designed based on the research questions to generate the expected outcomes of this study. The general research questions were translated into evaluation points, specific questions in the Evaluation Grid (see ANNEX).

The Evaluation Grid was considered an intermediate and supporting step in the whole process. The scope of necessary information and data, the possible and potential sources and the methods for obtaining data were also presented. Specific points in the Evaluation Grid were classified and used to formulate questionnaire forms (see II.2. Questionnaire) and criteria in evaluation forms (see II.3. Evaluation forms).

This study employed not only the primary data (from key informants), but also secondary data collected from other sources as mass media, articles, sustainability reports and Internet. The collected data were analyzed using mainly qualitative methods. The result of the analysis was used to verify three proposed hypotheses, then to answer to the research questions.

I.7. Theoretical background of the study

The concept of CSR has been evolving for decades since early 1930s (Carroll 1979). As the issue of CSR has been getting more important, an adequate number of scientific works concerning the different aspects of CSR have been conducted. Ascolese (2003) compared the environmental and social performance of 103 European-based and 150 US-based companies and considered environmental and social performance as a priority for Europeans but an opportunity for Americans. Ascolese' research also showed the opinion of 85 percent of surveyed executives in both Europe and the US who confirmed that their company reports about its economic and financial performance, but more companies in Europe report on other aspects of sustainability, particularly environmental and social performance.

Table 2: Sustainability reports provided to stakeholders

Stakeholder Reports	U.S. HQ Multinationals Present/Planned	European HQ Multinationals Present/Planned
Economic & financial performance	85%	85%
Employee issues & benefits	56%	64%
Environmental performance	23%	62%
Social performance	22%	58%

Source: Ascolese, M., 2003

In the research “The high impact of collaborative social initiatives”, Pearce and Doh (2005) explained to how companies can extract the maximum benefit from the resources available for social projects, while respecting obligations to increase shareholder value? Based on their research, the authors say that CSR activities work best for both the company and society when they are managed strategically and in collaboration with commercial and noncommercial partners. They figured out five principles to secure the benefit:

1. Identify a stubborn challenge and address it for the long term.
2. Contribute “what we do” – leverage core capabilities and contribute products and services that are based on expertise used in, or generated by, the company’s normal operations.
3. Contribute specialized services to a large-scale undertaking.
4. Weigh government’s influence.
5. Assemble and value the total package of benefits.

Laura et al. (2007) explored corporate social responsibility (CSR) by conducting a cross-cultural analysis of communication of CSR activities in a total of 16 US and European corporations. The study proposed that US-based companies would tend to communicate about and justify CSR using economic or bottom-line terms and arguments whereas European-based companies would focus more heavily on language or theories of citizenship, corporate accountability, or moral commitment.

The above mentioned studies are likely to focus more on general issues of CSR and explore the nature of CSR and compare the policies and performance of multinational companies. However, the number of researches working on specific aspects such as forestry is limited. It was difficult to find a study in sustainability regarding forestry in forestry-related multinational companies. Companies like IKEA, Home Depot, Carrefour, etc. are believed more or less to be related to forestry because the wooden furniture and productions have been an indispensable part of their everyday business. According to WWF (2001), a relatively small number of companies can make a dramatic difference to the forest industry. Since wooden production is very sensitive issue which firmly connects to climate change and nature conservation, these companies should be requested

by public to be more “green”. There is the reason to suppose that this could be a new approach to draw the picture of the partial forest sector. The study would put a new direction based on the basic study of CSR that is exploring sustainability policies regarding forestry.

I.8. Review of companies

I.8.1. Selection of companies

These five multinationals were not randomly selected. They were chosen for this study because they are multinationals, they have a long tradition in business in forest selected sectors and they are major global competitors in the retailer market for home improvement and wood furniture (see Table 3). The competition was highly concentrated in traditional markets such as North America and Awhile Asia (including China) is now becoming a very promising market.

Table 3: Summary of companies’ main data

Name	Home Depot	Carrefour	B&Q/Kingfisher	IKEA	Wal-Mart
Regional base	US	EU	EU	EU	US
Year of foundation	1979	1959	1969	1943	1962
Forms of business	Home improvement, wood furniture and others	Home improvement, garden product, agriculture products and others	Home improvement and garden products	Home improvement, wood furniture and others	Home improvement, wood furniture and others
Sale of last fiscal year	US\$81.5 billion (2005)	US\$85 billion (2006)	US\$7.7 billion (2006)	US\$26 billion (2006)	US\$351.1 billion (2006)
No. of stores	2,200	1,040 * (Carrefour Hypermarkets)	60	237	2,980
Distribution of business	North America	EU, South America and Asia	EU and Asia	EU, North America, Asia	EU, North and South America, Asia
Co-worker	355,000	292,877	39,000	104,000	550,000

Note: * - Carrefour group owns several famous banners (Champion, GLOBI, Gima, Minipreco, SHOPI) which operate the system of 12,547 stores with 456,296 co-workers. This study

investigated the Carrefour hypermarket format which accounts for 58,7% of group sales (US\$145,86 billion).

I.8.2. Review of sustainability policies regarding forestry in selected multinationals

I.8.2.1. Home Depot

In 1999, Home Depot was one of the first mega-retailers to issue a company policy endorsing wood suppliers that practice responsible forest management, while pledging to eliminate wood purchasing from endangered regions of the world. For the second year in a row, Home Depot has been named Energy Star Retail Partner of the Year.

Recognizing that it is one of the world's largest suppliers of wood products (WWF, 2000), Home Depot is working to make a positive impact by ensuring that the products it sells come from responsibly managed forests. In the early 1990s, Home Depot began to address this issue by offering products that came from forests that had been independently certified as originating from "well-managed" forests as determined by the Forest Conservation Program (developed by Scientific Certification System and accredited by FSC in 1995). To carry the certified label, suppliers' wood must be tracked from the forest, through manufacturing and distribution. In 1999, Home Depot went a step further by publishing a wood purchasing policy as well as leading industry as the first retailer to join the Certified Forest Products Council demonstrating its commitment to third party independently certified products (The Home Depot, Inc., 2007) and taking a pledge to stop selling wood from environmentally sensitive areas by the end of 2002. Today, Home Depot has a very transparent supply chain on all of its wood purchases to regulate products from sensitive forest areas and is the largest seller of wood products that have been certified by the Forest Stewardship Council (FSC). Supplier Programs incorporates into its vendor buying agreements, requirements that they comply with the company's ethical standards, which cover employment and work place conditions, and adherence to local country laws. (Fivewinds International, 2007)

Home Depot has joined with The Conservation Fund in program "Go Zero" with attempt to reduce the amount of carbon dioxide by planning more trees. (The conservation fund, 2007). Beside the several steps in forestry and conservation, another strategy is now welcome in Home Depot is Eco

Options. The Eco Options brand will identify more than 90 percent of the products which are already on Home Depot's shelves as environmentally friendly.

I.8.2.2. Carrefour

Although The Carrefour Group was not ranked in top 50 wood consuming companies (WWF, 2001) but it is still setting high priority for the production, its furniture products and garden decorations from certified wood. This is one direction in its proactive policy to conserve the natural resources. Since 1998 Carrefour has been working with the WWF to develop FSC-certified wood. By signing the European FLEGT proposal, a regulatory plan for fighting illegal trade in wood, the Group showed its responsibility to the issue regarding forestry. In 2006 Carrefour decided to drop teak production due to falling price of teak products. The problem with process of traceability of teak led Carrefour to Amburana products from South America which has FSC certification. This voluntary approach was implemented in 2006 in several European countries (France, Belgium and Italy) (Carrefour Group, 2007). In 2006 Carrefour had a nice comment from FSC for doing a good job on pushing the issue of FSC certified teak wood and that event had an impact on the ground by pushing the wood towards Certification (European Commission, 2006).

Table 4: Carrefour's wood purchasing from different countries (Scope: international purchasing office (France, Spain, Belgium, and Italy))

Timber	Teak	Keruing	Accacia	Roble FSC	Pine FSC
Country	Indonesia	Vietnam/ Indonesia	Vietnam	Bolivia	Poland
Percentage	27%	37%	3%	11%	22%

Source: Modified from Carrefour Group, 2003

The Carrefour Group tries to buy locally in every country where it operates. This policy aims to reduce the length of supply chains, in turn minimizing their environmental impact. Products for Carrefour should meet the criteria of traceability and resource conservation and guarantees quality at a price accessible to the consumer (Carrefour Group, 2007).

Carrefour has set up the Quality Lines as a tool to ensure sufficient supplies. For the Group, currently there are 363 Carrefour Quality Lines, with 795 contracts and 41,849 producers. A line can correspond to several contracts and producers (Carrefour Group, 2005).

In its Charter for Commitment Carrefour proposes a document called Supplier Charter whose several fundamental principles are the requirements for its suppliers. “The implementation of the reference standards of the "suppliers’ charter" is the subject of an internal audit initiated by Carrefour, as well as an external audit carried out by independent audit firms” (Carrefour Belgium, 2007). The ad hoc independent external audits are carried out confidentially by a consulting committee. This committee is responsible for carrying out or having carried out local investigations and formulating its recommendations to Carrefour. In case these recommendations have not been satisfactorily applied, Committee may decide to make its observation public (Carrefour Belgium, 2007).

I.8.2.3. B&Q/Kingfisher

Since 1990 company has taken a positive approach to the challenges that social responsibility presents and have developed solutions that not only address its environmental and social impacts but also add value to its business and its reputation. In 1991 B&Q launched its supplier Environmental Audit. B&Q was presented in ranking list of WWF (2001) as one of most wood consuming companies. Realizing its responsibility to forest sector, company has early taken into account the sustainability issue regarding forestry. Environment is one of four core values (Environment, Ethical trading, Diversity and Community) in B&Q’s Social responsibility. Timber – one of specific areas in Environment concern of B&Q. Company focuses on timber to ensure that all its wood and paper products come either from proven, well-managed forests or recycled material. B&Q’s policy so-called B&Q Timber Buying Standards (2006) (B&Q Online, 2006) is based upon the Timber Policy of its parent group, Kingfisher plc. The Kingfisher Timber Policy, August 2006 (Kingfisher PLC, 2006), recognizes the Three Tiers of certification, in order to guide policy implementation.

At the moment, B&Q accepts only two logos on its wooden products: FSC and TFT (Tropical Forest Trust). For timber reporting the following details about each timber-containing product must be included on its SAP (Systems Applications Products audit) new product input form: Species, Timber certification scheme, Product Category (e.g. Plywood, MDF, Sawn timber etc), Country of origin, Chain of Custody details, Volume (m3)

A random audit will be periodically carried out. Any product not meeting this policy will not be stocked and, if found in the business, will be discontinued (B&Q Online, 2006).

I.8.2.4. IKEA

WWF (2001) ranked IKEA one of 50 most wood consuming companies in the world. In the financial year 2006 IKEA has consumed 6,4 million cubic meters of roundwood (IKEA, 2006). About 70% of production which is being sold by IKEA is wood-based production (IKEA, 2004).

IKEA has earlier realized its responsibility to sustainability development of forest sector by taking into account the issue of forestry e.g. using as much as possible certified wood; tracing the origin of wood to be sure that wood does not come from the conflict sources One of the very basic document which focuses on this issue is The IKEA Way on Purchasing Home Furnishing Product (IWAY). The date of 1st version of IWAY was August 31, 2000. Like a Code of Conduct, IWAY describes the minimum requirements on social and working conditions, together with environmental demands for IKEA suppliers (includes wood suppliers). The concrete requirements for wood supplier are described on Staircase Model (IKEA Group. 2006) .The different steps (4 levels) illustrate the increasing demands on the timber that IKEA uses. The demands apply to all suppliers of products that contain solid wood, plywood, veneer and layer-glued wood. "The only current standard that meets the long-term aims of IKEA is that of the Forest Stewardship Council (FSC)" (IKEA, 2004). The most important tool for tracing the wood origin is Forest Tracing System (FTS). This is the combination of documents (Forest tracing system summary, forms) and manpower (IKEA forestry specialists around the world). Both internal and external audits are carried out to trace the fulfillment of suppliers to IKEA's requirements. IKEA has been involved in cooperation with NGOs in social and environmental issues. In forestry and nature conservation, the long-term partner is WWF.

I.8.2.5. Wal-Mart

Although not being ranked in 50 most wood consuming companies (WWF, 2001) but “...Wal-Mart is so big that a slight reduction in the packaging of one of its toy lines saved the company US\$2.4 million last year by cutting trucking costs, while saving 1,000 barrels of oil and 3,800 trees...” (Michael Grunwald, 2006). Wal-Mart has realized that being an efficient and profitable business should go together with being a good steward of the environment. Company made effort to proclaim two of its goals which are to sell products that sustain and protect our resources, and to generate zero-net waste. Wal-Mart uses the Forest and Paper Network to reduce wasted paper and packaging from products, achieves transparency of its wood supply chain, and eliminates illegally sourced wood from its supply chain. Wal-Mart took into account the issues of environment and sustainable forestry by working with a number of groups (WWF, the American Tree Farmers Association) to develop goals to source paper and wood products from sustainable forests (Wal-Mart Facts. 2007).

Wal-Mart published guidelines for the Wood Furniture Supplier Preference Program in order to encourage all of its suppliers to embrace transparency for wood fiber and raw materials by 2010 and give preference to suppliers that company can already verify use of sustainably harvested and recycled wood fiber. In case of discovering unsustainable factory issues, Wal-Mart will seek for alternatives, or even removing products from shelves e.g. cypress mulch – bagged or forested in Louisiana – because of concerns around the loss of cypress forests along the coasts in that state (Wal-Mart Facts. 2007).

II. Method of study

II.1. The methodology

II.1.1. Quantitative analysis

Many questions in questionnaires were quantitative which require numbers, percentage, ranks or evaluation points. The report evaluation and web impression also had a number of criteria which were evaluated by the appearance frequency of information, the length of information and

provided figures/numbers. Since the sample size was small, there was no quantitative sampling because “The basic concept most often is probability sampling, directed at representativeness. Measurements of variables are taken from the sample, which is chosen to be representative of large population” (Punch 1999: 193).

Quantitative data are very important for the analysis. Some interesting information such as how companies deal with contract breach or illegal logging was taken out from the ranking or evaluation where the numbers expressed the opinion of informants. Other quantitative data gave the background information about companies and played supportive role for qualitative analysis.

II.1.2. Qualitative analysis

II.1.2.1. General description of qualitative methods

This study used qualitative analysis as a core method in order to find out the motivation and activities towards sustainability policies regarding forestry from different companies. The qualitative analysis is different from the quantitative one which focuses on making the generalizations from a large sample. The nature of a quantitative analysis is receiving results from statistic calculation based on the number of respondents. In qualitative analysis, the “quality” and expertise of respondents in selected fields are important. The respondents’ answer would be considered the representative answer. Carvalho (1997) discussed deeply on the strengths and weakness of qualitative analysis. The strengths were believed to be the richer definition of focused topic and wide explanations of causal processes. It is also discussed that qualitative research uses unreconstructed logic to get at what is really real - the quality, meaning, context, or image of reality in what people actually do, not what they say they do (as on questionnaires) (North Carolina Wesleyan College, 2007). Some basic weaknesses of qualitative analysis were mentioned by Carvalho (1997). The absence of one from inherently limited group of respondents may cause the risk to make generalizations beyond the research area. Other weaknesses of this method are connected to the problems of verifying the information because “Subjectively arises from the nature of the information sought, non-structured interview formats and flexibility respond recording, and response analyzing methods” (Carvalho, 1997: 14). Despite of the existing weaknesses, accuracy and depth of information are stressed as advantages of qualitative analysis in specific cases “especially when an interpretive understanding of a phenomenon or process is

required, qualitative methods are more successful in obtaining relevant data, ideas or recommendations” (Carvalho, 1997: 14).

In the selected area of expertise for this study, not so many people can be respondents. Since the investigated companies are all multinational and dealing not only with wooden products in their business, finding the relevant respondents is getting more complicated. Therefore, the qualitative analysis approach was chosen.

Due to a small sample size, a qualitative method cannot synthesize through statistic calculation like a quantitative method does. In order to achieve the credibility, the research should take into account three elements: “firstly, rigorous techniques and methods for gathering high quality data that is carefully analyzed, secondly, credibility of a researcher, which is dependent on his/her training and experience and finally, and thirdly, philosophical belief in the phenomenological paradigm that is a fundamental appreciation of naturalistic inquiry, qualitative methods, inductive analysis, and holistic thinking” (Patton, 1990:46).

II.1.2.2. Data for qualitative analysis

Data for qualitative analysis are not inherently quantitative, and can be any forms or formats of almost anything. It is not necessarily to express the data in term of numbers so frequency distributions and probability tables are not obligatory to be used. Data can come in the form of words, images, impressions, gestures, or tones which represent real events or reality as it is seen symbolically or sociologically (North Carolina Wesleyan College, 2007).

The questionnaire forms (see II.2.) contained a lot of open-ended and multi-choice questions to get qualitative data of forestry sensitive issues. The qualitative data were also extracted from the sustainability reports and web’s impression with the support of two forms called “Sustainability report evaluation form” and “Web impression evaluation form”. The content and the details of information were evaluated qualitatively (see II.3)

II.1.2.3. Sampling of representatives

As qualitative analysis works with small number of samples, a special approach in selecting representatives is important. “Purposeful sampling is used as a strategy when one wants to learn something and come to understand something about certain select cases without needing to generalize to all such cases” (Patton 1980:100) was supported by Punch (1999:193) who states that “Purposive sampling – it means sampling in deliberate way with some purpose or focus in mind”.

It is difficult to say exactly the relevant number of samples for this study but at least one key informant in each selected company and NGO should respond. Carvalho (1997:7) has stated “with persons, selected on the basis of their special knowledge and experience in area of interest. Number of informant usually varies from 10 to 25”. Since the study focuses on rather narrow and sensitive aspect of sustainability which is typical only for forest-related companies and NGO so it requires deep knowledge in area of expertise. The highest priority for selecting respondents was set for people working directly or indirectly with sustainability policies regarding forestry in these units: social and environmental affairs, corporate social responsibility, supply chains, trading offices, quality and sustainability of products etc. Names and contact addresses of key informants was found in companies’ website, companies’ reports and other forestry-related papers. Other effective approach was tracing all forestry-related information of these companies on mass media to find the statements, interviews...from companies’ representatives. An analog approach was applied to find key informants in WWF and Greenpeace.

II.2. Questionnaire forms

As mentioned above, the generalization of research questions was translated into questions in questionnaires with aim of getting as much as possible data from informants. Questionnaires focus on institutional set-up for developing and implementing sustainability policies (such as responsible units, internal reporting, etc.); the main features of sustainability policies and how they translate into concrete requirements for suppliers and how these requirements are actually implemented (tracing systems, sanctions, etc.). During the process of designing, questionnaires were reviewed and commented by both the supervisors and other external experts who have contributed a great help to the final version of the questionnaires. The final version has been tested in IKEA and

received general comments stating that there are too many questions; the questions are too sensitive and too technical that not everyone dealing with sustainability issues in company can answer. These comments were expected because this study follows a sensitive issue which more or less influences on the reputation and business of the companies. The way of construct questions was paid attention in order to avoid direct questions to sensitive issues.

There are two questionnaire forms, one for informants in selected companies and the other for informants working with forestry issues in NGOs. The content of these questionnaires focused on five areas: data of respondent, background information of selected companies, sustainability policies regarding forestry in these companies, organizational unit of personnel in charge of sustainability policies regarding forestry and implementation of sustainability policies regarding forestry in these companies.

Different types of questions including open-ended questions, multi-choice questions, ranking question and evaluating questions were used in questionnaire forms. Amongst 29 questions in the questionnaire form for companies, 19 are open-ended, 5 are multi-choice, 2 are ranking questions and 3 are evaluating questions. In the questionnaire form for NGOs, the open-ended questions are dominant.

II.2.1. Questionnaire form 1 for companies

This questionnaire took two months to be finished. The electronic version was believed to bring friendliness to informants. The way of communication with informants was mainly e-mailing, and then followed up with telephone interview when getting answers to the questionnaire. First 21 introductory emails were sent for selected informants in five companies in 03rd November 2007. The reminding emails were addressed to informants in companies three times. The questionnaire form 1 was full of technical questions concern the issues connected to forestry and it was hard to avoid the sensitive meanings. The reaction of informants to the questions was recorded to analyze their communication friendliness to study. Since there were not so many informants and their answers were considered representatives in the area of expertise.

II.2.2. Questionnaire form 2 for NGOs

This questionnaire has a similar content in terms of questionnaire for companies. It was designed for people who work with issues related to forestry in NGOs. This questionnaire contains 23 questions and also covers five areas. These questions were focused on the opinion and the understanding of NGOs' personnel of what are going on with sustainability policies regarding forestry in selected multinationals. This approach was believed to bring more interesting and independent information about the issues of concern. Nevertheless, 11 introductory emails (in 05th November 2007) and several reminders did not result in a good response from WWF and Greenpeace to this study.

II.3. Evaluation forms

These evaluation forms were designed to extract necessary data from annual sustainability reports and webpages of the selected multinationals. Although the sustainability reports contain a variety of aspects of everyday business, some degrees of performance in sustainability regarding forestry can be revealed by evaluating these reports. The webpage is considered not only an appearance of a company but also an important mean of communication and business. The information regarding forestry can be obtained when exploring these websites.

II.3.1. Sustainability report evaluation form

This form was designed to extract the information from annual (or bi-annual) sustainability (or similar) reports of selected companies. Forty criteria (see ANNEX ...) have been created to evaluate the performance of companies through sustainability reports. As mentioned in I.6., this evaluation form was designed based on the Evaluation Grid. All criteria were divided into four groups: Company information (11 criteria); Sustainability policies regarding forestry (4 criteria); Organizational unit or personnel in charge of sustainability policies regarding forestry (9 criteria) and Implementation of sustainability policies regarding forestry (16 criteria). The presence, availability or accessibility of information regarding forestry in these sustainability reports were evaluated by giving point. The details are presented in *Table 5*.

Table 5: Evaluation for information regarding forestry in sustainability reports

0	1	2	3	4	5
No information	Have information but not clear	Information in general	Just enough to understand the issue	In details	In details with update

All available sustainability reports from 2000 to 2006 of selected companies were reviewed to extract necessary information. The results were summarized (see ANNEX ...) for further analysis.

II.3.2. Web impression evaluation form

This form was designed to extract the information of sustainability regarding forestry from website of selected companies. Criteria (see ANNEX ...) for this form are also based on the information from the Evaluation Grid. As a result, 16 criteria were used to evaluate the performance of companies through their website. Description and evaluation methods can be found in *Table 6*. All data collected using this form were summarized (see ANNEX) for further analysis.

Through websites people who are interested in companies' activities can find a lot of but not all information. The information published on websites relies on the policies or regulation of a company. That is therefore hardly to extract the sensitive information on websites. When exploring companies' websites, it was expected to evaluate the performance based on the designed criteria.

Table 6: Example of criteria and evaluation of web impression

	Criteria	Evaluation
W003	Visible contact for sustainability policies regarding forestry (SP RF)	0 – No contact 1 – Having contact but in general 2 – Direct contact to responsible people for SP RF
W004	News /Advertisements/Information related to forestry	0 – No information 1 – Having information in general of SP 2 – Having information of SP RF
W005	Accessibility to SP data (minimum number click to	0 – No direct link or at least 5 clicks to first information of SP in general

	get first information)	1 – At least 3 clicks to first information of SP in general 2 – Having direct link to information of SP in general
W006	Link to articles related to SP RF from other sites	0 – No link to external articles relate to SP RF 1 – Having links to external articles in SP RF 2 – Update external articles in SP RF (post at least 1 month before last access)

II.3.3. Communication friendliness of informants

As this study faces the problem of a small size of informants, reaction and behavior of informants are very important. The visible access to sustainability policies regarding forestry is limited on the websites of the selected multinationals. A solution is to apply the evaluation of communication friendliness what is rather common in media inquiry. Such evaluation is believed to express how responsible people react to such a sensitive aspect in business. Communication friendliness in this study is considered as a part of overall communication performance mentioning the ability to communicate and to deliver information by personal assistance from these multinationals. This approach more or less supports the study.

II.4. The Google search engine

Google is a registered trademark for the internet search engine of Google Inc. In this study, Google has played an important supporting role. Google has been used for searching references, literature for study; searching for addresses, contacts of informants (in case they were not provided) and searching for the information that could not be obtained from companies' websites or documents such as illegal logging. The general approach of handling Google is combining the keyword. This is extremely important and decides the success of the searches for inquiry information. The disadvantage of searching by Google is that not all information can be posted to internet for sharing and not all shared information is reliable.

III. The results and analysis

III.1. Communication of selected companies on issue regarding forestry

The communication is very important part in companies' everyday activities. Communication shows the ability of exchange information inside and outside companies. For this study, the communication or contact concerning sustainability policies regarding forestry were investigated. The investigation was carried out though web impression and the communication friendliness of contact people why questionnaire was addressed to them. Websites somehow represent the face of companies. All five selected companies have their own websites not only for electronic commercial but also for advertisement and communication in general.

III.1.1. Web impression analysis for companies' communication

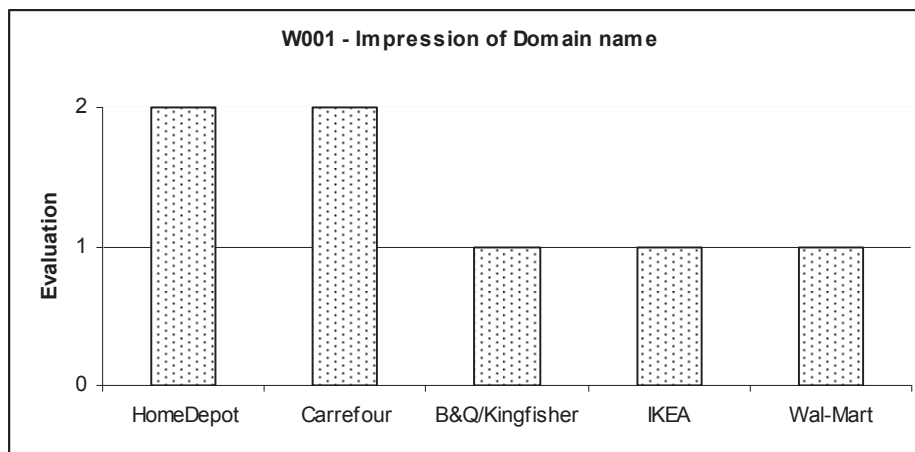


Figure 3. Impression of companies' domain name where information regarding sustainability issues located

Figure 3. shows that Home Depot and Carrefour have the easily-remembered domain name servers which could be easily found by Google search engine with keyword "Company + sustainability" (where "company" is the name of selected companies). With the same procedure, Google did not give the needed links to sustainability information of B&Q\Kingfisher, IKEA and Wal-Mart, that why they got only 1 point.

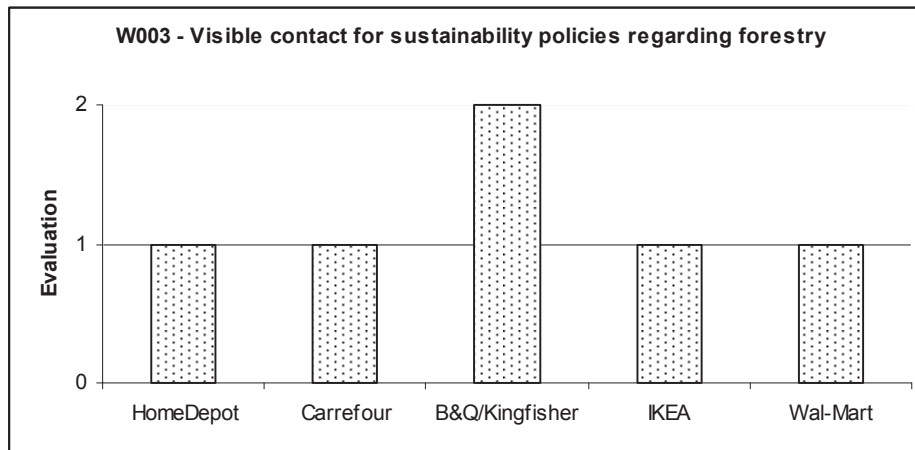


Figure 4. Visible contact for sustainability policies regarding forestry

Criterion W003 aimed to check whether companies put some visible contacts (email, phone...) of people dealing with sustainability regarding forestry. *Figure 4.* shows that B&Q\Kingfisher got better performance because it presented contact for sustainability responsibility on website and it was easy to find emails of people dealing which sustainability by Google with keywords “B&Q sustainability contact” or “B&Q sustainability @”. Other companies only provided press contacts (IKEA) or telephone number (Home Depot) which made the process get longer to find appropriate people.

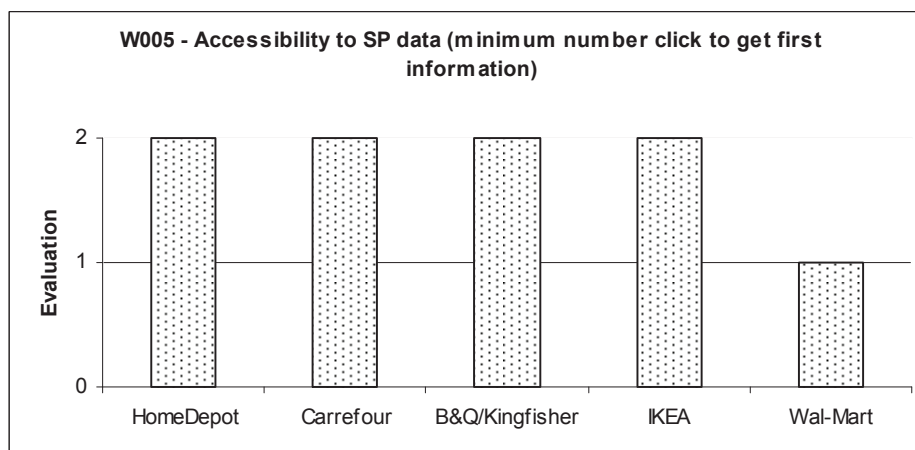


Figure 5. Accessibility to data related to sustainability policies in general

The result of Figure 5. shows the level of accessibility to the first data related to sustainability policies. According to the evaluation method for this criterion, Wal-Mart has lower point (1)

compare with 4 other companies (2). On website of Wal-Mart it takes more than 3 clicks for experienced user to reach to the first information about sustainability policies. In websites of other companies, it takes less than 3 clicks to get the interested information. Home Depot, Carrefour, B&Q and IKEA have direct link to the sub websites which contain the sustainability contents.

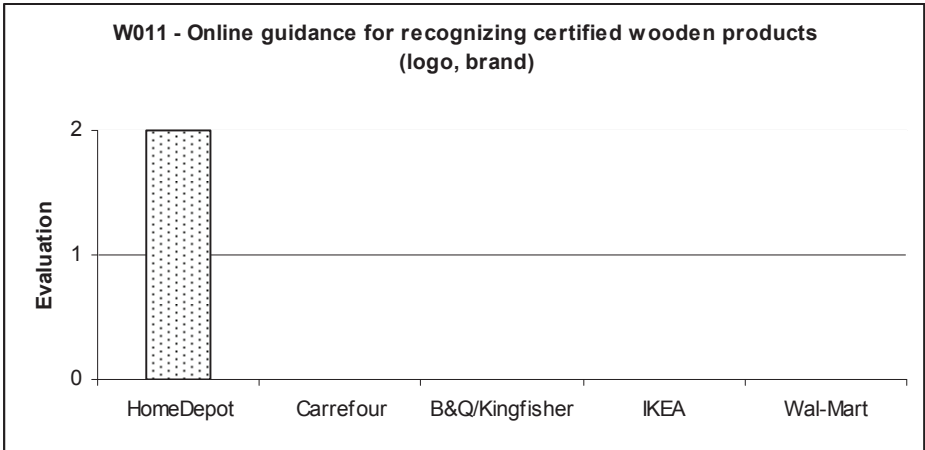


Figure 6. Online guidance for recognizing certified wooden products

The criterion W011 was designed to check whether on websites of selected companies there are any guidelines for consumers to recognize the certified wooden products among others. The guidelines were expected to contain the codes of certified products, the list of certified products, the environmentally friendly labels or logos of products. Only Home Depot fulfills this criterion and got 2 points (the maximum) while other companies don't have any information concerns this criterion (0 point). In this aspect, Home Depot shows better performance when trying to help consumers know how to distinguish the certified products. This can be considered one step towards responsibility regarding forestry.

III.1.2. Analysis of communication friendliness of informants

Table 7: Summary of contacts for survey

	HomeDepot	Carrefour	B&Q/ Kingfisher	IKEA	Wal-Mart	WWF	Greenpeace
No. of informants	4	5	4	5	3	5	6
Remind 1/Reply 1	YES/NO	YES/NO	YES/NO	YES/YES	YES/NO	YES/NO	YES/YES
Remind 2/Reply 2	YES/NO	YES/YES	YES/NO		YES/YES	YES/NO	YES/YES
Remind 3/Reply 3	YES/YES	YES/YES	YES/YES		YES/NO		YES/YES
Complaint	NO	YES	NO	NO	NO	NO	NO
Repeat explanation	YES	NO	NO	NO	NO	NO	YES
Answer (No. of answers)	NO	YES(1)	YES(1)	YES(3)	NO	YES(1)	NO

The *Table 7*. summarizes the process of survey from selecting informants in companies and NGOs to gathering results. The criteria for choosing informants were mentioned in II.2.1. All introductory mails (see ANNEX) were sent to informants in 2nd November 2007. At the first deadline (12th November 2007) no one could send back the answers. The first “Remind email” was sent out to prolong the deadline. Up to second reminder IKEA and WWF (Russia) answered. Up to third remind (8th December 2007) Carrefour and B&Q\Kingfisher gave the answers. Actually IKEA, WWF and Greenpeace had good communication; they replied most of emails which addressed to them. The disappointed thing here is that only WWF Russia answered to questionnaire but not WWF International or WWF US even though several emails were addressed to them. Despite having good communication Greenpeace did not give back the answer. Greenpeace Russia once promised to answer by the end of November 2007 but there was no answer. After the third remind, Greenpeace and HomeDepot even asked to repeat the aim and importance of study in order to decide to answer or not. Wal-Mart was not active in communication. They replied only to second remind with promise to answer but up to 15th December 2007 there was no answer from Wal-Mart. From all selected companies and NGOs for survey, only Carrefour complained and asked for stopping further emails addressed to Carrefour’ co-workers.

III.1.3. Conclusion for communication of selected companies on issue regarding forestry

In general all companies took into account the importance of the websites in their everyday's activities especially those regarding sustainability. This is proved by their effort of making the concerned data conveniently accessible. But according to the result of web impression analysis, each company has different performance for different criteria. While Home Depot put the guidelines for recognizing certified products B&Q/Kingfisher presents online report tool for tracing the issues of sustainability in general and regarding forestry in particular

EU-based companies had good reaction and communication with this study. This was proved by their answers to questionnaire. US-based companies did not pay much attention to the aim of study and had bad performance in communication with researcher comparing with their EU-based competitors. NGOs as WWF and Greenpeace were believed to be the main supporters for this study because they work independently. They were active and enthusiastic but at the end of survey (14th December 2007) only WWF Russia handed out the answer which was mainly about IKEA. Anyway, the available answers and opinion could be used for supporting other sources of information.

III.2. Sustainability policies and sustainability reports regarding forestry in companies' everyday business

Although all selected companies claimed to have clear sustainability policies as an important part in their business long time ago, it is necessary to find out whether they really have been taking the adequate responsibility to nature conservation.

The approaches to reveal this information are analyzing through their annual sustainability reports, their web impression and answer received from informants (companies and NGOs)

III.2.1. Sustainability report analysis for sustainability policies regarding forestry

As mentioned in II.3.1. there were 40 criteria to evaluate the available sustainability reports of selected companies from the year 2000 to the year 2006. Unfortunately two US-based companies

Home Depot and Wal-Mart don't have such kind of reports. They only have the annual reports which are full of financial information and these reports are not suitable for our analysis. Carrefour and B&Q/Kingfisher have the leadership in publishing sustainability reports. They have issued the sustainability reports quite early in 2001. The series of Carrefour's sustainability reports are under the title: Sustainability report. Sustainability reports of B&Q/Kingfisher carry the name "Kingfisher's plan for corporate social responsibility" or "Corporate social responsibility report". Actually B&Q had only reviews of sustainability in the years 2003 – 2005 but it reports annually to Kingfisher (parent company) so Kingfisher's reports (2005 version was not found due to unclear reason) were used for analysis. IKEA started publishing their sustainability reports from 2003 under the title "Social and environmental responsibility report".

US-based multinationals (Home Depot and Wal-Mart) don't have their sustainability reports (or equivalent reports). The comparative analysis is carried out among EU-based multinationals (IKEA, Carrefour and B&Q/Kingfisher). This fact brings an impression that selected EU-based companies have taken ahead the responsibility for publishing sustainability issues.

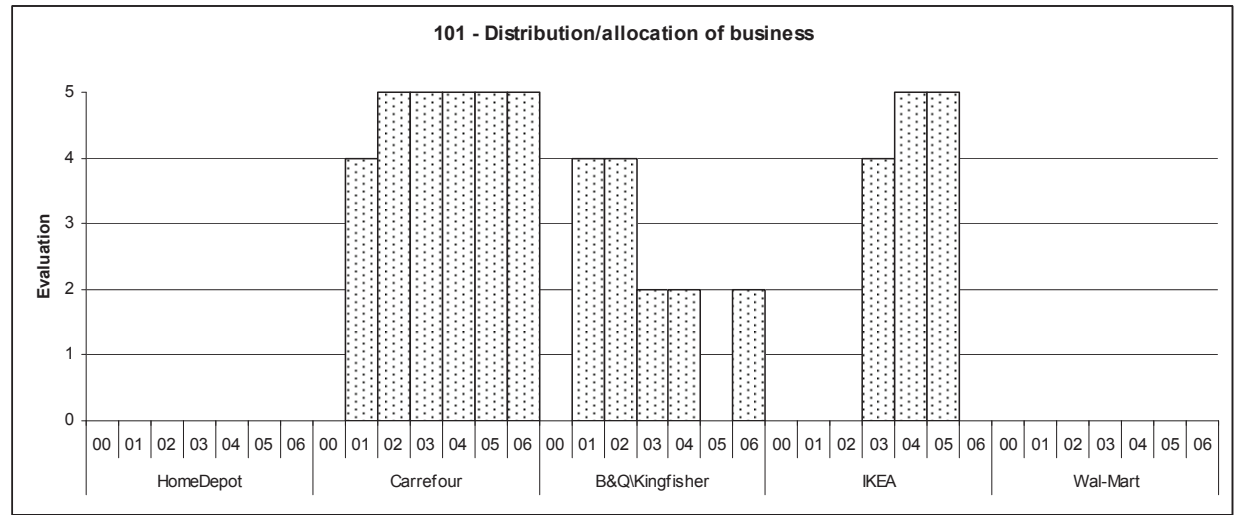


Figure 7. Information about distribution and allocation of companies' business (2000-2006)

The *Figure 7.* shows how selected companies presented themselves in sustainability reports. Home Depot and Wal-Mart did not have sustainability reports in the period of 2000-2006 so there is nothing to evaluate (0 point). From the first release of sustainability reports EU-based companies

have presented information about distribution and allocation of their business over the world. Carrefour, B&Q/Kingfisher and IKEA in the first reports gave information in details: how many stores they have, the location of stores, sales of stores and sometime the plan of opening new stores...Due to this level of information they got 4 points. In the following sustainability reports, Carrefour and IKEA continued to give detail information with update (5 points) about their distribution while B&Q/Kingfisher dropped to 2 points when they gave information in general. This could be explained by the way Kingfisher reported. As a parent company, Kingfisher not only reported the achievement of B&Q but also other brands (Castorama, Brico Depot, Screwfix Direct) so it is difficult to include everything in one report.

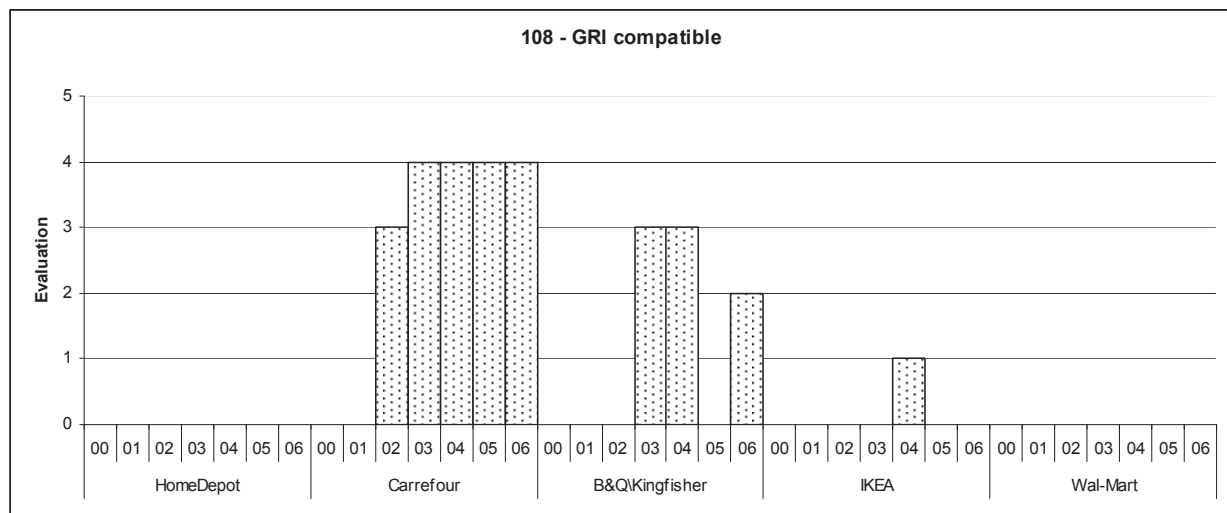


Figure 8. GRI compatibility of companies' sustainability reports (2000-2006)

GRI was described as a standard framework for non-financial reports from companies. This framework promised to provide the credibility, consistency, and comparability for non-financial reports (mainly deal with social and environmental aspects) so it has been being applied or used as reference by number of companies. Although GRI is still not obligatory, but the compatibility with GRI of one sustainability report brings the convenience for tracing and comparing the sustainability issues year by year. Looking at the *Figure 8*. Home Depot and Wal-Mart got 0 point for not having any sustainability reports. Carrefour started applying GRI in its second sustainability report (2002) in which the information about GRI was provided enough to understand the issue (3 points). From 2003 to 2006 the information about GRI in Carrefour's

reports went up to detail level (4 points) and maintained this level. The information about GRI was provided enough to understand in B&Q/Kingfisher’s sustainability reports in the years 2003 and 2004 (3 points). The information about GRI was down to 2 points in 2006 when giving information in general. IKEA mentioned the information about GRI in its second sustainability report (2004) but this information was not clear (1 point). In other sustainability reports (in 2005, 2006) IKEA did not mention any more about GRI compatibility. For this criterion, Carrefour performed better than other selected companies when keeping following the framework of GRI why the general trend in other companies was decreasing. It also shows that the issues social and environmental issues were reflected in professional way in Carrefour’s sustainability reports.

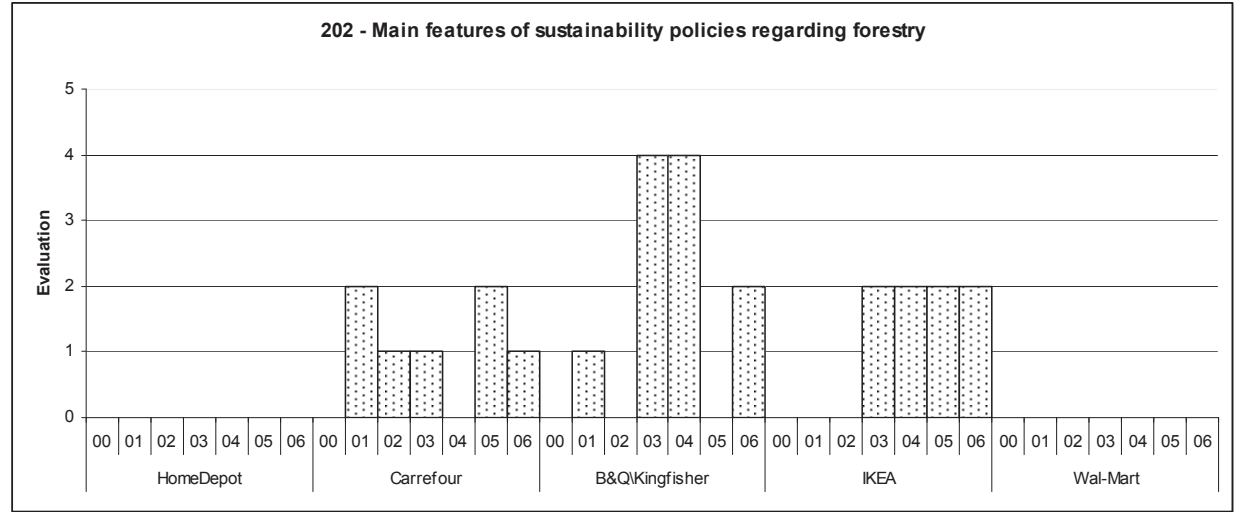


Figure 9. Information about main features of sustainability policies regarding forestry (2000-2006)

According to *Figure 9*, the main features of sustainability policies regarding forestry were reflected in sustainability reports in different ways. The main features here could be the start-up requirements to wood suppliers, compulsory documents for clarifying wood sources and procedure of auditing...This criterion was aimed to evaluate the expression of sustainability policies regarding forestry. Carrefour did not get even performance for this criterion. Its reports in 2001 and 2005 provided information in general (2 points) while in other reports the information was very poor (in the years 2002, 2003, 2006) or no information at all (the year 2004). B&Q/Kingfisher had uneven distribution of this information but in other pattern. In the sustainability reports in

2003 and 2004 B&Q/Kingfisher presented the features of sustainability policies in great detail (4 points) while the first report got 1 point for this performance and the report in 2006 presented only in general (2 points). IKEA did not have the high point like B&Q/Kingfisher got in 2003 and 2004 but it had a even distribution of information while provided information in general (2 points) over the years (2003 – 2006). Based on *Figure 9*, it could be concluded that the main features of sustainability policies were expressed differently in selected companies. Carrefour and B&Q/Kingfisher presented information unevenly over years while IKEA presented it in general but stably.

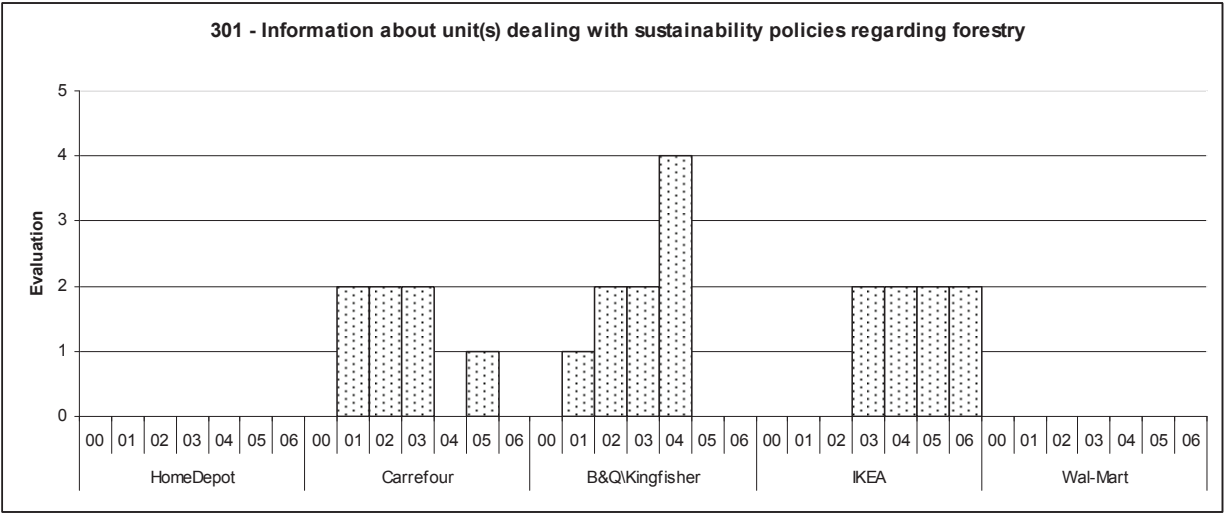


Figure 10. Information about unit(s) dealing with sustainability policies regarding forestry (2000-2006)

Criterion 301 was designed to check the information relates to unit(s) dealing with sustainability policies. For this criterion, all related information implied sustainability regarding forestry or similarity in the names, the function of units and statements from the units were taken into account *Figure 10*. shows that Carrefour presented information unevenly. In the first three sustainability reports (2001-2003) Carrefour got 2 points for information in general when mentioning Department of prevention, Health, Safety and the Environment; The Quality and Sustainable Development; Department International Purchase Office but it was not so clear that how these departments deal with forestry issue. Carrefour got 1 point in 2005 and 0 point in 2004, 2006 due to poor or no information. The trend of this information was decreasing in the series of

Carrefour’s sustainability reports. In B&Q/Kingfisher’s sustainability reports, the trend for this information was increasing from 2001 to 2004 (from 1 point to 4 points) when providing the presence Kingfisher and B&Q sourcing offices; but it did not have any information in the years 2005, 2006. IKEA maintained this information in general (2 points) for all sustainability reports. The impression from *Figure 10*. is that the information about the unit(s) dealing with sustainability policies was taken into account in EU-based companies early. Only B&Q/Kingfisher presented it in details in 2004, other companies revealed this information in general. IKEA kept presenting information in general about the Social and environmental Co-ordination group (SECO) (includes group manager of Social and Environmental Affairs) and the IWAY council (special forum for issues relating to IKEA’s code of conduct IWAY consisted of a number of senior IKEA co-workers) though series of sustainability reports.

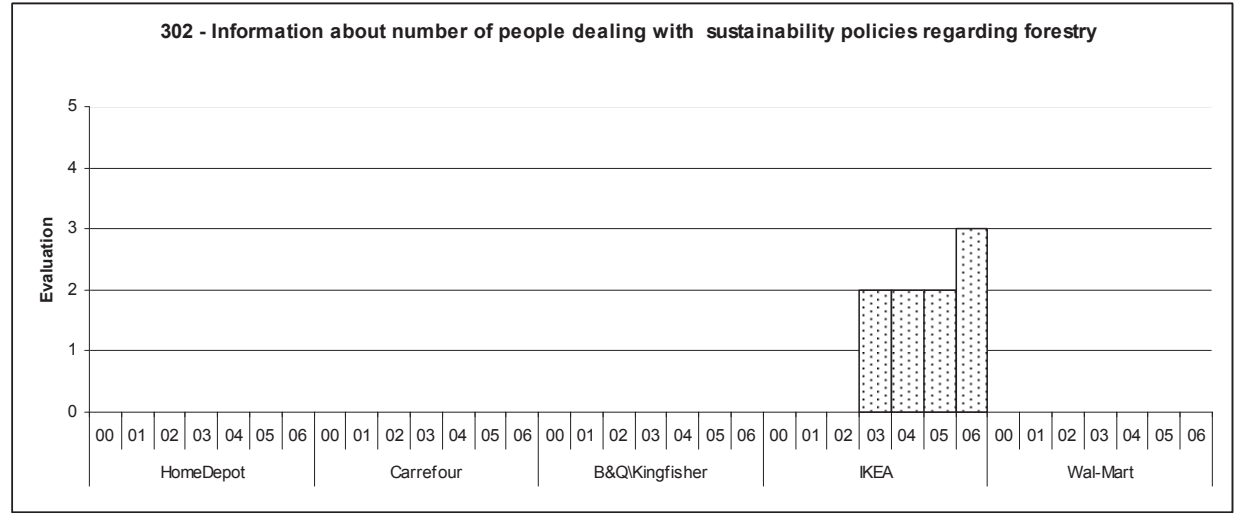


Figure 11. Information about number of people dealing with sustainability policies regarding forestry (2000-2006)

The *Figure 11*. indicates that although all selected EU-based companies have sustainability reports but only IKEA regularly mentioned about its staff dealing with sustainability policies regarding forestry. The provided information varies from 2 points to 3 points (or from “general to enough to understand the issue).

III.2.2. Web impression analysis for sustainability policies and reports

Three criteria of web impression analysis were used to investigate information about sustainability policies regarding forestry of selected companies.

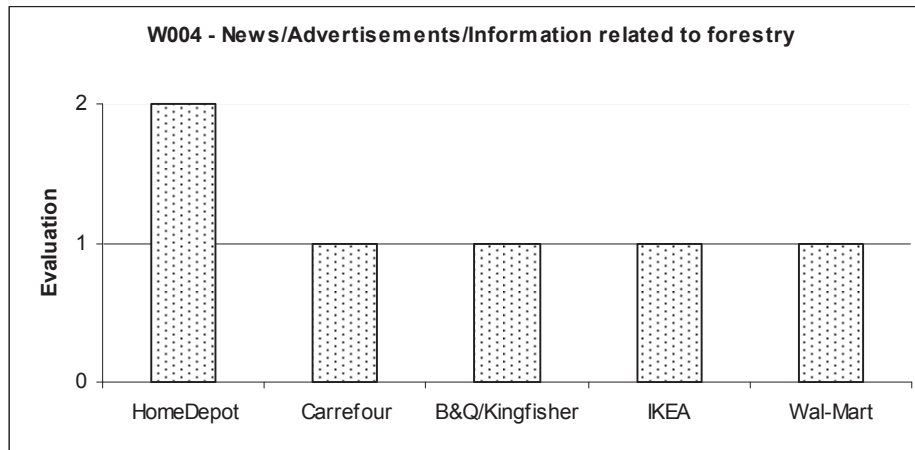


Figure 12. Information about News/Advertisements/Information related to forestry (2000-2006)

Figure 12. shows that four companies provided at least poor information (1 point) for this criterion, this means that companies only put the links to sustainability issue in general rather than focus on sustainability regarding forestry in particular. At the moment of webimpression checking IKEA gave direct links to its donation program with UNICEF which has nothing connect to forestry and the link to IKEA's Code of conduct (IWAY) which covers issue relates to forestry. Carrefour had direct link to content under title "Environment: Carrefour group priorities" which describes the environmental strategy of Carrefour. On Corporate responsibility (CR) page of B&Q/Kingfisher, the general information of sustainability was located such as Latest CR news and the recognized SRI indices as DJSI and FTSE4Good. Wal-Mart also put information about sustainability in general such as Sustainable Value Network and Renewable Energy. On the main website of Home Depot, the information relates to "Sustainable Forestry" was exposed so company got 2 points for this criterion.

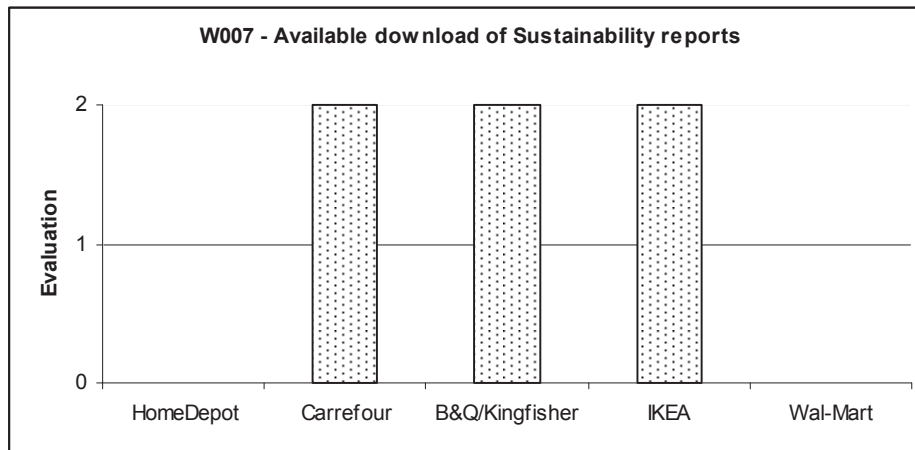


Figure 13. Available download of sustainability reports

This figure confirms the fact that Home Depot and Wal-Mart did not have sustainability reports so there were no copies available for download on their website. Remaining companies provided full accessibility to the annual sustainability reports.

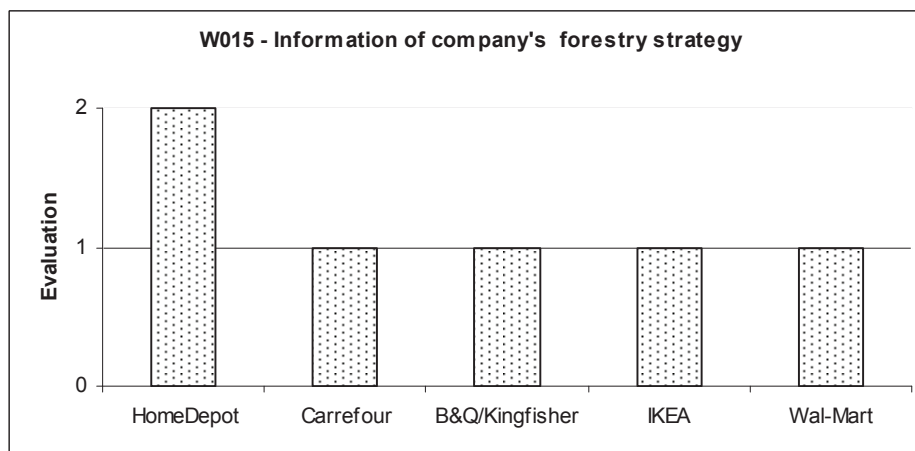


Figure 14. Information of companies' forestry strategy on websites

For criterion W015 Home Depot presented detail information about their forestry strategy on their websites while other companies only provided limited information. This criterion was aimed to check whether companies put information about their forestry strategy (wood sourcing, standard, restricted regions for import, restricted species for import etc.) on websites. Home Depot got 2 points for revealing this information.

III.2.3. Informants' answer analysis for sustainability policies and reports

The answers (1 from Carrefour, 1 from B&Q/Kingfisher and 3 from IKEA) were summarized and presented to make the information about sustainability policies and sustainability reports more clearly. The information is rather limited since Home Depot and Wal-Mart did not answer the questionnaire and due to this Home Depot and Wal-Mart were excluded from all the below summarizing tables.

Table 8: Definitions of “sustainability in forestry” according to selected companies

Carrefour	To promote sustainable forest management through our purchasing policies; to develop product lines more respectful of resources and bio-diversity
B&Q/Kingfisher	Sustainable forestry is the practice of meeting the forest resource needs and values of the present without compromising the similar capability of future generations - note sustainable forest management involves practicing a land stewardship ethic that integrates the reforestation, managing, growing, nurturing, and harvesting of trees for useful products with the conservation of soil, air and water quality, wildlife and fish habitat, and aesthetics.
IKEA 1	We use the terminology "a recognized third party certification system" Which is now equivalent with FSC
IKEA 2	We recognize forests certified according to FSC as well-managed
IKEA 3	“The IKEA business shall have an overall positive impact on people & the environment” As a business we will have both positive and negative impact on people and the environment when we analyze individual issues. Long term we are convinced that it is fully possible to have a balance with more positive than negative impact as step by step we implement better solutions and alternatives. Thereby we move in the direction of sustainability”

Table 8. shows that informants of EU-based companies had different definition for the term “sustainability in forestry”. Carrefour’s informant mentioned the respect of resources and biodiversity through their purchasing policies. B&Q/Kingfisher’s informant more or less focused on conservation. Two first informants of IKEA showed that definition of IKEA for “sustainability in forestry” relies on the reputation of forestry. The third one said about the balance between negative and positive impact of IKEA’s business on environment and people and connected that balance to sustainability.

Table 9: Events and milestones relate to formulation of companies' forestry-related sustainability policy

Carrefour	Partnership with WWF 1998
B&Q\Kingfisher	B&Q's original timber policy and targets were published in September 1991. This action was initiated by a growing number of customer letters and a specific media enquiry.
IKEA 1	No! Approximately 2000
IKEA 2	before 2000
IKEA 3	We conduct annual Wood Supply Chain Audit at about 25 % of volumes used at our suppliers and request our suppliers to provide wood procurement in Forest Tracing System for all wood purchased for the last 24 months

Above table shows that in general people remembered the events. Only third person in IKEA misunderstood questions. Two other people gave the same answer.

Table 10: Tools for translating sustainability policies regarding forestry into actions

Carrefour	Product specification, Supplier Charter
B&Q\Kingfisher	Internal training, guidance, policy requirements, workshops; QUEST assessment for Vendors; Timber policy; Vendor Manual; Vendor Workshops; Marketing, Information campaigns
IKEA 1	Requirement, Information, External projects
IKEA 2	Company standard, Legal documents, supplier reports
IKEA 3	IKEA require FSC certified timber using at suppliers for IKEA products; IKEA require suppliers to using Non FSC controlled Wood; IKEA set a Minimum requirement for wood merchandise that suppliers should comply with

For Carrefour, Product specification was important tool while B&Q/Kingfisher set internal training at the top. IKEA's informants gave the similar answers when indicating that the important tools were companies' requirements or standards.

Table 11: Unit(s) and people are dealing with Sustainability policies regarding forestry

	Name of unit(s) dealing with forestry	Manpower (people)	Provided name
Carrefour	Doesn't have	1	No
B&Q\Kingfisher	Department of Social Responsibility	2	Yes
IKEA 1	IKEA forestry	10	No
IKEA 2	Forestry team	15	Yes
IKEA 3	Forestry, Social and	15	Yes

	Environment		
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Table 11. summarizes the information about unit(s) and people dealing with sustainability policies regarding forestry. Carrefour does not have any units but it has one person dealing with sustainability policies regarding forestry (the name was not given). B&Q/Kingfisher has Department of Social Responsibility with 2 people to deal with issues regarding forestry; the name of head of department was provided. IKEA performed strong manpower for issues related to forestry with 15 specialists, the names of units and heads of units were provided.

III.2.4. Conclusion for companies' sustainability policies regarding forestry and sustainability reports

Result of sustainability reports analysis shows that selected EU-based companies have made step ahead selected US-based companies when publishing their annual sustainability reports. Carrefour and B&Q/Kingfisher had sustainability reports earlier (2001). The sustainability reports from companies not only confirm the presence of sustainability policies regarding forestry in companies' business but also reflect the features and contents of these policies. All selected EU-based companies showed great concern to sustainable forestry and reported back their achievements annually. Although having sustainability reports later (2003) than Carrefour and B&Q/Kingfisher but IKEA provided information about sustainability policies regarding forestry regularly and plentifully.

Based on information from web impression it is possible to realize that all selected companies put information about issues regarding forestry on their websites. Information about forestry strategy was presented more detailed on website of Home Depot. Companies like IKEA, Carrefour and B&Q/Kingfisher did not have good performance here as they had in sustainability report analysis. Home Depot provided information on its website as a compensation for not having any sustainability reports. Wal-Mart did not have good performance in web impression regardless it got no point for sustainability reports. It was found the difference in web impression did not depend on the different groups of companies (US-based and EU-based groups) but on the ability to provide and organize information on website of each company. The result from web impression was not enough to prove that all selected companies have clear sustainability policies regarding

forestry. It only confirmed that the information about forestry could be found on companies' websites.

For information of units and personnel dealing with sustainability policies regarding forestry other consideration is that, if such information is easily accessible on company's website, there is less need to present it in the annual sustainability report. This is well matched with IKEA's case. US-based companies did not have good performance for this information. All the needed contacts of US-based companies for this study were found by Google search engine or from secondary source of data.

The collected information shows that EU-based companies reacted better than US-based companies in this study. Based on provided information by informants, it is possible to conclude that selected EU-based companies have their sustainability policies regarding forestry. B&Q/Kingfisher took into account issues of forestry earlier (1991) than Carrefour (1998) and IKEA (2000). The tools used for translating policies into actions were different. IKEA used their strict standard and requirements to suppliers while B&Q/Kingfisher focused on internal training, guidance for issues and Carrefour required product specifications. IKEA performed powerful team (15 people) dealing with sustainability policies regarding forestry while B&Q/Kingfisher had only 2 full-time staffs and Carrefour had 1 person and these are probably not dealing with these issues full-time, but this is in an integrated part of work by employees responsible for wood sourcing. It is likely, that the big difference in answers is due to different interpretation of the questions. No conclusion could be made for US-based companies because they did not provide information.

III.3. Implementation of key policies regarding forestry in companies' supply chains

This section is going to prove how selected companies set up and trace the policies for their wood suppliers and confirm whether companies had made efforts in preventing illegal timber access market.

III.3.1. Sustainability reports analysis for implementation of key policies regarding forestry

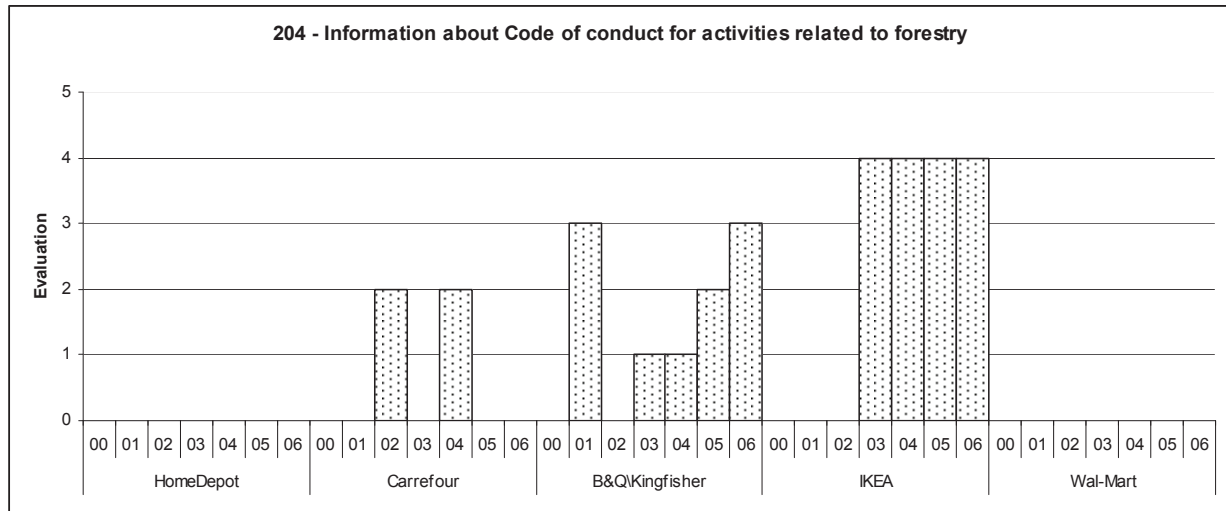


Figure 15. Information about Code of conduct for activities related to forestry (2000-2006)

Code of Conduct or equivalent documents can be considered the requirements of companies not only to their co-workers but also suppliers who intend to have or already in business with companies. Code of conduct was used as a tool to secure the social and environmental issue in business and it is especially important to be sure that wood suppliers adopt the content of this Code. *Figure 15.* shows the evaluation for information connects to Code of conduct for activities related to forestry. Carrefour had two times referred to its Sustainable Forest Management Charter (issued by International Purchase Office) in 2002 and 2003. This is policy to suppliers to ensure full timber traceability and sustainable forest management. B&Q\Kingfisher provided enough information to understand (3 points) its “Environmental and ethical code of conduct for suppliers” in 2001 and 2006. In other years, the limited information was provided (0 point in 2002, 1 point in 2003 and 2004, 2 points in 2005). IKEA got higher point (4 points) for this criterion when mentioning its Code of conduct “IWAY – IKEA Way of Purchasing Home Furniture” regularly in details.

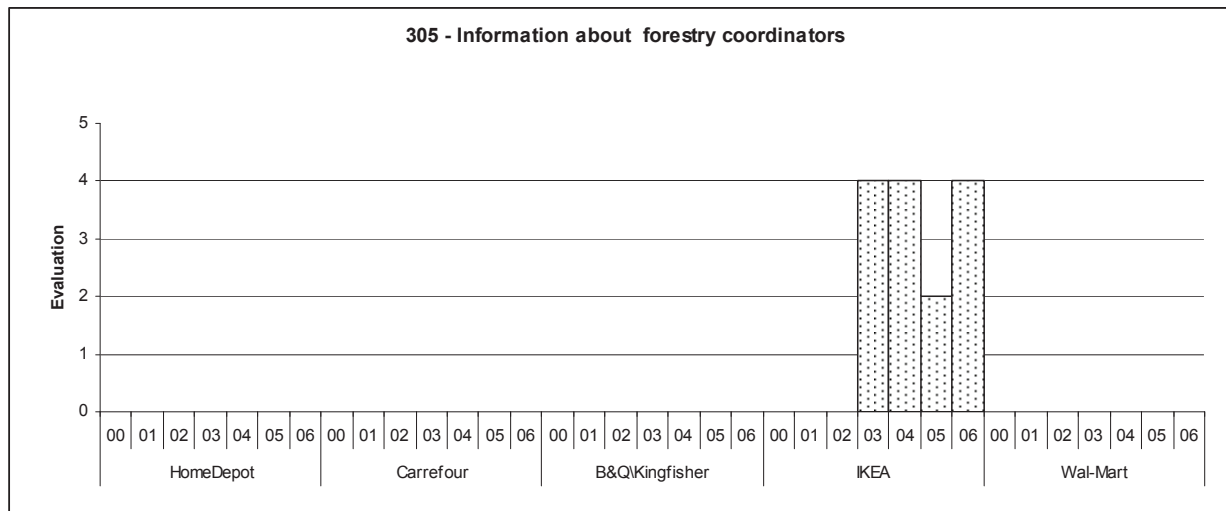


Figure 16. Information about companies' forestry coordinators (2000-2006)

Figure 16. indicates the interesting thing that although being involved in forestry-related sector but not all selected companies have forestry coordinators. Forestry coordinators were believed to be important and they should have relevant knowledge to handle the questions connected to forestry in companies. Investigation shows that only IKEA provided information in details (4 points) about their forestry coordinators in annual sustainability reports. This could be lead to conclusion that IKEA has control over questions of forestry with the support of their own foresters over the world.

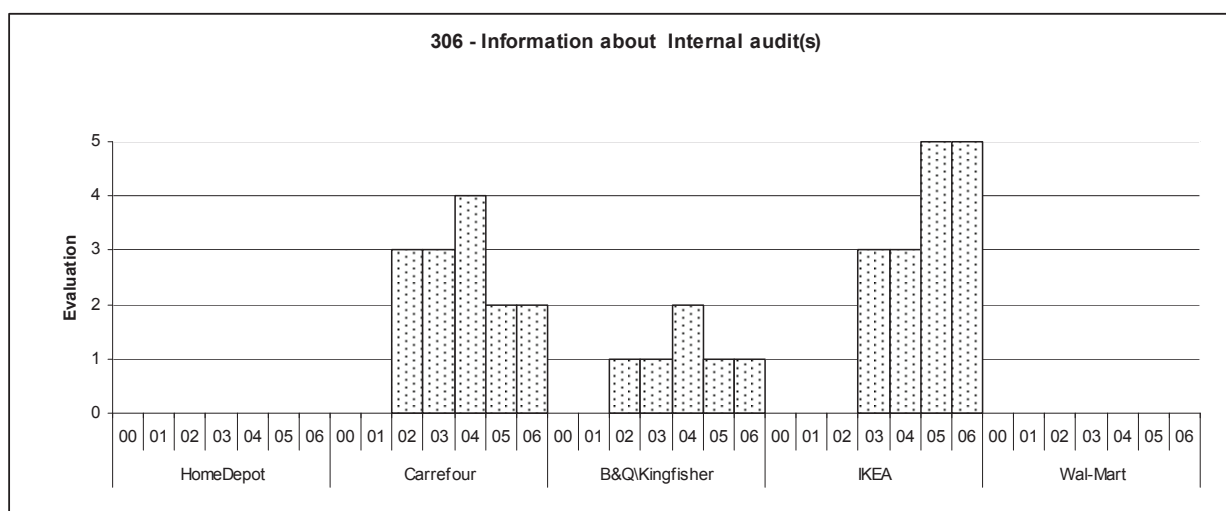


Figure 17. Information about companies' internal audit(s) (2000-2006)

Figure 17. gives the picture of how selected companies reflected the information about their internal audit mechanism. B&Q had worst performance for this criterion when providing very limited information (having information but not clear). Carrefour usually provided information enough to understand (2002, 2003) or in general (2005, 2006). In sustainability report 2004 Carrefour gave detail information (4points) about “Internal Audit Department” – unit carried out the internal audits (include wood procurement audits) in Carrefour. Information for this criterion was given by IKEA from “enough to understand issue” (3 points) to “details with update” (5 points). Internal audits in IKEA (includes wood procurement audits) were carried out by 46 Trading services offices over the world and around 70 full time auditors (Social and environmental sustainability report, 2005 IKEA).

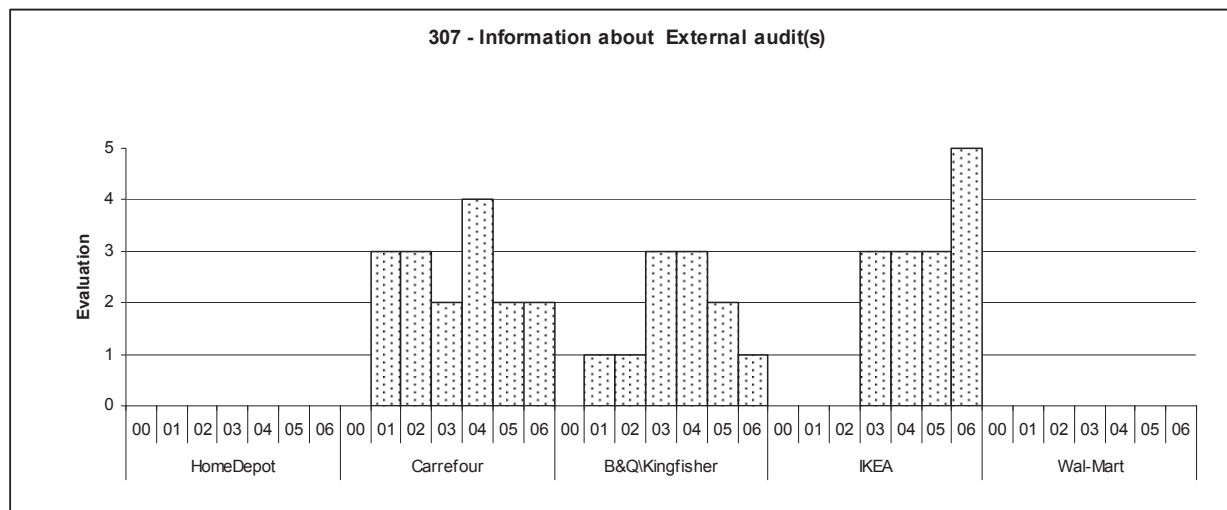


Figure 18. Information about companies' external audit(s) (2000-2006)

The result of investigation for information about external audits was presented in *Figure 18*. In general, all selected companies had information about external audits in their reports. B&Q/Kingfisher gave information enough to understand (3 points) in 2003 and 2004 that external audits were made by URS Verification Ltd and Groundwork Trust (B&Q Social Responsibility Review 2003-2005). The clearness of information given by B&Q/Kingfisher decreased when getting only 1 point in their report in 2006. Carrefour provided information from “enough to

understand the issue” (in 2001, 2002) down to “in general” in 2003, 2005, 2006). Only in 2004 it gave in detail the information about external audits (4 points) when mentioning KPMG verified the reporting and audit systems of Carrefour (Carrefour Sustainability Report, 2004). IKEA maintained this information at level “ enough to understand the issue” (3 points) in 2003, 2004, 2005 and shifted up to “in details with update” in 2006 with information about Rainforest Alliance SmartWood Program which took responsibility for auditing wood suppliers of IKEA (IKEA Social and environmental sustainability report, 2006).

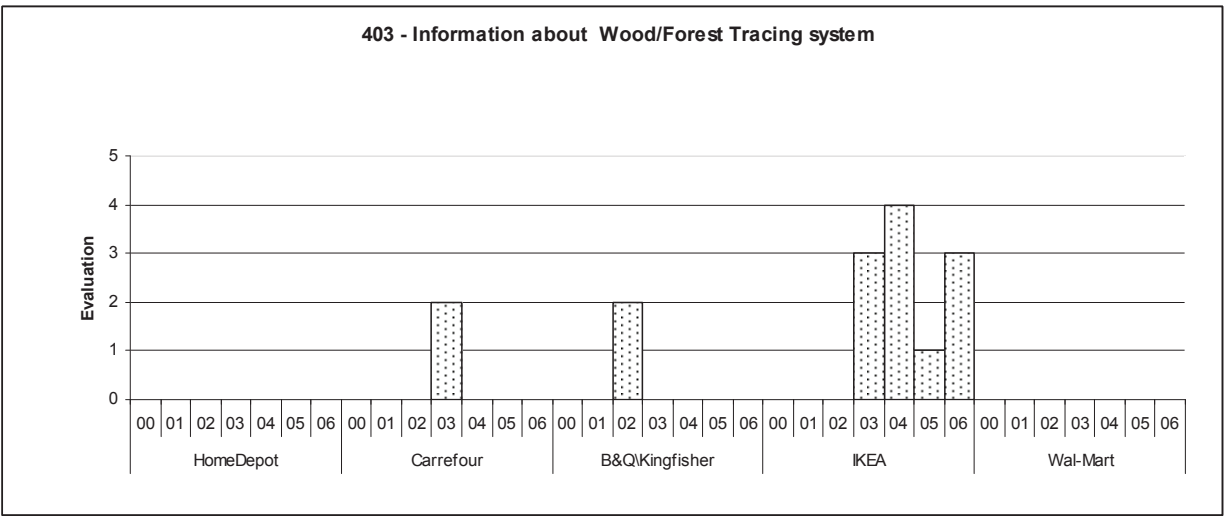


Figure 19. Information about companies’ wood/forest tracing system (2000-2006)

Figure 19. shows the information connects to the tracing systems for wooden products. Since all selected companies have raised through their policies the awareness to origin of wood they consumed, it is necessary to have the appropriate solution for tracing the origin of wood to be sure that illegal wood hardly to come to the market. The tracing systems can be constituted by several components as obligatory documents, questionnaire, registry, data bases, reports, private symbols...and may be supported by the GPS/GIS technology. In its Sustainability report 2003, Carrefour mentioned in general (2 points) the case with teak in Indonesia. Carrefour tried to engraving a serial number onto each teak product corresponding to a Certificate of Origin. It could be considered one form of tracing system. B&Q/Kingfisher also mentioned one time in general that it traced the record of product and its Sourcing offices support to trace legal source of timber. IKEA provided information about its Forest Tracing System (FTS) (in 2003, 2004, 2006). This

system consists of Questionnaire about the origin of wood and database of wood origin in company and wood suppliers. Based on FTS audits of wood origin are carried out to check the fulfillment of suppliers before starting up of business with new suppliers and once a year on on-going business. *Figure 19.* indicates that based on sustainability report analysis, IKEA got better performance when presenting its FTS.

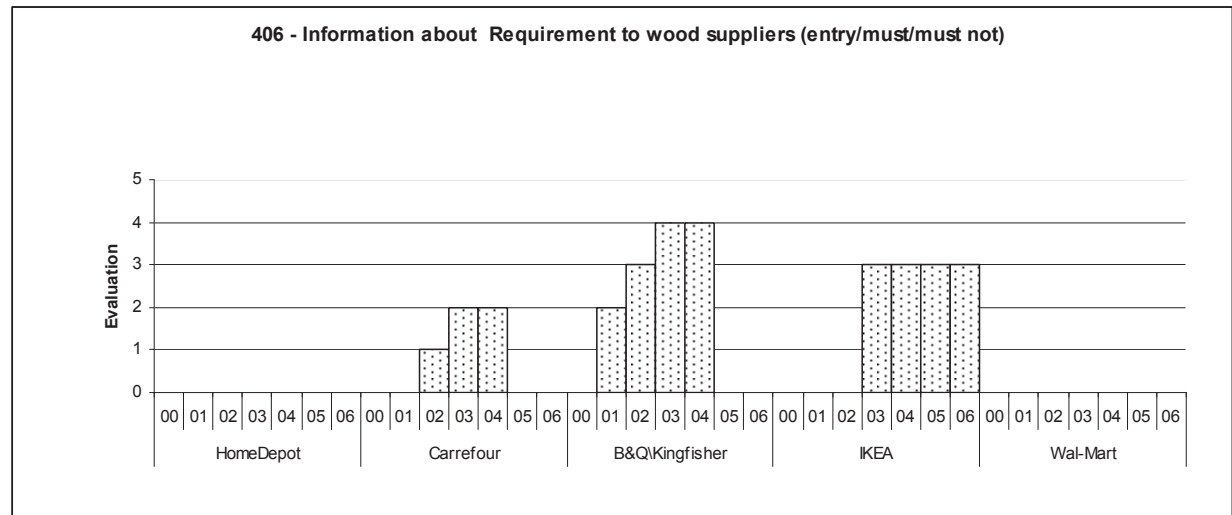


Figure 20. Information about companies’ requirements to their wood suppliers (2000-2006)

The criterion 406 was designed for extracting the information about requirement to wood suppliers. This requirement could be entry requirement to suppliers to start business with companies, list of demands that suppliers must or must not do to fulfill requirement of companies. Carrefour started presenting this information in 2002 (1 point) then went up to “general” (2 points) in 2003 and 2004. Carrefour did not provide this information in 2005 and 2006. B&Q\Kingfisher got 4 points for the year 2003 and 2004 but then got 0 for 2005 and 2006. IKEA regularly presented this information enough to understand (3 points) from 2003 to 2006.

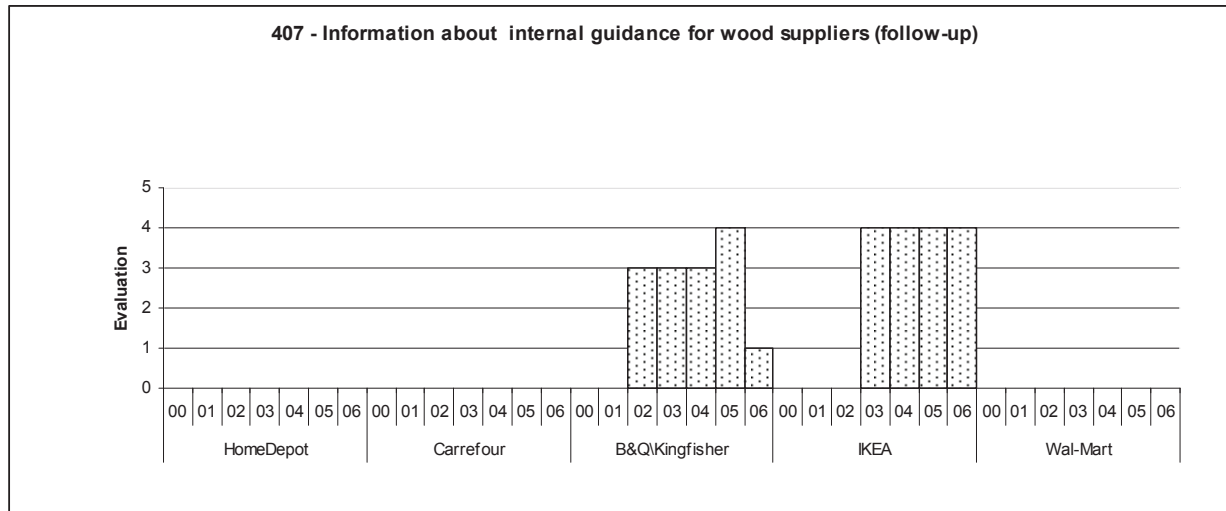


Figure 21. Information about companies' internal guidance for their wood suppliers (2000-2006)

Figure 21. shows how detail the provided information by companies was to help their wood suppliers fulfill the requirements. Carrefour did not mention any internal guidance in their sustainability reports although they had requirement implied that products for Carrefour should meet the criteria of traceability and resource conservation and guarantees quality at a price accessible to the consumer (Carrefour Group, 2007). From 2002 to 2004 B&Q had this information "enough to understand" (3 points). In 2005 Kingfisher introduced in detail standards to help buyers and suppliers implement its timber policy. These set out 3 tiers of certification: Tier 1 – FSC certification or equivalent, Tier 2 – Working towards tier 1, Tier 3 – Other third party certification (Social Responsibility Report 2005 Key Performance Indicators (KPIs)). In report 2006 B&Q/Kingfisher did not report clearly about this information. In its all releases of sustainability reports, IKEA gave information about internal guidance in details (4 points). The Staircase model could be considered clear guidance for wood suppliers to fulfill step by step the requirement of IKEA.

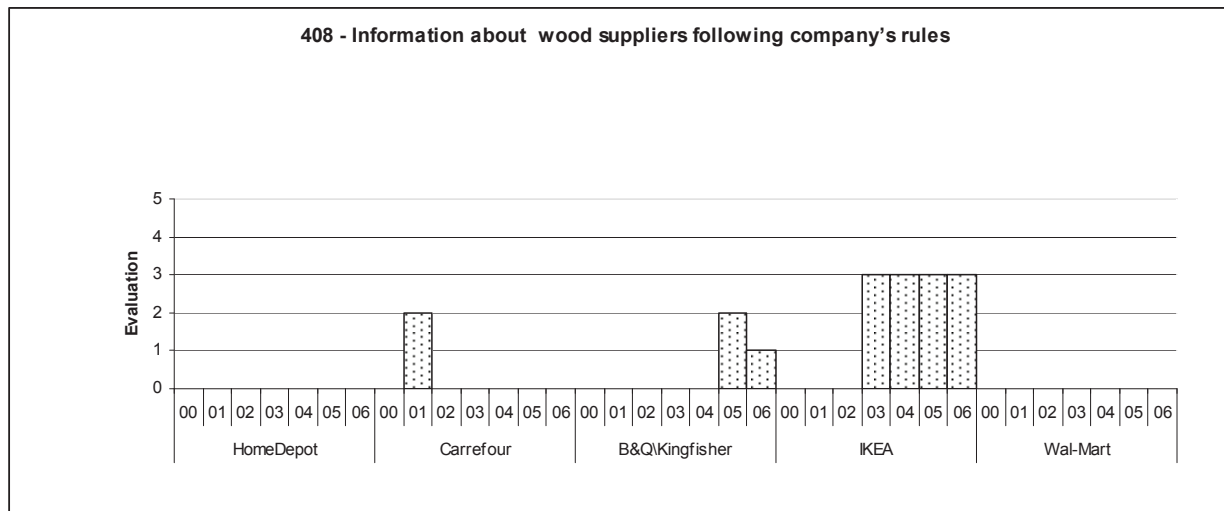


Figure 22. Information about wood suppliers following companies' rules (2000-2006)

Criterion 408 checked whether selected companies present information about how their wood suppliers followed requirements. Carrefour gave information in general in its very first sustainability report. It confirmed that “all suppliers will be progressively audited” (Carrefour Sustainability report 2001). B&Q\Kingfisher also provided very limited information for this criterion in 2005 and 2006. In 2005 B&Q\Kingfisher mentioned the total percentage of suppliers followed the company's rule but did not indicate how many wood suppliers were they. In 2006 the information went down to “not clear” when company did not provide information about how many wood suppliers fulfilled requirements. IKEA maintained information at level “enough to understand the issue” when providing results from wood procurement audits. They indicated percentage of wood suppliers met or did not meet requirements of company. The information was not deep enough to know the name of suppliers or how they met and did not meet the requirements. *Figure 22.* shows that Carrefour and B&Q\Kingfisher did not pay attention to provide this information although it could be important to evaluate how companies worked with their wood suppliers. IKEA had a better performance but the provided information reaches only “enough to understand” the issue while it could be expected to be in detail with update.

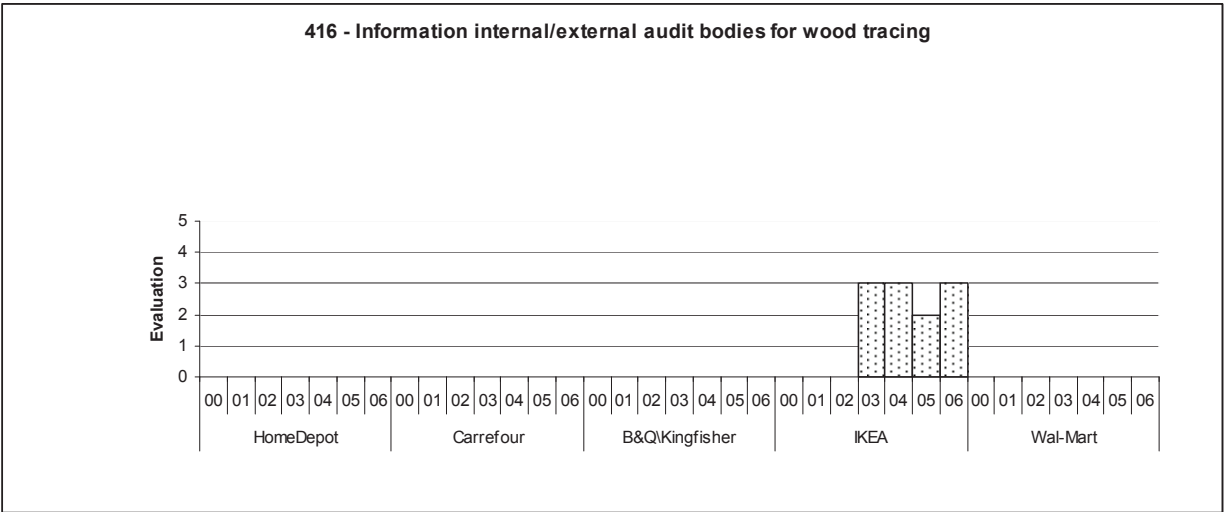


Figure 23. Information about companies' internal/external audit bodies for wood tracing (2000-2006)

Figure 23. shows the information relates to audit bodies for wood tracing in selected companies. These audit bodies are believed to be involved in process of wood tracing. Their area of expertise is to be sure that wood from illegal activities could not come to market. Only IKEA provided information for this criterion. The information was enough to understand that the FTS was handled by IKEA's trading service offices and around 70 internal auditors. The result of criterion 416 does not mean that other companies do not have internal, external audit bodies; it only indicates companies' low attention to presence of that information in their reports.

III.3.2. Web impression analysis for implementation of key policies regarding forestry

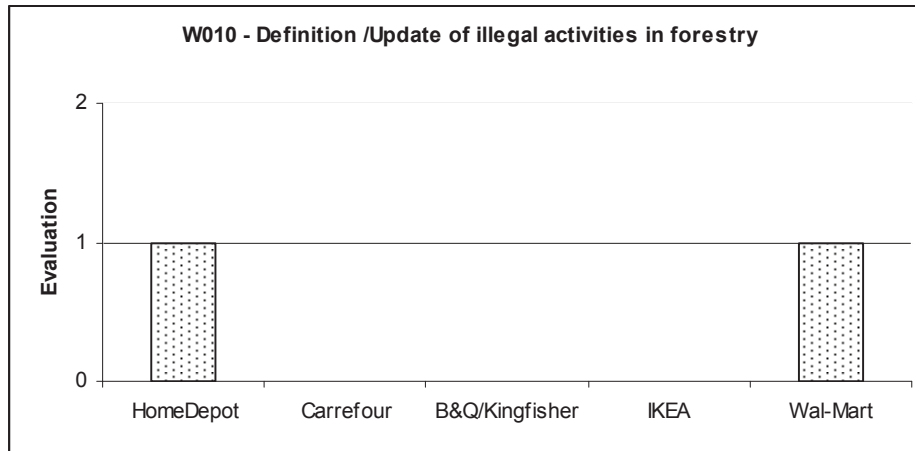


Figure 24. Definition/Update of illegal activities in forestry on companies' website

There were not so many criteria to check the information relates to effort of companies against illegal wood. Criterion W010 was aimed to reveal the presence of definition of update of illegal activities in forestry in selected companies' websites. Since companies were involved in forest sector, they must take attention to illegal activities in forestry. By having clear definition, it is believed that companies orientate their business on right way to avoid relating with wood from illegal activities. *Figure 24.* shows that Home Depot and Wal-Mart presented this information on their website while EU-based companies did not mention.

III.3.3. Informants' answer analysis for implementation of key policies regarding forestry

Table 12: Concrete requirements to wood suppliers for implementing sustainability policies regarding forestry

Carrefour	Certification and traceability
B&Q/Kingfisher	Suppliers must comply with the B&Q Timber Policy and QUEST process before products will be allowed into the business.
IKEA 1	To keep track of the origin and verify that the wood is not from illegal
IKEA 2	Known origin, no wood from HCVF, no illegally harvested wood, not from plantations established after Nov 1996 by replacing natural forest. Constant increase in share of FSC certified wood over time
IKEA 3	N/A

Table 12. shows that, according to respondent's answer, the requirements of Carrefour were not concrete (certification and traceability). IKEA and B&Q/Kingfisher had more specific requirements. Besides requiring the clear origin and traceability of timber, wood suppliers must comply with the B&Q Timber Policy and QUEST before the coming of products to business. IKEA did not accept wood from HCVF or harvested from plantations established after Nov 1996, the need for FSC certified wood is increased over time.

Table 13: The 5 largest wood suppliers of each company

Carrefour	Confidential
B&Q/Kingfisher	Finnforest, Richard Burbidge, Premium Timber, Chindwell, Liberty Hardware. Please note: B&Q currently has over 100 timber suppliers.
IKEA 1	N/A
IKEA 2	N/A
IKEA 3	N/A

Table 13. shows an interesting fact that why providing names of wood suppliers is confidential or sensitive for Carrefour and IKEA, B&Q/Kingfisher provided the list of its top five wood suppliers.

Table 14: The changing of companies' requirements for wood suppliers during last 10 year

	Carrefour	B&Q	IKEA 1	IKEA 2	IKEA 3
Frequency of audit	+	++	++	+	+
Level of audit	+	++	++	+	+
Work with enforcement	+	+	+	0	++
Frequency of updating standard	+	++	0	0	+
Number of legal documents	+	+	+	0	++
Information campaigns	+	+	0	0	++
Number of contract breaches	0	0	N/A	+	0
Amount of fines	0	0	N/A	0	0
Number of conflicts due to not fulfilling requirements	0	0	+	0	0
Number of forestry coordinators working with wood tracing	0	0	++	+	+
Number of complain/reports from ENGOs	+	0	+	0	0

++	Increasing strongly
+	Increasing moderately
0	No significant change
-	Decreasing moderately
--	Decreasing strongly

According to the result in *Table 14*, there was nothing changed strongly in requirements of Carrefour to its wood suppliers. Carrefour only changed moderately some requirements as frequency of audit, level of audit, information campaigns etc. There was nothing changed at all in number of contract breaches, amount of fined, number of conflicts due to not fulfilling requirements, number of forestry coordinators working with wood tracing. In B&Q/Kingfisher's case, frequency of audit, level of audit and frequency of updating standard increased strongly. The same situation with Carrefour's case was observed here when some issues did not change at all. Three informants from IKEA had totally different answers for this question. First informant believed that during last 10 years frequency of audit, level of audit and number of forester working with wood tracing increasing strongly. The second informant did not observe so many changes except for some issues increased moderately. The last informants thought that intensive changes were in enforcement, number of legal documents and information campaigns. This difference could be explained by the different positions and experience of informants in IKEA.

Table 15: Definitions of non-compliance cases according to selected companies

Carrefour	N/A
B&Q\Kingfisher	Not meeting the requirements of the Timber Policy; Failing to supply accurate timber information for the New Article Input form; Changes of timber origin/sources and/or specifications of products without notifying B&Q; Failing a vendor assessment audit; Not giving clear transparency of supply chain to B&Q
IKEA 1	Illegal logging; INF, national parks, nature reserves; HCVF; Unknown origin
IKEA 2	unknown origin; wood from HCVF; no legal verification; poor wood procurement routines, etc
IKEA 3	lack documentation/information for traceability of wood origin; lack of awareness for IKEA requirement for wood merchandise; lack of staff in charge for wood procurement; Poor reporting system and routine for wood procurement at suppliers

Here is the non-compliance case's definition according to selected companies (*Table 15*). Only IKEA and B&Q gave answers for this question. The non-compliance cases mainly are violations with companies' requirements, legal documents and traceability of origin.

Table 16: Ranking for the most effective tools for forcing suppliers to follow companies' requirements

	Carrefour	B&Q	IKEA 1	IKEA 2	IKEA 3
a) Long-term contracts	1	4	1	5	4
b) Legal documents (convention, contract, reports, guarantee....)	2	5	3	4	3
c) Internal audits	5	5	2	5	5
d) External audits	5	5	2	4	4
e) Wood Tracing System	3	4	2	5	4
f) Fines	N/A	1	5	N/A	2
g) Negotiation	5	2	4	3	1
h) Information campaigns	1	3	5	5	1

(Rank from 5 to 1, 5 for the most important, 4 for the next most important, etc)

According to *Table 16*, informant from Carrefour believed that the most effective tools for forcing wood suppliers are internal audits, external audits and negotiation (5). Carrefour does not have Wood Tracing System (as IKEA has) but it could be important (3) in this informant's view. B&Q ranked legal documents, internal/external audits as most effective tools (5). The very important position (4) was set for long-term contracts and Wood Tracing System. The information campaigns could be considered important (3) in B&Q/Kingfisher's case. IKEA's informants gave different opinion. First one preferred fines and information campaigns (5) then negotiation (4) and legal documents (3). The second one thought long-term contracts, internal audit, Wood Tracing System and information campaigns were most important (5). The "very important" (4) was set for legal documents and external audits. Negotiation was given low priority (3). Third informants believed that internal audit was most effective (5). Long-term contracts, external audit and Wood Tracing System were considered very important (4). Legal documents got low priority (3). This difference reflects the different background, position location and experience of informants in IKEA.

Table 17: Evaluation for effective solutions when dealing with non-compliance cases

	Carrefour	B&Q	IKEA 1	IKEA 2	IKEA 3
Stopping import	5	4	N/A	N/A	4
Stopping contract	5	4	4	5	3
Negotiating	4	4	4	4	5
Lobbying	2	3	1	N/A	3
Prosecuting	2	3	1	N/A	2
Asking for penalty	2	2	1	N/A	3
Other solution	N/A	N/A	N/A	N/A	3

1 – useless 5 – very effective

Table 17. shows an interesting thing that Carrefour’s informants thought stopping contract and stopping import were very effective (5). The negotiation was also considered effective (4). B&Q/Kingfisher expressed its even interest in stopping import, contract and negotiating (4). Two IKEA’s informants did not mention their opinion about “stopping import” but third one thought that is “effective” solution. In general IKEA’s informants preferred stopping contract or negotiation to other solutions. In general, the high evaluation for negotiation of IKEA’s informants is reasonable according to IKEA’s policy for its suppliers. IKEA tried to minimize the interrupt of business in case of non-compliance by negotiation and giving chance for suppliers to fix their mistakes. Since the interviews were failed it was difficult to clarify the thinking behind these evaluations.

Table 18: Manpower for wood tracing

	Forestry coordinators	Other people
Carrefour	No	N/A
B&Q/Kingfisher	No	Buyers in Commercial, QA Department and Social Responsibility.
IKEA 1	Yes	N/A
IKEA 2	Yes	N/A
IKEA 3	Yes	N/A

Table 18. shows that among three EU-based companies only IKEA has forestry coordinators joining in process of key policies implementation. According to informants of Carrefour and B&Q/Kingfisher don’t have any forestry coordinators. B&Q/Kingfisher’s informant gave the name of units dealing with sustainability policies regarding forestry while Carrefour’s informant did not.

III.3.4. Conclusion for companies' implementation of key policies regarding forestry

Results from sustainability report analysis allow to make the conclusion that excepts US-based companies, other EU-based companies had include the achievements of implementing sustainability policies regarding forestry (see hypothesis H2) in their annual sustainability reports. The information was presented in different levels of detail but it more or less revealed the fact that EU-based companies have set the policies for activities connected to forestry, traced the fulfillments towards these policies and reported back to stakeholders. IKEA had a better performance over the years (2000-2006) when providing regularly and in detail the implementation of key policies in forestry as start-up requirements to wood suppliers, compulsory documents for clarifying wood sources and procedure of auditing. The implementation of these key policies was granted by expertise of its 15 forestry coordinators working over the world and the presence of Forest Tracing System. B&Q/Kingfisher followed IKEA in presenting the implementation of key policies in forestry. Aspects that B&Q/Kingfisher frequently mentioned in reports were Code of conduct or ethics for its co-worker and suppliers, the requirements to wood suppliers and internal guidance for its wood suppliers to fulfill the requirements. Despite providing good information about its audit procedures Carrefour was left behind due to the lack of information about internal guidance for wood suppliers, forestry coordinators and poor information about Code of conduct, forest tracing, and requirements to wood suppliers etc.

Since Home Depot and Wal-Mart did not have sustainability reports, the web impression analysis result showed that they tried to put information related to their activities regarding forestry on websites. But the information is still rather poor and hardly to compensate for the lacking of sustainability reports. Web impression analysis' result is not enough to conclude the implementation of key policies regarding forestry in Home Depot and Wal-Mart.

According to analysis from informants' replies, all EU-based companies have concrete requirements for their wood suppliers. In the last ten years, the requirements for frequency of audits and level of audits for suppliers have increased intensively while for legal documents and information campaigns they have increased moderately. All three companies used the tools as legal documents, internal and external audits to force their wood suppliers follow the requirements of

companies. Three EU-based companies have clear definition for non-compliance cases in wood trading. Informants in Carrefour and B&Q/Kingfisher thought that stopping import is very effective solution for non-compliance cases while majority of IKEA’s performance did not mention it. The information in IKEA’s sustainability reports said that in non-compliance cases IKEA tried to help its suppliers first before stopping import from them. Informants from three companies agreed that stopping contract and negotiation are also effective solutions. Asking for penalty for non-compliance cases was not rated highly by all informants.

III.4. The responsibility for using certified raw materials and effect of certification in marketing

III.4.1. Sustainability report analysis for using certified raw materials and forest certification

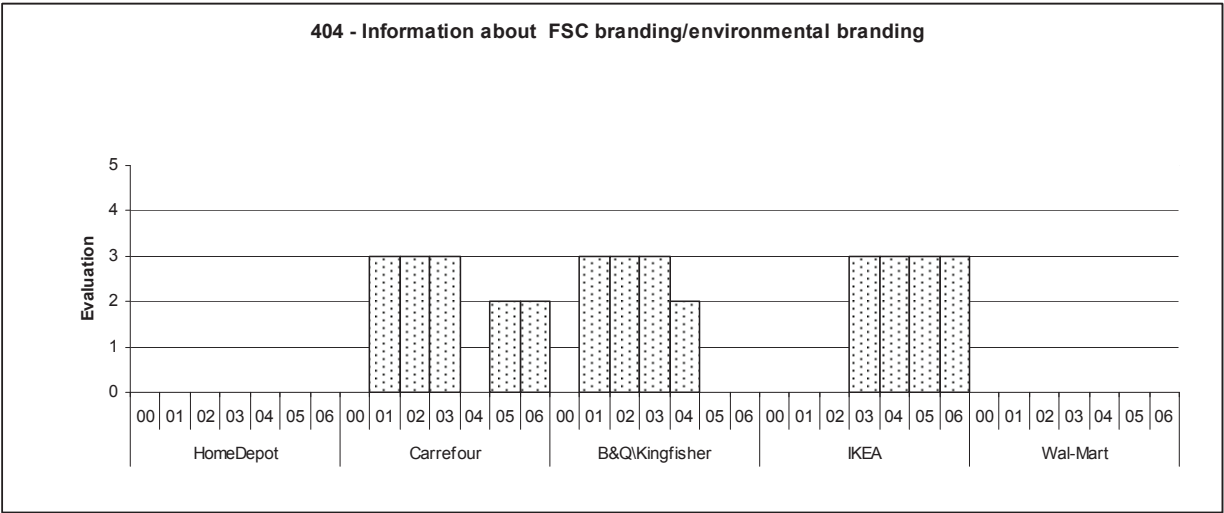


Figure 25. Information about companies’ FSC branding /environmental branding (2000-2006)

According to *Figure 25*, in their sustainability reports EU-based companies presented enough information about FSC to understand. While IKEA kept on maintaining this information at “enough to understand” (3 points), the trend for this information in Carrefour and B&Q\Kingfisher went down. Carrefour got 3 points in 2001, 2002, 2003 but in 2004 it provided no information and got only 2 points in 2005, 2006. B&Q\Kingfisher reduced this information from “enough to understand” (2001, 2002, 2003) to “general” (2 points) and it provided nothing in 2006. The

information about FSC branding in above companies for their products was presented not higher than “enough to understand”.

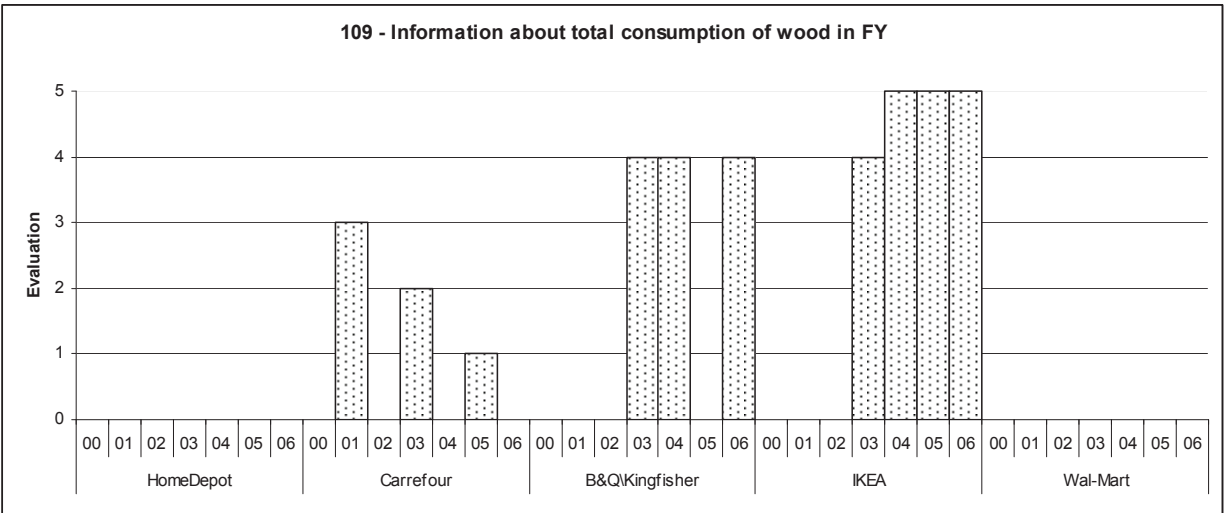


Figure 26. Information about companies’ total consumption of wood (2000-2006)

Figure 26. shows the evaluation for information about total wood consumption of selected companies over the years 2000 – 2006. IKEA gave information in details (4 points) and update (5 points) in all releases of reports. B&Q\Kingfisher provided information in detail but not consecutively (in 2003, 2004 and 2006). Carrefour did not mention this information consecutively over years and trend of detail went down from 3 points (2001) to 1 point (2005). The information about wood consumption was considered important because based on which the assumption of companies’ influence on global forestry could be made. This information was not usually presented or mentioned by companies.

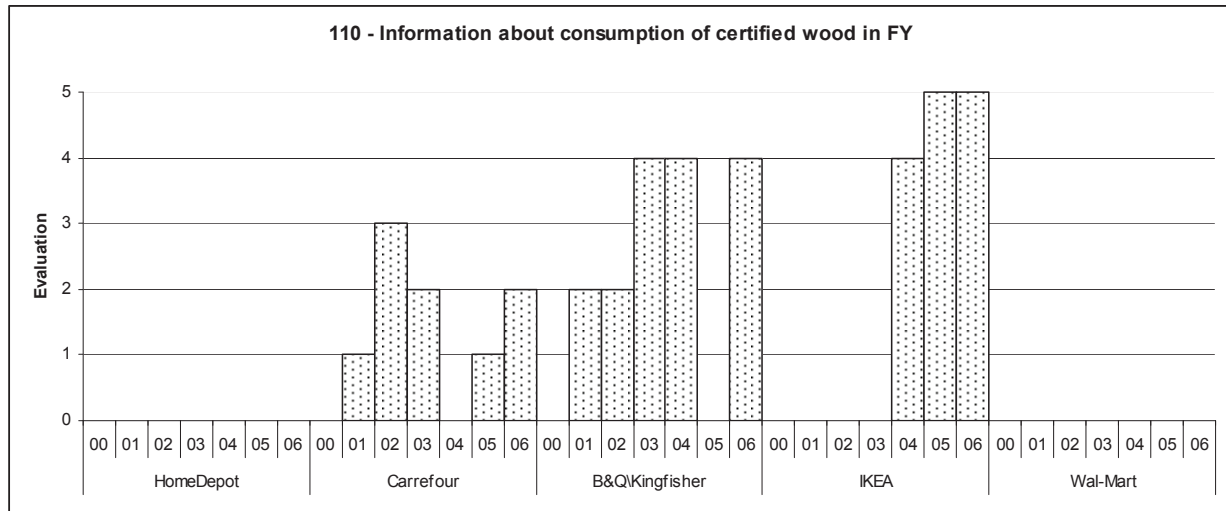


Figure 27. Information about companies' consumption of certified wood (2000-2006)

Figure 27. shows how selected companies presented information related to consumption of certified wood in their sustainability reports. In general, companies provided this information fairly consecutively. Carrefour did not give any information in 2004. For other years information varied from “enough to understand” (3 points) (2002) to “in general” (2003 and 2006) and “not clear” (2001 and 2005). B&Q\Kingfisher maintained it's provided information on “in general” in 2001 and 2002 then shifted up to “in details” in 2003, 2004 and 2006. IKEA did not present anything related to consumption of certified wood in first report then got 4 points for this information in 2004 and 5 points for 2005 and 2006. It is easily to recognize that Carrefour and B&Q\Kingfisher had mentioned earlier information about consumption of certified wood but B&Q\Kingfisher and IKEA obtained better performance when maintaining their details about information.

III.4.2. Web impression analysis for using certified raw materials and forest certification

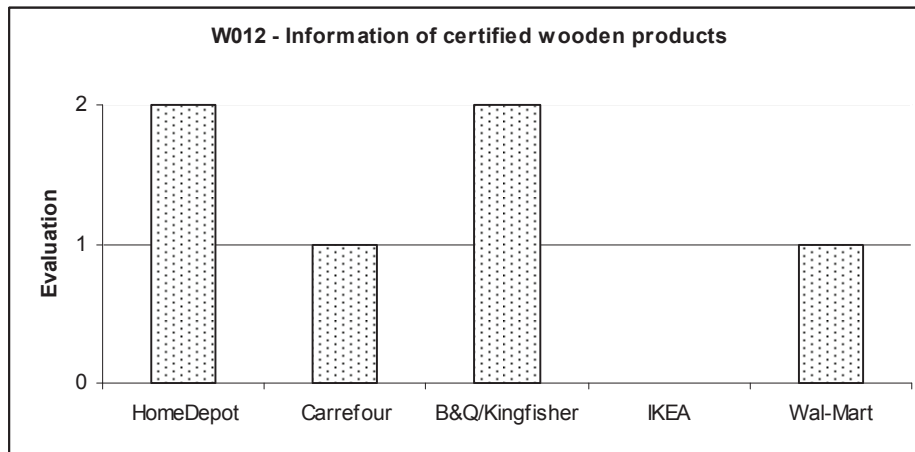


Figure 28. Information about certified wooded product on companies' websites

The information of certified wooded products was presented on websites in different ways. *Figure 28.* shows that Home Depot and B&Q\Kingfisher provided details information related to certified wooden product on their website, Carrefour and Wal-Mart gave limited information about this subject, only IKEA did not mention this information on their website. So not like other criteria for which IKEA gave good information, in this case, the performance of IKEA is worst than other companies.

III.4.3. Informants' answer analysis for using legal raw materials and forest certification

There were some questions in Questionnaire form 1 related to using certified materials and forest certification but not so many questions were answered by informants.

Table 19: Companies' definition of illegal timber

	Definition of illegal timber
Carrefour	N/A
B&Q/Kingfisher	Illegal timber is the harvest, transportation, purchase or sale of timber in violation of national laws.
IKEA1	Output from sources not according to national forestry legislation and without logging permits.
IKEA2	Based on country specific definitions
IKEA3	<ul style="list-style-type: none"> • unknown sources • Wood produced in compliance with national and regional forest legislation; • Wood originate from protected areas; • Wood originate from intact natural forests or high conservation value forest; • Wood originate from plantations established after 1994 by replacing intact natural forests

Only B&Q/Kingfisher and IKEA gave their own definitions of illegal wood. The definitions in *Table 19*. Shows that B&Q and IKEA more or less relied on national laws to recognize the timber is illegal or not. Carrefour did not provide information for this question.

Table 20: Procurement of companies' consumed wood in 2006

	From internal suppliers	From external suppliers
Carrefour	0%	100%
B&Q/Kingfisher	0%	100%
IKEA	10%	90%

According to *Table 20*. among three EU-based companies, only IKEA imported 10% of wood from their internal supplier "Swedwood". This is different from the remaining two companies and also not common when big retailer has its own internal wood supplier. Carrefour and B&Q/Kingfisher are fully dependent with supply of wood from external suppliers.

Table 21: Origin of roundwood used by companies in recent years (2000 -2006)

		Asia	Africa	EU	N.America	S.Ameria
Carrefour	00					
	01					
	02					
	03	Y				
	04	Y				
	05	Y				
	06					Y
B&Q/Kingfisher	00					
	01					
	02					
	03					
	04			Y		
	05			Y		
	06			Y		
IKEA	00	Y(3)		Y(1)		
	01	Y(3)		Y(1)		
	02	Y(3)		Y(1)	Y(3)	
	03	Y(2) Y(3)		Y(1)Y(2)	Y(3)	
	04	Y(2) Y(3)		Y(1)Y(2)	Y(3)	
	05	Y(2) Y(3)		Y(1)Y(2)Y(3)	Y(3)	
	06	Y(2) Y(3)		Y(1)Y(2)Y(3)	Y(3)	

(Y(1): The first informant answered Yes)

Table 21. summarizes the responds from informants to question about origin of wood in recent years (2000 - 2006). According to Carrefour’s informant, this companies imported wood from Asian countries (Vietnam, Malaysia and Indonesia) in 2003-2005 and South America (Bolivia). This information did not mention about procurement of FSC pine from Poland in 2003 (Carrefour Sustainability report 2003). B&Q/Kingfisher’s informant said that company imported wood mainly from EU in 2004-2006. This informant did not mention about B&Q in China because she works in B&Q UK. Actually the question was also addressed to B&Q representative in China, but there were no answers. Answers from IKEA’s informants are diverse. The first informant believe that IKEA all the time imported wood from EU while the second informed that from 2003 -2006 IKEA imported from Asia as well as EU. The third one said that IKEA imported from Asia in 2000 – 2006 then it started to import from North America in 2002. It is difficult to judge who was correct but more answers focused on “Asia” and “EU”. The result of *Table 21.* shows that informants could not give detail answer for the origin of wood in 2000 -2006 and the answers were

diverse even from one company. How the companies assured the clear origin of wood is still the question.

Home Depot's informant did not answer but on its website companies informed that 94% of its purchased wood came from North America and around 1% came from Indonesia and Brazilian Amazon Basin. Home Depot consumes less than one percent of the world's wood purchases, which leads company to requirement of acting as a responsible purchaser of wood products. It also by partnering with others to overcome some of the challenges it faces in tracing wood. (Home Depot website, 2007). Wal-Mart did not reveal any information about its origin of wood.

III.4.4. Conclusion for companies' responsibility for using certified raw materials and forest certification

Information about companies' responsibility for using certified raw materials and forest certification was presented rather well in their sustainability reports. All three EU-based companies provided information enough to understand their achievements towards FSC and environmental branding. Home Depot did not have sustainability reports to present its big program with EcoOption which is now being applied for around 90% of Home Depot's products (includes wood and non-wood). This information was found in other sources of information. Three EU-based companies provided information about consumption of wood and certified wood through the years but the presence of information was not even. While IKEA and B&Q/Kingfisher sometimes gave information about their wood consumption in detail Carrefour did not mentioned about it regularly.

Analysis of web impression showed that two US-based companies put information regarding FSC branding in their products on companies' websites. This could be considered the compensation for the lack of sustainability reports. Anyway information on websites is limited and not regularly updated. Despite having annual sustainability reports, EU-based companies as Carrefour and B&Q/Kingfisher still put information regarding certified raw material and forest certification on the websites.

According to informants from EU-based companies, their classification of illegal timber more or less is based on the national legislations of countries where they procured timber. But the national

legislations don't always require having certification for timber. In order to avoid this issue while securing the supply chain, All EU companies have their own policies for timber trading that express the requirements for certified raw materials and forest certification. IKEA presented Staircase model with 4 levels of requirement for origin of wood. Level 1 is minimum requirement to start business with IKEA then wood suppliers should go through or levels. When reaching level 4, IKEA accepts only FSC certified wood. B&Q had its own Timber Policies and Buying Standards which based upon the Kingfisher's Timber Policy. In this policy, 3 tiers were designed to express the requirement for certification. On tier 1 company accepted only FSC-certified wood, tier 2 is buffer step towards tier 1's requirement that certification should be equivalent to FSC and therefore meet the Kingfisher's criteria. Tier 3 requires third party certification schemes that meet some but not all Kingfisher's criteria. Result of analyzing informants' answer also showed that excepting for IKEA who has 10% of wood consumption from internal supplier (Swedwood) two other EU companies had to import 100% from external wood suppliers. It was difficult to conclude that these companies assured the origin of all their imported wood and no companies could confirm that 100% their consumed wood is clean. Thomas Bergmark, Head of Social and Environmental Affairs, IKEA Group was questioned that whether IKEA could guarantee that it doesn't sell products made from illegally logged wood: *"No, unfortunately IKEA can never guarantee that IKEA products are not made from illegally logged wood. However, we work actively to secure that the wood comes from legally logged and responsibly managed forests."* (IKEA Corporate PR, 2007:2). This is not astonished thing when these companies when their suppliers buy wood from countries where the illegal logging is so common.

III.5. Cooperation with NGOs in issues regarding forestry

III.5.1. Sustainability report analysis for cooperation with NGOs

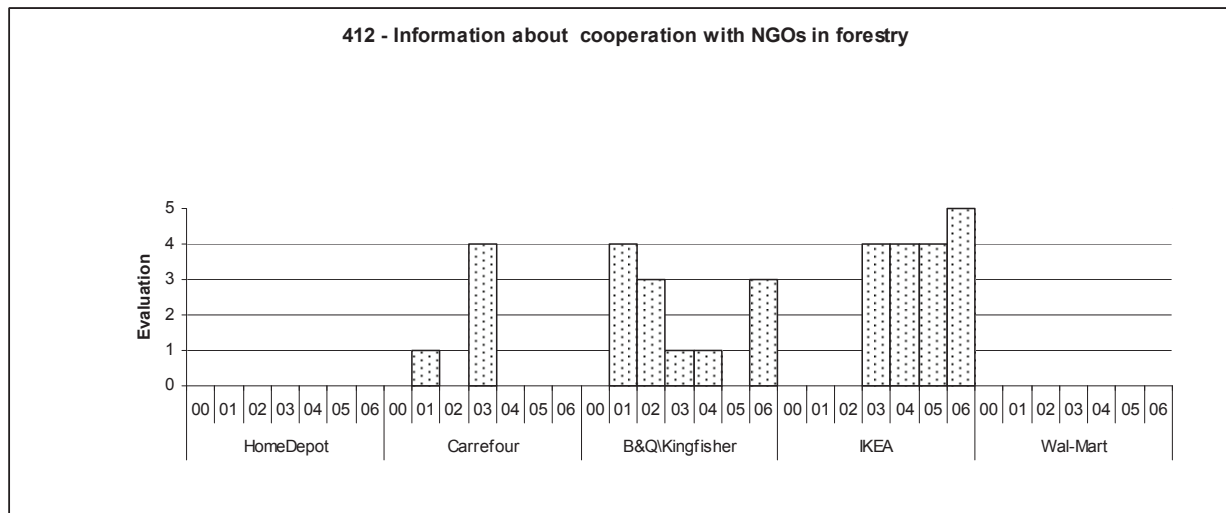


Figure 29. Information about companies' cooperation with NGOs in forestry (2000-2006)

Criterion 412 was aimed to check whether selected companies presented information about their cooperation with NGOs in their sustainability reports. Carrefour and B&Q/Kingfisher provided poor and desultory information. Information from Carrefour was not clear in 2001 and shifted to detail in 2003 when mentioning the field study with CIFOR-CIRAD for better understanding the ways in which teak is supplied in Indonesia and improving the traceability (Carrefour sustainability report 2003). B&Q/Kingfisher gave detail information in 2001 that B&Q helped create now internationally recognized Forest Stewardship Council (FSC) and confirmed its membership of WWF Buyer Group (Kingfisher's plan for corporate social responsibility October 2001). IKEA regularly provided detail information or even update it (in 2006). IKEA was proud of presenting all cooperation with its faithful partner WWF in forest-related sector over the world. It is possible to state conclusion that EU-based companies more or less cooperated with NGOs in issues related to forestry. The same conclusion could not be made for US-based companies because they did not have sustainability reports.

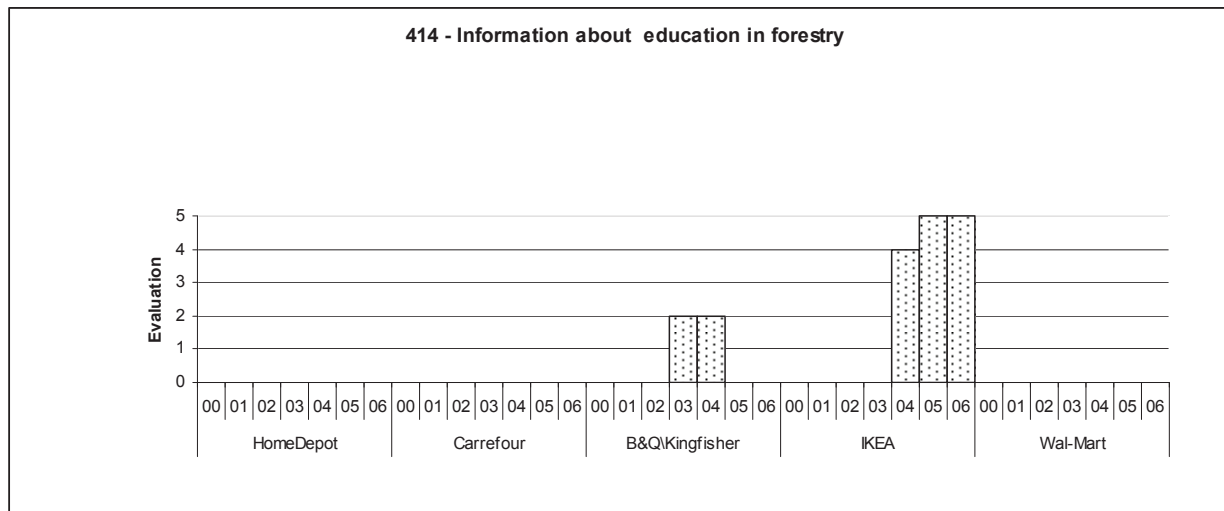


Figure 30. Information about education in forestry (2000-2006)

Education in forestry is getting more and more important. This is one of aspects to evaluate the awareness of companies to propagating knowledge relates sustainable forestry. *Figure 30.*

indicates that only B&Q\Kingfisher and IKEA provided information in their report. B&Q\Kingfisher mentioned in general about “Research project comparing global timber certification schemes commissioned” in 2003. IKEA from 2004 to 2006 provided details (2004) and update (2005 and 2006) information about its cooperation with Swedish University of Agriculture Sciences (SLU) in Master program “Sustainable forestry around the southern Baltic Sea” which aims to study and to analyze the current situation and development of forestry in the region. In general all selected companies (excludes IKEA) had bad performance for this criterion.

III.5.2. Web impression analysis for cooperation with NGOs

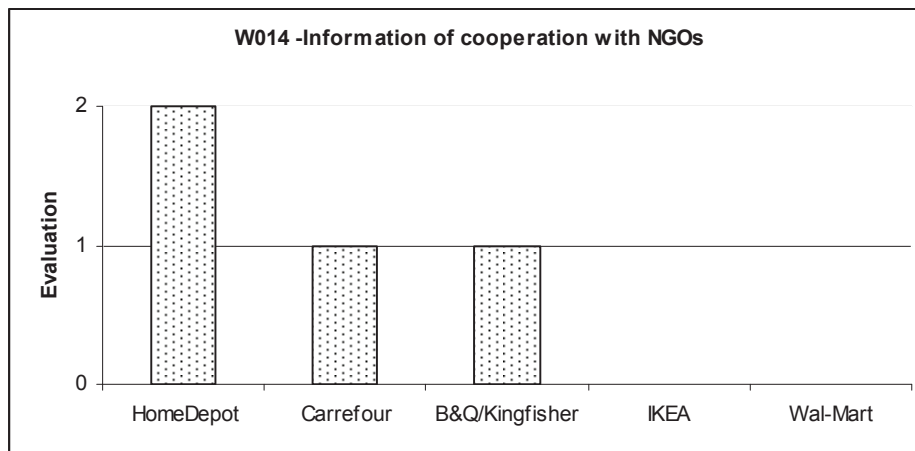


Figure 31. Information about companies' cooperation with NGOs

Figure 31. shows that while browsing the websites of selected companies, the information was described in details in FAQ (Frequently Asked Questions) on Home Depot' website. Carrefour and B&Q\Kingfisher provided limited information. IKEA and Wal-Mart did not present this information on their websites.

III.5.3. Conclusion for cooperation among NGOs and companies in issues regarding forestry

The forest industry has globalized which resulted the creation of a large network of relationships, influence, and communication for international timber trade and marketing. This network is being successfully accessed and influenced by environmental NGOs working for sustainable forest management (Hansen, E. and Juslin, H, 1999).

The cooperation among NGOs and companies in issues regarding forestry is very important in every steps of business towards sustainable forestry. Result from analyses showed that excepting for IKEA, other two EU-based companies did not present so much information about their cooperation with NGOs in forestry. The strong cooperation between IKEA and WWF was confirmed by Duncan Pollard, Director Forests for Life Program WWF: *“Our work with IKEA, especially in Russia, has been fundamental in raising awareness of the illegal logging problem and*

its complexities. The work has been pivotal in advancing understanding of the problem, particularly the underlying root causes, and in providing solutions not only for IKEA but also for its suppliers and others in the industry. While these activities go in some way towards helping to combat the problem, illegal logging can only be solved if there is political will and companies like IKEA continue to work proactively with their suppliers.” (IKEA Corporate PR, 2007:1).

The information about cooperation among companies and NGOs is not only presented in official documents and on companies’ websites but also easily found in Internet with search engines as Google and suitable keywords.

III.6. Selected multinationals and information regarding illegal logging

All companies claimed that they used only certified or known origin wood. Actually it was difficult to find out any information related to illegal wood or illegal logging from the primary source of data as companies’ reports, statements or websites. In this case the secondary data (newspapers, forums, websites) provided some interesting information. The Google search engine with key words “company name + illegal logging” were used for searching and making statistic.

Table 22: Result of Google search

Company name	Total results
HomeDepot	16000
Carrefour	4050
B&Q/Kingfisher	1500
IKEA	24900
Wal-Mart	16700

The *Table 22.* presents the results of Google search for combination of keywords “ company name + illegal logging”. A lot of related and potential information was found for IKEA, Wal-Mart and Home Depot. Although there were thousands of results but the later results have lower credibility. 30 first results of each company were taken for analysis because the search engine always sorted the most matched results first.

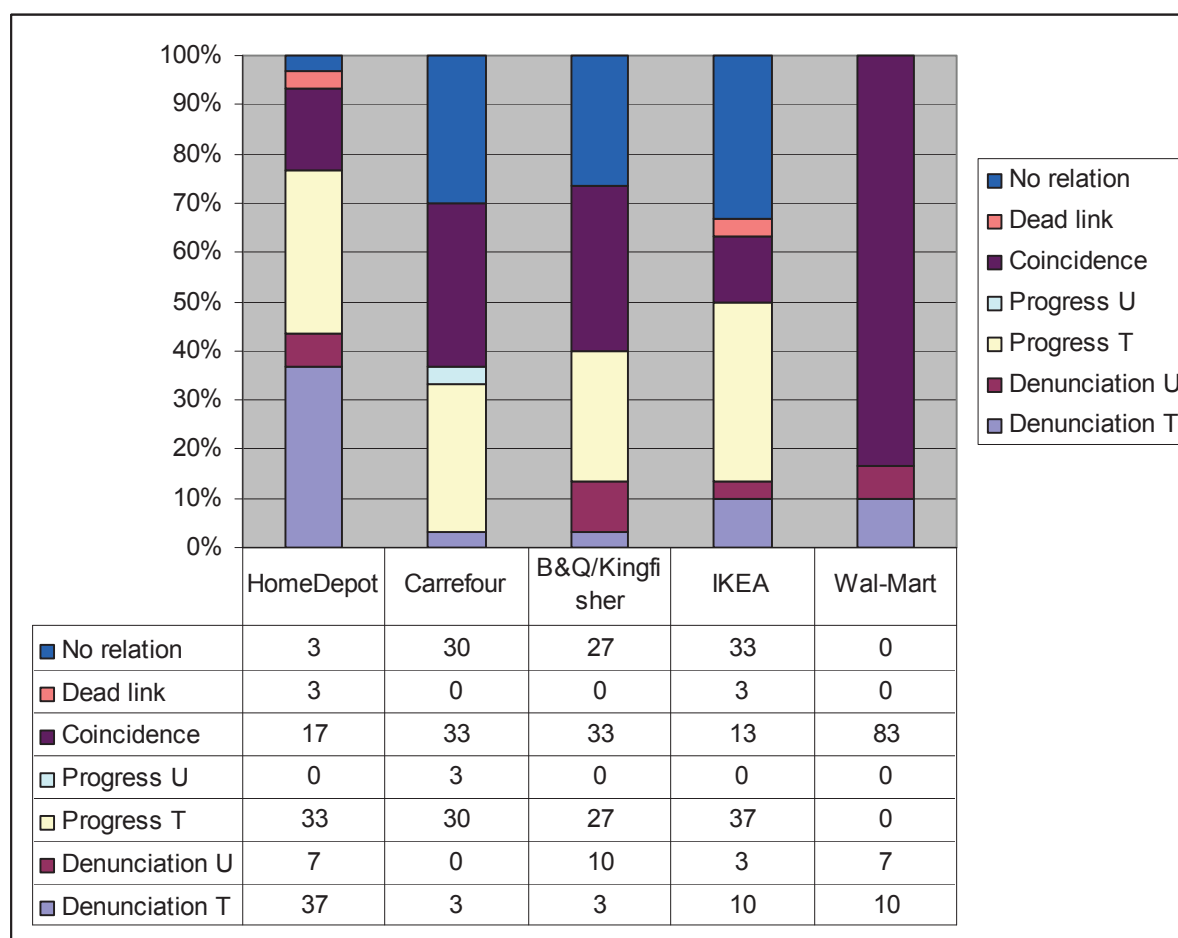


Figure 32. The distribution in percentage of different sources of information regarding illegal logging from 30 first results of Google search

In *Figure 32*. “Denunciation” means the cases in which companies were proved to be involved in illegal logging. “Progress” means the cases in which showed companies’ motivation in anti illegal logging. “U” means unreliable sites (e.g. internet forum, blogs or personal websites etc.) and “T” means trusted sites (e.g. official, independent, registered or well recognized websites or source of information). In general, the information about companies’ involvement in illegal logging can be found from some trusted websites (different from companies’ websites). 11/30 sites (37%) provided information about Home Depot’s involvement (selling illegal wood from Papua New Guinea, Corruption Stains Timber Trade: illegal timber from China, The illegal logging crisis in Honduras).

In case of IKEA (Corruption Stains Timber Trade: illegal timber from China, IKEA exposed over “child labor” and green issues, illegal timber in Russia) and Wal-Mart (Illegal wood from Russia, illegal wood from China) 3 sites (10%) for each were found. The issue relates to illegal logging was carefully investigated by non-profit groups, experts and NGOs. Information about involvement of Carrefour (Carrefour somehow related to illegal logging in Indonesia) and B&Q (Greenpeace criticized that B&Q sells endangered wood in China) was found in 1 site per each. From unreliable sites, the involvement of all companies (except for Carrefour) was found. The information from these sites reflected the information about involvement from trusted sites together with deep analysis and commentary. The contribution to anti illegal logging were found in trusted sites with rather high frequency: Home Depot - 33% (using bar code to stop illegal logging in Indonesia, partner of the Global Alliance to promote forest certification and combat illegal logging), Carrefour - 30% (member of GFTN, joining alliance to combat with illegal logging, stopping teak products from Indonesia), B&Q - 27% (stopping using, selling illegal timber in China, partner of EU voluntary plan to fight illegal logging, terminating wood from high-risk countries such as Indonesia) and IKEA – 37 % (long-term partner of WWF in China, Russia in combating illegal logging). There was no trusted site within 30 first results showed the progress of Wal-Mart in fighting illegal logging. Hardly found any unreliable sites within 30 results provided the positive information about how these multinationals combat the illegal logging except 1 site for Carrefour.

A lot of “Coincidence” information was found. These sites only repeat the information of “Denunciation” and “Progress”. The highest “Coincidence” belongs to Wal-Mart’s case and all of these sites were about the involvement of this company in illegal logging. It was interesting that in unreliable sources of information, people loved discussing on the issue of Wal-Mart and hardly find any positive information for Wal-Mart there. The “dead link” was found in case of Home Depot and IKEA. The high frequency of “No relation” information was found for Carrefour -30%, B&Q – 27% and IKEA-33% due to the nature of search engine that it could search the keywords separately instead of their combination if no more satisfied results were found. Based on the result of *Figure 32*, it can be concluded that all selected multinationals more or less relate to illegal logging and the information cannot be found in companies’ websites but from other sources.

Analysis also showed that two US-based companies were criticized more seriously than their three competitors in EU for the involvement in illegal logging.

III.7. Result summary and verification of hypotheses

Three hypotheses were tested in turn based on the result of this study: **Hypothesis H1** “*All selected companies have clear sustainability policies and sustainability reports regarding forestry as an obligatory part in their activities*”

According to the result of data analysis from all sources, it is clear that three EU-based companies have sustainability policies regarding forestry as requirements to wood suppliers, policies for buying, purchasing, standards and forest certification. IKEA has IWAY as requirements for its suppliers for starting and maintaining long-term business with IKEA. The IKEA’s Staircase model can be considered as guidance for its wood suppliers to fulfill the demand for forest certification, and FTS is the tool to trace the origin of wood which come to IKEA’s business. Carrefour described its requirements to wood suppliers in Supplier Charter and build up various Quality Lines as a tool to secure business from illegal wood products. B&Q/Kingfisher has issued its “B&Q Timber Policy and Buying Standards” as an orientation for its wood suppliers. The QUEST is the obligatory document for more than 100 wood suppliers of B&Q to ensure the traceability of wood products.

The information from web impression was poor for several analyses but it was enough to prove that two US-based companies have also mentioned their sustainability policies regarding forestry. Home Depot issued its policy endorsing wood suppliers in 1999. Up to now, the Supplier program is still running to take the control over its suppliers. Home Depot is one of leading companies who introduce the EcoOption label for wooden as well as non-wooden products on the shelves. Wal-Mart mentioned it Sustainable Forest and Paper as a core policy regarding forestry. The company has published the guidance “Wood Furniture Supplier Reference Program” to increase the understanding of suppliers in company’s requirements in forestry-related issues.

Hypothesis H2 “*All selected companies have implemented key policies in their supply chains such as start-up requirements to wood suppliers, compulsory documents for clarifying wood sources and procedure of auditing. These can be considered efforts to prevent illegal timber*”

This hypothesis was difficult to test for two US-based companies. While its test requires a lot of data from sustainability reports and companies informants, Home Depot and Wal-Mart did not provide any sustainability reports and did not respond the survey. Although there were some data obtained from web impression, but it is hard to make conclusion based on poor information. The implementation of key policies regarding forestry in two US-based companies' still remains a question to this study.

In case of three EU-based companies, the information was enough to conclude that these companies have implemented key policies in their supply chains. Indeed, IKEA posed its IWAY to wood suppliers as requirements. The content of Staircase model guides step by step IKEA's wood supplier to fulfill the requirement for forest certification. In each level (from 1 to 4) the demand for clear wood origin is increasing; particularly at the highest level (level 4) IKEA requires suppliers provide it with only FSC-certified wood. All wood suppliers should show their fulfillment in each step by reporting or auditing. There are three types of internal audits for wood sourcing in IKEA: FTS (Supplier reports wood sourcing), IWAY Audits (Verify supplier's procurement routines) and WSCA (Wood supply chain audit – Random audit from factory to forest). These audits aim to assure the origin of wood to avoid illegal wood supplied to IKEA's business.

Carrefour applies a Sustainable Forest Management charter to ensure that the wood or timber supplied to Carrefour meets the requirement of sustainable management of forests and does not conflict with conservation purposes. Carrefour also has a strict requirement to its suppliers of wood products upon which the wood suppliers should organize their operations in order to put the traceability of wood in the highest priority. The audit of Carrefour starts with a visit to the sites by outside observers, followed by the unannounced inspections conducted by the supplier authorized by Carrefour, or any person appointed under the internal supervision mechanism. The implementation of external supervision may be carried out by the third-party organizations if needed.

B&Q issued its own Timber Buying Standards and also followed Kingfisher's Timber Buying Standards (3 tiers). B&Q used QUEST-8 (QUEST for suppliers) as requirements for suppliers. Kingfisher used the tool named "Step to Responsible Growth to check the achievement of

sustainability policies”. This tool has 6 key focused areas covering 12 issues. Timber is the third issue which belongs to the first key focus area “Product stewardship”. All 12 issues are evaluated and reported annually. However, the mechanism of auditing in B&Q/Kingfisher was not clear in all sources of information. It was only mentioned that B&Q/Kingfisher used both internal and external audits.

Hypothesis H3 *“All selected companies have used certified raw material and planned to use majority of certified wood products in the business. The forest certification FSC was preferred by these companies because of its credibility”*

It was impossible to check with two US-based companies because the information is so poor. It was difficult to find out how much of wood (in cubic meters or %) these two companies consume annually, and from that total consumption how large the share of certified wood is. The data obtained from web impression and secondary sources only showed that although these US-based companies also required wood certified by FSC as a dominant certification scheme, the companies still accepted wood with a known origin or compatible certification schemes which provided by well-known partners such as TFT in order to compensate the inadequate amount of FSC-certified wood.

In contrast, Hypothesis H3 was validated in case of IKEA. According to its sustainability reports and other data sources, IKEA consumes around 6,4 million cubic meters of round wood in the last year. Of this total, 91% meet requirements of Level 2 in Staircase model,¹ and 7% meet Level 4 (FSC-certified). The ambition of IKEA is to increase FSC-certified wood in its business up to 30% in 2009.

IKEA accepts only FSC-certified wood in Level 4 due to the credibility and reputation of this certification scheme. Carrefour did not provide with information about its total consumption of wood but revealed in the 2003 sustainability report that 11% Roble FSC was from Bolivia and 22% Pine FSC was from Poland. Carrefour's teak products were replaced by Amburana, certified FSC, from Bolivia due to the expensive traceability of teak in Indonesia. Carrefour believes that

¹ i.e. Compliance with forest legislation, not from protected areas or felled in accordance with management prescriptions, not from plantations established after Nov. 1994 by replacing intact natural forests.

the FSC label will be easier to communicate to consumers and in the future Carrefour wood sourcing will orientate towards FSC certified species. In case of B&Q/Kingfisher, there was no information on total wood consumption of B&Q but Kingfisher presented that it consumed 6,67 million cubic meters of roundwood (this could be accounted for B&Q and Castorama). B&Q UK reported that 75% of timber product lines are certified with FSC and other 11% are certified with FFCS (Finish Forest Certification Scheme). B&Q China has around 10% of all laminate flooring certified by FSC. These evidences prove that FSC certification is also preferred for B&Q/Kingfisher's wood products.

IV. Discussion

IV.1. Discussion

Qualitative analysis is a suitable method for such kind of studies with limited informants. As this study touched a very sensitive question, the informants should be knowledgeable about the area of expertise. According to Carvalho (1997:7) "with persons, selected on the basis of their special knowledge and experience in area of interest, number of informant usually varies from 10 to 25". For this study, only five selected companies and two NGOs were selected. Although at least 3 informants per company/NGO were selected for the survey but the study faced the fact that only 6 informants (1 from Carrefour, 1 from B&Q/Kingfisher, 3 from IKEA and 1 from WWF) gave answer. Hence, this did not meet the above assumption about the quantity of informants to secure the credibility of a qualitative analysis.

Another problem is that these five companies were not randomly selected. They were chosen for this study based on following conditions: they are multinationals, they have long tradition in business in forest selected sector and they are major global competitors in the retailer market for home improvement and wood furniture (see above). Because the selected companies are competitors and the study questions are sensitive, it was difficult to collect enough samples. The limitation of samples compared to Carvalho's assumption could influence on the result of qualitative analysis. The data collected from informants were only analyzed and concluded in specific conditions. It was impossible to predict the trend towards sustainable forestry in these companies.

Several methods to collect data for this study were employed. All methods aimed to test the proposed hypotheses against the set of criteria (which was designed in Evaluation Grid) from different sources of information. The questionnaire forms took two months (September and October 2007) to formulate and test. The questionnaires were commended by the companies such that it was long with many sensitive questions which were difficult to answer. However, the questionnaires were intentionally long in order to extract as much information as possible from informants.

The geographical distance and the lack of previous experience in surveying could be problems. Direct interviews were therefore replaced by email and phone-based interviews as major means of communication. However, emails sometimes took a long time to receive reply and not always made thing work (in cases of Home Depot, Wal-Mart and Greenpeace). The phone calls did not work well because informants were busy and they travelled a lot at the end of a year. The phone calls to Home Depot and Wal-Mart took a long queue at answering machines. Collecting data from sustainability reports and websites was carried out easily since reports were available for downloading on companies' websites.

The quality of data is the next issue to be discussed. The data collected from questionnaire forms were very limited. Only three companies and one NGO answered the questionnaire forms. Even if they answered, they could not answer all questions inside. In some cases, misunderstanding the content of questions was observed. It was difficult to avoid the subjective judgments during extracting data from sustainability reports and companies' websites. The selected companies provided information in sustainability reports and on their websites in different ways. GRI, for instance, can be considered as guidance for non-financial reports but not so many companies followed it in their reporting.

This study used secondary data which employed Internet and other media as main sources of information. The origin of these data has been taken into account during collecting to avoid data bias. In fact, secondary data are useful in terms of amending some sensitive information (e.g.

information relates illegal timber used in these companies) which is difficult to obtain from official sources.

The analyses were carried out against data collected from different sources: questionnaire, sustainability reports and web impression. The analyses could be poor if they relied mainly on one source of information and could be failed if data were not available or difficult to collect. That was a reason why various approaches to data collection were needed. The data from questionnaire forms were very limited and they were comparatively analyzed only among Carrefour, B&Q/Kingfisher and IKEA. The limited data from sustainability reports also led to comparatively analysis among 3 companies because Home Depot and Wal-Mart did not have annual reports for the period of 2000 -2006. Although data from web impression covered five selected companies, it was risky to analyze the companies' performance using only this source of data. As the analyses aimed to produce the results that could clarify the three hypotheses, it was difficult to make conclusions because the comparative analyses were undertaken mainly among the three EU-based companies. A poor cooperation from the two US-based companies can be seen as a hindrance to this study.

The study results showed that the selected EU-based have a better communication and performance in sustainability issues regarding forestry than the two selected US-based companies do. The hypotheses of this study could be tested only for three EU-based companies. Based on the analysis of web impression' data, an assumption could be made for the other two US-based companies; that is despite the existing sustainability policies regarding forestry, the two US-based companies did not show a strong concern to the problem of sustainable forestry through available media, like their competitors in EU, due to their limited reporting and communication. The question of how these two US-based companies have implemented key policies regarding forestry in their business is still not clear.

The outcome of this study was supposed to support consumers in accessing and referring to the information on the sustainability regarding forestry of the five big retailers. The role of NGOs in this study was highly expected at the beginning because several previous studies have shown that environmental organizations rank highest in public confidence for information on the environment.

A recent study of “thought leaders” in the USA, France, Germany, UK and Australia by Edelman in 2000 concluded that “non-government organizations are more trusted than the media, the most respected corporations or governments.” It also indicates that “Non-Governmental Organizations (NGOs) such as Greenpeace and Amnesty International have become the new “super brands” in global governance. They have earned a far greater level of trust than some of the most well-respected global multinational companies such as Ford, Microsoft, G-7 governments and global media” (Strategy One. 2000).

Despite their reputation, NGOs contributed very little to this study. WWF International, WWF Russia, WWF China, WWF US were ever contacted but only WWF Russia answered the questionnaire with full information on IKEA who is its faithful partner in Russia. A number of emails were also addressed to Greenpeace International, Greenpeace Russia, Greenpeace China, and Greenpeace EU. Although some of them promised to answer, none of them gave any reply until the survey deadline on the 15th of December, 2007. An emerging question is whether these two NGOs were too busy due to summing up Year 2007, or the question of study was so specific and sensitive that WWF and Greenpeace could not answer?

When comparing this study with other previous researches which had been carried out in the field of sustainability, some similarities were discovered. Ascolese (2003) impressed that “Environmental and Social Performance a Priority for Europeans; an Opportunity for Americans”. In this research, 85 percent of the surveyed executives in both Europe and the US said that their company reports on its economic and financial performance, but more companies in Europe also report on other aspects of sustainability, particularly environmental and social performance. The study of Laura O. Hartman, Robert S. Rubin and K. Kathy Dhanda (2007) proposed that the US-based companies would tend to communicate about and justify CSR using economic or bottom-line terms and arguments, whereas the European-based companies would focus more heavily on language or theories of citizenship, corporate accountability, or moral commitment. Those cases are quite similar to the generalization from the current study when two US-based companies only offered annual financial reports and had poor performance with the study of sustainability in forestry; whereas three EU-based were quite open for such an area of study.

The method of web impression was also used by WWF in the report “Corporate Responsibility Reporting: The Pulp and Paper Sector in Europe” (WWF, 2004). The result showed that 63% of companies provide some forms of information on corporate environmental performance on the websites, but the quality and quantity of information varies considerably; 15% of companies do not provide any environmental information; and the web sites of the remaining 13% of companies were not found. In total, 28% of companies do not provide any environmental information at all. It was mentioned that the environment section on the websites does not necessarily provide information on corporate environmental performance. Although the above mentioned report was only on the Pulp and Paper Sector in Europe, it could be an explanation of why the collected information from web impression was poor.

Despite the above weakness, the study still gained some good points. Several approaches such as web impression analysis, communication friendliness analysis and Google search statistic analysis have been applied to get as many data as possible from different sources. At least three hypotheses could be tested with the EU-based companies and the two US-based companies sometimes. The study also has a number of interesting findings. Firstly, all informants who were chosen for the survey were not fully ready for such a sensitive topic. Secondly, while the companies avoided presenting disadvantaged information on them, it was easy to find an ebullient debate on their involvement in illegal logging. Thirdly, the study showed the difference between two groups of companies in dealing with sustainability regarding forestry: three EU-based companies performed better than their two US-based competitors. This picture was similar to what has been found in the previous researches (see above).

IV.2. Conclusion

The result of this study is limited and allows making conclusions only in specific cases relating to the five selected companies. Based on the analysis of communication in sustainability regarding forestry of the selected companies (IV.1.), it is concluded that the performance of the two selected US-based companies was worse than their EU-based competitors. It was believed that if the companies did not have sustainability reports, then they would present more information on websites to compensate. This is true because Home Depot and Wal-Mart put a lot of information regarding sustainability issues in general (in social, economic and environmental terms). However,

when focusing on the narrow aspects of sustainability like forestry, the picture was different. While Home Depot provides rather sufficient information regarding forestry on its website, Wal-Mart does not despite its absent sustainability reports. On the contrary, the EU-based companies such as Carrefour and B&Q/Kingfisher have a good performance with information regarding forestry although they submit sustainability reports annually.

A conclusion on the cooperation among the selected companies can be made such that all selected companies more or less have a relationship and cooperation with NGOs such as WWF, Greenpeace, TFT, etc. The favorite issues to cooperate are forest certification and illegal logging in forestry. Due to the lack of information from NGOs for this study, it is difficult to know how NGOs think about the implementation of sustainability policies regarding forestry in these five selected companies.

This study did not reach its full aim due to a failure in checking with the two US-based companies - Home Depot and Wal-Mart. Nevertheless, the result did not mean that it was impossible to approach sustainability policies regarding forestry in a scientific way. This study also addressed the question why its informants are still not ready for answering. Nevertheless, the study result confirms the difference between the EU-based and US-based multinational companies which have been mentioned in other previous researches.

Regarding the above mentioned research questions, some messages could be made for the selected companies. It is a big challenge for the two US-based companies to catch up their EU-based competitors in reporting sustainability regarding forestry. All selected companies avoided answering the specific and sensitive questions. This could be improved by loosening the Code of conduct to certain level and continuously updating staff with different specific areas of expertise. The policy and mechanism of providing and publishing information should be reconsidered to reveal negative information and the way the companies ambitiously overcome such situation as illegal timber. Marketing efforts and reputation should go better with the trust from consumers.

IV.3. Further research steps

As mentioned in Section II.1., this study attempts to investigate the real picture behind the business of the 5 big retailers in the forest-related sector. It therefore has faced unavoidable difficulties. A number of lessons can be made for the further researches.

Firstly, although the methodology of study is well developed, it still exposes weakness especially when there were not enough samples. It would be better if more companies would be chosen for surveying regardless they are competitors or not. The bigger number of informants will secure the viability of data collected. In this study, due to the limited budget there was no chance to visit informants to have face-to-face interviews. Experience of this study showed that email sending and phone calls did not work well and delayed data collection.

Secondly, manpower for the study needs to be taken into account. As the study has to go through many steps from data collection to analysis, a group of two people is recommended. If study requires evaluating the data from reports or other sources of information, the subjective judgments can be avoided with more people involved. In face-to-face interviews, more people will share the work load.

Thirdly, the temporal issue is also important. This study was carried out at the end of a year when co-workers of these companies were much busier than ever with summation, reporting and planning for the next year. The delay and failure of data collection in this study more or less relate to this situation. Some emails were not replied and telephone calls were out of reach because the informants travelled a lot at this moment.

Finally, this study touched only co-worker in companies and NGOs. It is suggested that the future researches also take wood suppliers as important informants. Wood suppliers are more or less dependent and they are expected to tell about companies' requirements, companies' policy and their fulfillment to companies' policy and requirements.

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ANNEX

1. Evaluation grid

R1. Institutional set-up for developing and implementing sustainability policies (such as responsible units, internal reporting, etc.)?

Evaluation points	Specific questions	Necessary information/data	Sources of information	Study methods
E1. Each company has responsible unit for developing and implementing sustainability policies	S1.1 Does company have such unit(s)?	Quantity, name, year, location	Responsible people, company website, report	Interview, report review
	S1.2 What are the functions of responsible units?	Name of function, integrated/separated function	Responsible people, company website	Interview, web review
	S1.3 What is the finance paid for activity of responsible unit?	Finance support from mother company, direct/indirect support	Responsible people, report	Interview, report review
	S1.4 What is the position of responsible unit in activities of whole company?	Importance, dependence/independence, outside/inside relation	Responsible people	Interview
	S1.5 What is the main media responsible unit uses to spread out information?	Type of media, quality, quantity, effectiveness	Responsible people, company website, report	Interview, web view, report view, observation
	S1.6 What is the main issue that responsible unit focus on during recent years?	Name, importance, quantity, time	Responsible people, company website, report	Interview, web review, report review
	S1.7 Is function of responsible units modified to cope with actual situation in different region?	Region, specification, regard local situation		
E2. Personnels working in responsible unit of company have appropriate background to deal with their work	S2.1 How many people working in environmental affair?	Number, position, location	Responsible people	Interview
	S2.2 What is profession in environmental issue of personnel?	Education, experience	Responsible people	Interview
	S2.3 Does company cooperate with other professional partners outside ?	Number, issue, profession	Responsible people	Interview
	S2.3 Do people in environmental affair influence on other parts or activities of company?	Contact, training, exchange	Responsible people, company website, report	Interview, web review, report review
	S2.4 How people working in environmental affair can improve their knowledge?	Requirement, training, field work	Responsible people	Interview
E3. The development and implementation of sustainability policies are	S2.5 How are people organized in working?	Individual, group, corporal network	Responsible people	Interview
	S3.1 Does company have sustainability policy?	When, who conduct, how conduct	Responsible people, company website, report	Interview, web review, report review
	S3.2 What is the main focus of this policy?	Issue, importance, year, awareness	Responsible people, company website, report	web review, report review
	S3.3 How are the sustainability reports conducted?	Author, material, frequency, time of year, check/review	Responsible people, company website, report	Interview, web review, report review
	S3.4 How does company pay attention to sustainability reports?	Money, number, format, language, update, design...	Responsible people, company website, report	Interview, web review, report review

	S3.5	How easily can people find sustainability report from company?	Storage, accessibility, comfort, response, web expression...	Company website, report	web review, report review
	S3.6	Is environmental issue clear in company's reports?	Structure, attraction, data, fact, explanation....	Company website, report	web review, report review
	S3.7	How does company conduct the internal report on sustainability?	Author, units, schedule	Responsible people, company website, report	Interview, web review, report review
	S3.8	Is environment the main issue in internal report?	Structure, unit, issue	Responsible people, company website, report	web review, report review
	S3.9	What is the requirement for the internal report concern environmental issue in forestry?	Responsible people, responsible unit, follow-up issue	Responsible people, company website, report	Interview, web review, report review
	S3.10	How does company translate environmental policy to implementation in forestry?	Internal requirement, external requirement	Responsible people, company website, report	Interview, web review, report review
	S3.11	Is there any clear strategy in promoting environmental policy in forestry?	Plan, program, general trend,	Responsible people, company website, report	Interview, web review, report review
	S3.12	What is the function of responsible units in developing/implementing environmental policy in forestry?	Role, activity, connection, relation, responsibility	Responsible people, company website, report	Interview, web review, report review

R2. What are the main features of sustainability policies and how do they translate to concrete requirements to suppliers?

Evaluation points	Specific questions	Necessary information/data	Sources of information	Study methods
E4. The main features of sustainability policies in company is to support sustainable forest management and nature conservation	S4.1	How does company support forest certification?	Year, location, scheme, %certified\uncertified wood	Interview, web review, report review
	S4.2	What is the certification structure of company?	Internal/external schemes, % of wood per each	Interview, web review, report review
	S4.3	What is the trend of using certified wood?	Volume, schemes, species	Interview, web review, report review
	S4.4	How is the relation of company with ENGOs?	Donation, cooperation, programs, issues, conflicts	Interview, web review, report review
	S4.5	How does company take care of education in forestry?	Donation, programs, location, partner	Interview, web review, report review
	S4.6	Is company interested in managing forest?	Forest area, location, species, investment, management, logging	Interview, web review, report review

E5. Company has concrete requirement to its wood suppliers	S5.1	How does company classify its wood supplier?	Criteria, number, location, volume, increase/decrease	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review
	S5.2	How does company transfer content of environmental policy to its suppliers in forestry?	Supplier, requirement, responsibility, contract	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review
	S5.3	What is the special policy for suppliers in developing countries?	Requirement, responsibility, contract	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review
	S5.4	How does company control its suppliers?	Contract, internal/external audit, time, method of auditing	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review
	S5.5	Do all suppliers follow up requirements?	Conflict, delay, wood source	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review
	S5.6	Does company open feedback channel for improving requirement from suppliers?	Channel, performance, respond time	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review
	S5.7	Does company control sub-supplier?	Requirement, audit	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review
	S5.8	Does company want to depend on external suppliers?	Own supplier, material, volume, species, location	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review

R3. How are these requirements actually implemented (tracing systems, sanctions, etc.)?

Evaluation points		Specific questions	Necessary information/data	Sources of information	Study methods
E6. Company pays much attention on wood source	S6.1	When did company realize the important of checking wood source?	Time, scale, document, announcement, issue	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review
	S6.2	Is company increasing awareness to origin of wood?	Personnel, cooperation, system, partners	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review
	S6.3	Does company strongly promote certified material in producing?	Declare, plan, strategy, volume, %, region	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review
	S6.4	What is the special attention for tropical wood source?	Region, country, species, forestry coordinator, requirement	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review

	S6.5	Is there any review to check whether appropriate attention was paid?	Investigation, meeting, reporting	Responsible people, company website, report, 3-rd parties' report	Interview, web review, report review
E7. Company tries its best to make sure that wood not come illegal operation or conflict	S7.1	Base on which criteria can company recognize the pattern of global forest?	Partner, map, information, ENGOs	Responsible people, company website, report	Interview, web review, report review
	S7.2	Is there any merchandise in checking wood source?	Chain of Custody, wood merchandise, location, requirement	Responsible people, company website, report	Interview, web review, report review
	S7.3	How do the auditors involve in checking operation?	Internal/external auditor, location, contract, requirement	Responsible people, company website, report	Interview, web review, report review
	S7.4	How is checking carried out by auditors?	Procedure, time, legal frame, method of checking, open/close report	Responsible people, company website, report	Interview, web review, report review
	S7.5	How does company help consumers to define certified product (environmental friendly)?	Advertise, handbook, poster, labels	Responsible people, company website, report	Interview, web review, report review
	S7.6	What is the decision for illegal wood ?	Solution, announcement, punishment ...	Responsible people, company website, report	Interview, web review, report review
E8. Company considers GIS/GPS system as powerful tool in tracing wood	S8.1	What are the basic information of application of these new technologies?	Year, place, provider, platform, trend	Responsible people, company website, report	Interview, web review, report review
	S8.2	How does the system function?	Scale, effectiveness, control, procedure	Responsible people, company website, report	Interview, web review, report review
	S8.3	How does company take care of system?	Investment, personnel, upgrade	Responsible people, company website, report	Interview, web review, report review
	S8.4	Does system play a competitive role in business?	Advantages, cost efficiency, image improvement	Responsible people, company website, report	Interview, web review, report review
	S8.5	How is the reliability of system in making sure the source of wood?	Focused species, requirement, audit, mistakes	Responsible people, company website, report	Interview, web review, report review

R – General research question

E – Evaluation points (Come from research questions)

S – Specific questions (Criteria for Evaluation points)

O – Operationalized questions (Simple questions come from Specific question, easy answer by yes/no or quantitative/qualitative answer, with aim to get data)

2. Questionnaire forms

QUESTIONNAIRE FORM No1_IKEA

(For interviewing company personnel dealing with sustainability policies)

This questionnaire is a part of the international research project “Comparative analysis of sustainability policies regarding forestry in leading forestry-related companies”. Coordinated by the Swedish University of Agricultural Sciences, the project should evaluate corporate forestry-related sustainability and wood sourcing policies and consider: 1) what does the policy include, e.g. forest certification, minimum requirements, and social issues; 2) how does the surveyed company follow up the policy; 3) how does the surveyed company communicate its performance; 4) how does the company include the sustainability policy in its marketing efforts e.g. FSC branding, off-product communication, and claims about requirements. The data will be used for scientific analysis of general trends in sustainability policies regarding forestry. All personal data will be treated confidentially. We will conduct in-depth interviews of only few companies and respondents, therefore your answers will be very important for project results. Thanks a lot for your concern for the project.

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I. DATA OF THE RESPONDENT

1. Interviewee's name:

2. Age:

☐ Male

☐ Female

3. Professional degree:

Specialization:

4. Occupation:

5. Working unit in IKEA:

II. BACKGROUND INFORMATION OF THE COMPANY

6. Could you estimate the share of the total volume of solid wood furniture consumed by your branches over the world in the year 2006 (m3) : % came directly from your own forests and % was procured from external (sub)suppliers.

7. Could you specify the origin of the round wood used by IKEA in recent years?

	Tick to choose where round wood mostly originated (one tick for each year)						
	2000	2001	2002	2003	2004	2005	2006
Asia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Africa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EU	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
North America	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

South America	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

III. SUSTAINABILITY POLICIES REGARDING FORESTRY

8. In recent years, big companies including IKEA have elaborated sustainability policies to make sure that their business takes into account economic, social and environmental values. Most likely, a big wood furniture retailer as IKEA should have sustainability policies specially dealing with forestry. So how do you define “sustainability in forestry ” in IKEA’s way?

ENTER YOUR TEXT HERE :

9. Could you specify to which events the company's forestry-related sustainability policy was initially connected and when it was formulated?

YOUR TEXT HERE :

And could you shortly describe the most important internal/external processes resulting in changes of IKEA's forestry policy over time?

YOUR TEXT HERE :

10. Could you shortly describe how the main features/principles of current sustainability policies regarding forestry in IKEA?

YOUR TEXT HERE :

11. In IKEA's sustainability policies, what are the main priorities in forest utilization in terms of allocating financial and human capacities?

	1	2	3	4	5
Acquiring forest land and planting forest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Supporting sustainable forest management (seven thematic areas of Conference Rio de Janeiro-92)*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Requirements for certified wood	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Controlling the origin of timber	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stopping use of timber from tropical natural forests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Avoid using hybrid plantations (gene-modified)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saving energy through optimal utilization of forest output for biofuel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Optimizing use of roundwood to make more output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Investment in forest research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Investment in forestry education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(please tick, 1- not important, 5- very important)

* Extent of forest resources Biological diversity; Forest health and vitality; Productive functions and forest resources; Protective functions of forest resources; Socio-economic functions; Legal, policy and institutional framework

12. When implementing the sustainability policies regarding forestry, it could be expected that IKEA has made use of a number of tools to translate sustainability policies regarding forestry into actions. Could you list these tools in order of importance/priority? (e.g. information campaigns, subsidies, legal documents, requirements...)

- a)
- b)
- c)
- d)
- e)
- f)
- g)

13. What media are used for spreading information/result of sustainability policies regarding forestry?
YOUR TEXT HERE :

IV. ORGANISATIONAL UNIT OR PERSONNEL IN CHARGE OF SUSTAINABILITY POLICIES REGARDING FORESTRY

14. Does your company have unit(s) dealing specifically with sustainability policies regarding forestry?
☐Yes ☐No

If Yes, could you list name(s) of the unit(s) and year of establishment?

Name1	Year
Name2	Year
Name3	Year

Then could you list some main functions of the unit(s) to make its position in whole company clearer?
YOUR TEXT HERE :

How many people at your company are in charge of sustainability policies regarding forestry? Please name the most important person dealing with sustainability policies regarding forestry :
YOUR TEXT HERE

and his/her background education :

YOUR TEXT HERE

15. Are full-time staff dealing only with formulating and implementing sustainability policies regarding forestry?
☐Yes ☐No ☐Not sure

How big is the total human capacity directly in dealing with sustainability policies related to forestry, measured in full-time positions (the total sum of full- and part-time positions:

16.How is auditing in terms of sustainability policies regarding forestry conducted?

By internal audit : Name of the last auditor:

(☐Weekly ☐Monthly ☐Annual ☐On demand)

By external audit: Name of organization:

Name of the last auditor:

(☐Weekly ☐Monthly ☐Annual ☐On demand)

V. IMPLEMENTATION OF SUSTAINABILITY POLICIES REGARDING FORESTRY

17. In the recent years, NGOs blame the companies in forestry-related industries for using timber from illegal sources. So in IKEA's way, what do you refer to as:

- Illegal activities:

YOUR TEXT HERE

- Illegal timber:

YOUR TEXT HERE

18. What kind of concrete requirements are posed to IKEA's suppliers in order to implement its sustainability policies regarding forestry (please list in order of importance)?

YOUR TEXT HERE

19. Could you please list the 5 largest wood suppliers of IKEA ?

YOUR TEXT HERE

20. How have IKEA's requirements for its suppliers changed during last 10 years?

++	Increasing strongly
+	Increasing moderately
0	No significant change
-	Decreasing moderately
--	Decreasing strongly

Frequency of audit	Pls answer!
Level of audit	Pls answer!
Work with enforcement	Pls answer!
Frequency of updating standard	Pls answer!
Number of legal documents	Pls answer!
Information campaigns	Pls answer!
Number of contract breaches	Pls answer!
Amount of fines	Pls answer!
Number of conflicts due to not fulfilling requirements	Pls answer!
Number of forestry coordinators working with wood tracing	Pls answer!
Number of complain/reports from ENGOs	Pls answer!

21. With a large number of suppliers it is hardly possible to avoid cases of non-compliance with IKEA forestry requirements (e.g. delaying the supply, not clear origin, not reporting...). What do you refer to as non-compliance cases in IKEA's definition?

- a)
- b)
- c)
- d)
- e)

22. What are the most effective tools used by IKEA when forcing suppliers to follow its requirements?

	Ranking
a) Long-term contracts	-----
b) Legal documents (convention, contract, reports, guarantee....)	-----
c) Internal audits	-----
d) External audits	-----
e) Wood Tracing System	-----
f) Fines	-----
g) Negotiation	-----
h) Information campaigns	-----

(rank from 5 to 1, 5 for the most important, 4 for the next most important, etc)

23. How are the non-compliances usually recognized/discovered by IKEA?

YOUR TEXT HERE

Then could you evaluate effectiveness of these solutions when dealing with non-compliance cases:

	1	2	3	4	5
Stopping import	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stopping contract	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Negotiating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lobbying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Prosecuting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Asking for penalty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1 – useless 5 – very effective

24. Could you describe the process (objects and selection method) of internal/external audits in order to check the fulfillment of wood suppliers?

YOUR TEXT HERE

25. The company should have some kind of tracing system as a tool to verify that suppliers' routines of wood purchasing and sources of the raw material comply with company's requirements. Does IKEA have any own wood tracing system?

☐ Yes ☐ No

If Yes, specify its exact name

and which unit in IKEA is in charge of it ?

If No, how does company trace the origin of wood used in its factories?

YOUR TEXT HERE

26. What are the documents that verify facts connected to the evaluation of compliance and how long they are required to be kept for auditing or tracing the origin of wood?

a)	Time
b)	Time
c)	Time
d)	Time

27. Does IKEA have forestry coordinators to deal with wood tracing in regions where it has business ?

☐ Yes ☐ No

If No, who is in charge of tracing wood origin for IKEA?

YOUR TEXT HERE

28. Is there set of private symbols used by IKEA for tracing the origin of wood ?

☐ Yes ☐ No

29. Does IKEA have an IT system equipped with GIS/GPS for tracing the wood origin?

☐ Yes ☐ No

If Yes, how do you evaluate its contribution to fulfillment of IKEA's requirements?

unimportant 1 2 3 4 5 very important

(choose number in dropped box) ----

VI. ANY OTHER COMMENTS ARE WELCOME:

YOUR TEXT HERE

Thank you for your time and answers!

QUESTIONNAIRE FORM No2_WWF

(For interviewing NGO personnel dealing with sustainability policies regarding forestry)

This questionnaire is a part of the international research project “Comparative analysis of sustainability policies regarding forestry in leading forestry-related companies”. Coordinated by the Swedish University of Agricultural Sciences, the project should evaluate corporate forestry/wood sourcing policies and consider: 1) what does the policy include, e.g. forest certification, minimum requirements, and social issues; 2) how does the surveyed company follow up the policy; 3) how does the surveyed company communicate its performance; 4) how does the company include the sustainability policy in its marketing efforts e.g. FSC branding, off-product communication, and claims about requirements. The data will be used for scientific analysis of general trends of sustainability policies regarding forestry. All personal data will be treated confidentially. We will conduct in-depth interviews of only few companies and respondents, therefore your answers will be very important for project results. Thanks a lot for your concern for the project.

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I. DATA OF THE RESPONDENT

1. Interviewee's name:

2. Age:

☐ Male

☐ Female

3. Professional degree:

Specialization:

4. Occupation:

5. Working unit in WWF:

II. BACKGROUND INFORMATION OF THE COMPANIES

6. The following forestry-related companies are among the global leaders with regard to their turnover. At your current position in WWF, could you describe how strongly are these companies related to forest?

	Ranking
IKEA	----
Home Depot	----
B&Q	----
Wal-Mart	----

Carrefour	----
-----------	------

Not important 1 2 3 4 5 Highest important

III. SUSTAINABILITY POLICIES REGARDING FORESTRY

7. Do you think all listed above companies have sustainability policies regarding forestry as an important part of their strategy of development? And what are the important events connected to formulating of these policies?

		Events connected to formulating of these policies
IKEA	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Home Depot	<input type="checkbox"/> Yes <input type="checkbox"/> No	
B&Q	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Wal-Mart	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Carrefour	<input type="checkbox"/> Yes <input type="checkbox"/> No	

8. Does WWF cooperate with these companies in formulating sustainability policies regarding forestry and how do you evaluate this cooperation?

With IKEA	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes: ----
With Home Depot	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes: ----
With B&Q	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes: ----
With Wal-Mart	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes: ----
With Carrefour	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes: ----

Bad 1 2 3 4 5 Very good

9. In the below matrix, could you shortly describe the issues of sustainability policies regarding forestry that WWF cooperates with companies in recent years?

	Sustainable forest management	Certification of wood	Biodiversity conservation	Tracing wood origin	Promoting broadleaves	Research and education
With IKEA	----	----	----	----	----	----
With HomeDepot	----	----	----	----	----	----
With B&Q	----	----	----	----	----	----
With Wal-Mart	----	----	----	----	----	----
With Carrefour	----	----	----	----	----	----

1 – bad 5 – good (----) – no cooperation

IV. ORGANISATIONAL UNIT IN CHARGE OF SUSTAINABILITY POLICIES REGARDING FORESTRY

10. If we do agree that developing and implementing forestry-related policies are an important task for those big companies, then the institutional unit/personnel is necessary for this purpose. Do you think that all companies

have their separate institutional units dealing with sustainability policies regarding forestry? And how do the units perform?

In IKEA	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes: ----
In Home Depot	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes: ----
In B&Q	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes: ----
In Wal-Mart	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes: ----
In Carrefour	<input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes: ----

Bad 1 2 3 4 5 Very good

11. In your view, what is educational background suits best for with the leading staff that is in charge of sustainability policies regarding forestry in these companies?

	Ranking
Forestry education	----
Environment education	----
Social education	----
Economic education	----
Other technical education	----

Not important 1 2 3 4 5 Highest important

12. As a representative of WWF, what do you expect from experts working with sustainability policies regarding forestry in these big companies?

YOUR TEXT HERE

13. For the purpose of auditing as well as increasing reputation of these companies, how could you suggest the best way the result of sustainability policies regarding forestry should be reported?

☐Internal reports : Units should be audited and frequency of audit

☐External reports : Units should be audited and frequency of audit
Recommended external organization for audit

V. IMPLEMENTATION OF SUSTAINABILITY POLICIES REGARDING FORESTRY

14. In the recent years, NGOs blame the leading companies in forestry-related industries for using timber from illegal sources. So in WWF's way, what do you refer to as?

- Illegal activities:

YOUR TEXT HERE

- Illegal timber:

YOUR TEXT HERE

15. Although these companies have tried to follow the sustainability policies regarding forestry but it's quite difficult to avoid the conflict with other stakeholders. Were there any conflicts between WWF and these companies and recall the most serious event in period 2000 – 2006?

		The most serious events if Yes
With IKEA	<input type="checkbox"/> Yes <input type="checkbox"/> No	

With Home Depot	<input type="checkbox"/> Yes <input type="checkbox"/> No	
With B&Q	<input type="checkbox"/> Yes <input type="checkbox"/> No	
With Wal-Mart	<input type="checkbox"/> Yes <input type="checkbox"/> No	
With Carrefour	<input type="checkbox"/> Yes <input type="checkbox"/> No	

16. How do you evaluate the cooperation between WWF and these companies in implementing sustainability policies regarding forestry in recent years?

	Cooperation
With IKEA	----
With Home Depot	----
With B&Q	----
With Wal-Mart	----
With Carrefour	----

Bad 1 2 3 4 5 Very good

17. In your point of view, what are the most effective means to address non-compliances with regard to timber supplies and related sustainability requirements?

	Ranking
Stopping import	----
Stopping contract	----
Negotiating	----
Lobbying	----
Prosecuting	----
Financial penalties	----
Other.....	----

Not important 1 2 3 4 5 Highest important

18. How do you evaluate the quality of internal and external audits related to forestry in these companies?

	Quality of audit regarding forestry	Short comment : why
IKEA	----	
Home Depot	----	
B&Q	----	
Wal-Mart	----	
Carrefour	----	

Bad 1 2 3 4 5 Very good

And what do you suggest the best way to audit these companies:

☐Only internal audit ☐Only external audit ☐Internal&External audits

19. Are you satisfied with forestry-related information in sustainability reports published by these companies?

		Your short comment on quality of reports
In IKEA	<input type="checkbox"/> Yes <input type="checkbox"/> No	
In Home Depot	<input type="checkbox"/> Yes <input type="checkbox"/> No	
In B&Q	<input type="checkbox"/> Yes <input type="checkbox"/> No	
In Wal-Mart	<input type="checkbox"/> Yes <input type="checkbox"/> No	
In Carrefour	<input type="checkbox"/> Yes <input type="checkbox"/> No	

20. Based on your information, do you think that all these companies have environmental requirements for the origin of wood?

IKEA	<input type="checkbox"/> Yes <input type="checkbox"/> No
Home Depot	<input type="checkbox"/> Yes <input type="checkbox"/> No
B&Q	<input type="checkbox"/> Yes <input type="checkbox"/> No
Wal-Mart	<input type="checkbox"/> Yes <input type="checkbox"/> No
Carrefour	<input type="checkbox"/> Yes <input type="checkbox"/> No

Do you have any suggestions for companies on how to make the wood (sub-) suppliers follow companies' requirements for origin of wood?

YOUR TEXT HERE

21. Do you have any information whether these companies have a system of so-called "wood tracing" (or similar)? And in your view, how to best evaluate these systems in terms of clarifying wood origin?

In IKEA	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	If Yes: ----
In Home Depot	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	If Yes: ----
In B&Q	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	If Yes: ----
In Wal-Mart	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	If Yes: ----
In Carrefour	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	If Yes: ----

Bad 1 2 3 4 5 Very good

In your view, do you think that implementing IT system (GIS/GPS) will improve the tracing of wood origin in these companies?

☐Yes ☐No

22. Your short comments on how these companies currently trace the wood origin?

	Short comment
IKEA	
Home Depot	
B&Q	
Wal-Mart	
Carrefour	

23. As representatives of WWF what is your suggestion to build up a good tracing system of wood origin (includes documents and technical activities)?

YOUR TEXT HERE

VI. ANY OTHER COMMENTS ARE WELCOME:

YOUR TEXT HERE

Thank you for your time and answers!

3. Evaluation forms

REPORT DATA EVALUATION FORM_IKEA (Evaluation of data presented on company's report)

About reports in sustainability (RS):

			Comments/notes
1	Purpose of RS	<input type="checkbox"/> Internal use <input type="checkbox"/> External use <input type="checkbox"/> Other	
2	Frequency of RS	<input type="checkbox"/> Monthly <input type="checkbox"/> Annually <input type="checkbox"/> Other	
3	First RS conducted	Year.....	
4	Format of RS	<input type="checkbox"/> PDF <input type="checkbox"/> HTML <input type="checkbox"/> MS Office <input type="checkbox"/> Other	
5	Languages of publication	<input type="checkbox"/> In English <input type="checkbox"/> In other languages	
6	Storage of all RS	<input type="checkbox"/> All versions <input type="checkbox"/> Not all versions	
7	Accessibility RS	<input type="checkbox"/> Only for staff <input type="checkbox"/> For all who concern	
8	Possibility to get RS in printed version	<input type="checkbox"/> Yes <input type="checkbox"/> No	

0	1	2	3	4	5
No information	Have information but not clear	Information in general	Just enough to understand the issue	In details	In details with update

	Questions are about the presence/availability/accessibility of following information regarding forestry (RF)	Grade/Year						Comments/Notes/Details
		00	01	02	03	04	05	06
I. Company information	101 Distribution/allocation of business							
	102 Financial data/report							
	103 International/regional ranking/list							
	104 Award /Successful stories RF							
	105 Voting/comment from others RF							
	106 Key Performance Indicators (KPI) RF							
	107 Author/responsible unit(s) conduct reports							
	108 GRI compatible							
	109 Total consumption of wood in FY							
	110 Consumption of certified wood in FY							

URL:

Last access:

	Criteria	Evaluation
W001	Impression of Domain name	0 – Hard to remember (not the same as the name of company) 1 – Having direct link from shopping site of company 2 – Possible to find by search engines with key words company + sustainability
W002	Hit counter	0 – No counter 1 – Having counter
W003	Visible contact for SP RF	0 – No contact 1 – Having contact but in general 2 – Direct contact to responsible people for SP RF
W004	News /Advertisements/Information related to forestry	0 – No information 1 – Having information in general of SP 2 – Having information of SP RF
W005	Accessibility to SP data (minimum number click to get first information)	0 – No direct link or at least 5 clicks to first information of SP in general 1 – At least 3 clicks to first information of SP in general 2 – Having direct link to information of SP in general
W006	Link to articles related to SP RF from other sites	0 – No link to external articles relate to SP RF 1 – Having links to external articles in SP RF 2 – Update external articles in SP RF (post at least 1 month before last access)
W007	Available download of Sustainability reports	0 – No Sustainability reports or no available download of Sustainability reports 1 – Available download of Sustainability reports 2 – Full Sustainability reports to download (from first report to last one)
W008	Interview of company's employees related to SP RF	0 – No information 1 – Having statement or interview of company's employees related to SP RF 2 – Update of this information (post at least 1 month before last access)
W009	Online forum for open discussion on SP RF	0 – No information 1 – Having online forum for SP 2 – Having online forum with discussion on SP RF
W010	Definition /Update of illegal activities in forestry	0 – No information 1 – Having definition of illegal activities in forestry 2 – Update information of illegal activities (post at least 1 month before last access)
W011	Online guidance for recognizing certified wooden products (logo, brand)	0 – No information 1 – Guidance for recognizing environmental friendly products 2 – Guidance for recognizing certified wooden product with logos and brands

W012	Information of certified wooden products	0 – No information 1 – General information about certified wood 2 – Detail information about certified wood (volume, logo, distribution, vendors...)
W013	Information of fulfilled wood suppliers	0 – No information 1 – In general information about wood suppliers 2 – Update information about how wood suppliers follow company's requirements
W014	Information of cooperation with NGOs	0 – No information 1 – General information about cooperation with NGOs 2 – Detail cooperation/conflict with NGOs
W015	Information of company's forestry strategy	0 – No information 1 – General information 2 – Detail information with clear targets in forestry
W016	Online report tool(s)	0 – No tool(s) 1 – Having online tool(s) for reports from responsible units 2 – Having online tool(s) with module for timber/forestry data

4. Result summary for report evaluation and web impression:

Summary of report evaluation:

	HomeDepot						Carrefour						B&Q/Kingfisher						IKEA						Wal-Mart											
	00	01	02	03	04	05	06	00	01	02	03	04	05	06	00	01	02	03	04	05	06	00	01	02	03	04	05	06	00	01	02	03	04	05	06	
Cr	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
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W014	2	1	1	0	0
W015	2	1	1	1	1
W016	0	0	2	0	0

5. Emails:

Introductory email COMPANY :
Dear Mr/Ms AAAAA

Firstly, let me introduce myself. My name is Nguyen Nghia Lan, I’m now carrying out international research project “Comparative analysis of sustainability policies in leading forest-related companies” at the Southern Swedish Forest Research Centre, Swedish University of Agricultural Sciences.

It is generally known that multinational companies that to a substantial degree rely on timber as a raw material, pay increasing attention to corporal sustainability policies. However, this topic is very little researched to date. Our survey would try to reveal how the globally leading companies do cope with the growing environmental requirements with regard to timber supplies; what are the institutional set-up as well as policies dealing with these issues and how would companies follow up what they have promised.

Your company is one of five globally leading forest-related companies that receive this questionnaire. The data will be used for scientific analysis only and all personal data will be treated confidentially. We will conduct surveys of only few companies and respondents, therefore your answers will be very important for project results.

I kindly ask you to reply by e-mail before..... If something is not clear I am ready to discuss the emerging questions by phone or e-mail.

Thanks a lot for your concern for the project!

Best regards,
Nguyen Nghia Lan
Swedish University of Agricultural Sciences, MSc student
Tel: +46-73-8581990
E-post: nguyennghialan@gmail.com

Introductory email NGOs:
Dear Mr/Ms AAAAA

Firstly, let me introduce myself. My name is Nguyen Nghia Lan, I’m now carrying out international research project “Comparative analysis of sustainability policies in leading forest-related companies” at the Southern Swedish Forest Research Centre, Swedish University of Agricultural Sciences.

It is generally known that multinational companies that to a substantial degree rely on timber as a raw material, pay increasing attention to corporate sustainability policies. However, this topic is very little researched to date. Our survey would try to reveal how the globally leading companies do cope with the growing environmental requirements with regard to timber supplies; what are the institutional set-up as well as policies dealing with these issues and how would companies follow up what they have promised.

Your organization is one of two NGOs that receive this questionnaire. The data will be used for scientific analysis only and all personal data will be treated confidentially. We will conduct surveys of only a few companies and respondents, therefore your answers will be very important for project results.

I kindly ask you to reply by e-mail before..... If something is not clear I am ready to discuss the emerging questions by phone or e-mail.

Thanks a lot for your concern for the project!

Best regards,
Nguyen Nghia Lan
Swedish University of Agricultural Sciences, MSc student
Tel: +46-73-8581990
E-post: nguyennghialan@gmail.com

Email to remind respondents :

Dear Mr/Ms AAAAA

My name is Lan, student in Sweden. I hope that you have received my introductory email and my questionnaire. Anyway, you can find questionnaire again in attachment. As I mentioned in first email, I would like to receive your answer beforeand our project faces hard deadlines. So please remember to reply me in time, your answer is very important for the project.
Thanks a lot for your concern!

Best regards,
Nguyen Nghia Lan
Swedish University of Agricultural Sciences, MSc student
Tel: +46-73-8581990
E-post: nguyennghialan@gmail.com

Prolongation email:

Dear Mr/Ms AAAAA

My name is Lan, the researcher in Sweden. The deadline came but I have not received your answer yet. I know you are busy person but I kindly ask you to spend time on answering the questionnaire because your answer is very important for the international project.

Looking forward to hearing from you soon,

Nguyen Nghia Lan
Swedish University of Agricultural Sciences, MSc student
Tel: +46-73-8581990
E-post: nguyenngghialan@gmail.com

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