Sustainable Certified Oak Flooring

“A research about the possibilities for Hout Industrie Schijndel of sustainable certifying their oak flooring”

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1. Preface

The last year has been a difficult time for the Timber Industry in the Netherlands. The economic crisis put a lot of pressure on every company active in this business. The first quarter of 2010 was a little bit better than the same period last year. This small revival was a reason to look for new opportunities, one of this opportunities was the certification of Hout Industrie Schijndel (HIS).

For me a 4th year International Timber Trade student at the University of Van Hall Larenstein the job to sort this out and come to a clear advice toward the HIS.

I would like to thank everybody who helped me with my research by giving me information and their opinion about various subjects. Special thanks goes to the HIS and all their employees. They gave me the opportunity to get a good inside in the company and the market they are active on.

Beside the information I received from the HIS I have interviewed several organization and companies. They all give me useful information which made the back bone of this report. Especially I want to thank FSC and PEFC Netherlands and SKH for all the information they provided me. Last but not least I want to thank my supervisors John Raggers, Job Janssen and Jordi de Jongh as they give me the guideline to make this report to a success.

Schijndel, 1 June 2010

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2. Executive Summary

Hout Industrie Schijndel (HIS) is one of the bigger timber industries in the Netherlands. Traditionally the company does all kind of subcontracting related to timber. In 2002 they started to produce oak flooring to expend their activities. Nowadays the company is a well known international player on the wooden flooring parquet market. Because of recent development in the market concerning the growth of demand for sustainable oak flooring. The HIS wants to know what possibilities they have on sustainable certify their oak flooring, to supply to this demand. The central research question in this report is: ‘What are the possibilities for Hout Industrie Schijndel of sustainable certifying their oak flooring?’

There are quite a lot of sustainable certificates available, but only 2 apply for the HIS. These two are FSC (Forest Stewardship Council) and PEFC (Program for the endorsement of Forest Certifications Scheme). The 2 certificates don’t differ a lot from each other, differences can be found on the field of numbers, social aspect, transparency, recognition by government and the brand awareness. But beside these differences mentioned above they strive the same goal, that is sustainable forest management.

The internal analyses showed that the HIS has quality and sustainability as key point of their entrepreneurship. Three value strategies can be recognized, namely Product leadership, Operational Excellence and Customer Intimacy. Operational excellence is the most important for the HIS as they operate as efficient as possible. Product leadership can be recognized because of their innovating spirits in machinery and unique oak floors. HIS is despite its size still very flexible and has a wide range of tools and possibility in finishes for their oak floors. This makes them able to deliver at almost every demand and this shows us their customer intimacy.

The flooring branch is very competitive, companies have to stay focused all the time and see what others do. But HIS is more a trend setter then a trend follower, by giving their customers the possibility to supply their flooring with a FSC or PEFC certificate they want to differ once again. There are 2 big competitors on this field, these are Lieverdink and Inpa Parket. The market for sustainable certified oak flooring is small at this moment, but the expectations for the future are positive. This can be a big advantage as the HIS can now put their roots in this market, and as the market will grow so will their market share. The demand today is mainly for FSC certified flooring, but the customers of the HIS also see possibilities for PEFC as a cheaper option for FSC.

For their subcontracting the HIS doesn’t need the FSC and PEFC certificate. These certificates are only necessary if the timber comes in legal possession. This will be the case by the flooring division of the HIS. So if the HIS wants to deliver floors with FSC or PEFC they have to be certified. Fortunately their customers, floor retailer, don’t have to be certified to sell the products. But this only count when the floor is prepackaged and has the correct labels on it.

The HIS has 3 possible options for sustainable certifying their oak floors. Option one is only take the FSC certificate. Option 2 is to take both FSC and PEFC certificate. Option 3 is to not certify at all. The second option has the preference as this will also benefit the subcontracting work of the HIS and will give them the possibility to offer a wide range of certified products. The other options are not applicable for the HIS as they want to make a sustainable impression to their customers and offer these sustainable certified oak floorings.
3. Introduction

Hout Industrie Schijndel (HIS) is a well established timber industry in the Netherlands. Recently they were voted as the best timber industry in the Netherlands for the year of 2009. Their main activity is subcontracting timber processing for timber traders and other industry. Processes like; Storage, Drying, Chafing, Profiling, Double end-profiling, Varnishing, Packaging and Transport are daily business of the HIS. Beside the subcontracting work the HIS has started to produce oak flooring in the year of 2002. The idea behind this diversion of activity is not being dependent on the subcontracting work.

The problem they face at this moment is that they have demand for sustainable certified floors but they can not apply to this demand. To apply to this demand they want to have the opportunity to sustainable certify their oak floorings. This demand has risen because of recent market development, the market is demanding more and more sustainable products including sustainable certified flooring. Under this sustainable certified flooring we mean floors produced with timber from sensible managed forest. Figures from a recent research made by Probos commissioned by the Dutch department of VROM and LNV show us that from 2005 till 2008 the use of timber with a sustainable certificated has grown with 20.5%. In 2008 33.8% of all the timber used in the Netherlands was with a sustainable certificate. The Dutch government has the objective that in 2011 50% from all the timber used in the Netherlands has a sustainable certificate on it. The expectation of Probos is that this percentage will be around 43% in 2011. This report from Probos is being found in the appendix.

Another reason for the HIS to sustainable certify their production process is to expend their sustainable entrepreneurship activities. Sustainable activities are not only demanded by the consumer who buys the floors, but also demanded by other business. Especially banks are demanding that the company has described their sustainable entrepreneurship activities. This sustainable entrepreneurship is a condition by the provision of credit.

The main question for this report is; ‘What are the possibilities for Hout Industrie Schijndel of sustainable certifying their oak flooring?’.

To answer the main question 4 sub questions are formulated;
- Which sustainable certificates are available?
- How is the market for certified oak flooring?
- What is the application of these certificates?
- How does the certification process looks like?

Every good report needs a good planning, through a accurate planning the processes and phases will run smoothly and the deadlines will be no problem keeping on to the planning. The whole planning should be written within the time available, the time available for this report is from 1 February till 3 June 2010. The planning is available in the project plan which is added in the appendix.

The report is in the first place made for the HIS, beside the informational function for the HIS it also has to be interesting and has to be understandable by others. The final result has to give an answer on the main question, and the HIS should be able to make a well considered decision according to my advice. Before coming to the final result the above mentioned subject are been treated.
The first chapter gives an overview of the available certificates, at the end 2 certificates are being chosen. Then a market analysis is being made to get a good view on the market with its customers and competitors. After the market analysis, chapter 6 puts the certificates to the test if they could apply for the HIS. Then we will take a closer look in the certification process. This all result in 3 options described in chapter 8. At the end we will give a final conclusion with a recommendation.
4. Methodology

The methodology is set-up in phases and steps which follow up each other in a certain order. This order is according to the sub questions. The sub questions determine the chapters and the methods used to get an answer on this sub questions. Methods used are; *internal analysis*, *external analyses*, *branch analyses*, *customer analyses*, *competitor analyses*.

4.1 Methods

By implementing these methods described below all the necessary information will be gathered.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificates for sustainable forest management</td>
<td><em>Branch analyses</em></td>
</tr>
<tr>
<td>What sustainable certificates are available?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interview; Interview with the different certification schemes</td>
</tr>
<tr>
<td></td>
<td>Publications; Gather information from the publications published to give a clear view on the certification schemes</td>
</tr>
<tr>
<td></td>
<td>Internet; Advise on the different sites on the different certification schemes</td>
</tr>
<tr>
<td>Market analyses</td>
<td><em>Customer analyses</em></td>
</tr>
<tr>
<td>How is the market for certified oak flooring?</td>
<td><em>Branch analyses</em></td>
</tr>
<tr>
<td></td>
<td><em>Competitor analyses</em></td>
</tr>
<tr>
<td></td>
<td>Survey; To get the best idea about the market is to ask the market itself, the best way of doing this is doing a survey.</td>
</tr>
<tr>
<td></td>
<td>Internal interview; Internal interview is needed to acquire market information</td>
</tr>
<tr>
<td></td>
<td>External interview; By interviewing branch organization information can be confirmed and extended.</td>
</tr>
<tr>
<td>Applications of certification</td>
<td><em>External analyses</em></td>
</tr>
<tr>
<td>What is the application of these certificates?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>External interview; First handed information will be gathered by direct contact with the certifying bodies.</td>
</tr>
<tr>
<td></td>
<td>Publications; Beside the external interview, publications are very important as here in this publications all the information is available</td>
</tr>
<tr>
<td>The certification process</td>
<td><em>External analyses</em></td>
</tr>
<tr>
<td>How does the certification process looks like?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>External interview; First handed information will be gathered by direct contact with the certifying bodies.</td>
</tr>
<tr>
<td></td>
<td>Publications; Beside the external interview, publications are very important as here in this publications all the information is available</td>
</tr>
</tbody>
</table>

Table 1 Gives an overview of when the several methods are being used.
5. Certificates for sustainable forest management

The demand for sustainable timber has grown in the last 2 decades, in a reaction to this demand several certification systems are set up to apply to this demand. These systems are shortly described below and then evaluated which systems are applicable for the HIS. Those systems are then described more in detail.

5.1 Certification systems

The process of certifying sustainable forest was first initiated beginning 1990. Today there are over 60 certification initiatives in over 150 countries. More then 344.7 million hectares are certified. The total hectares of forest in the World is around 4 milliard*. This means that around 8.62% of the world forest area is certified. These systems try to stimulate ecological, social and economical forest management. Of course the ecological part is the most important one. The most familiar systems are: FSC, PEFC, SFI, CSA, ATFS and MTCC. Its possible to buy timber under these certificates which comes from sustainable managed forest. Underneath there is a short description of the most important timber certificates for the Dutch market.

Forest Stewardship Council (FSC)
The FSC is operating internationally, they are founded in 1993 by international environmental-human right organizations, indigenous population groups and enterprises from the forest and timber sector. Their main goal is to protect forest against destruction and irreparable damage. Unique in FSC is the equal representation of the stakeholders, namely economical, social and environmental. FSC is supported by the timber branch, social organizations and international environmental organizations.

Program for the endorsement of Forest Certifications Scheme (PEFC)
PEFC is a global system that provides a voluntarily, independently forest and timber certification system. The foundation of the system goes back to 1999. The system is based on mutual recognition of national and regional timber certification systems. It guarantees that the consumer gets sustainable and legal paper and timber products. PEFC works as a international umbrella systems which test their standards to national standards.

Malaysian Timber Certification Council (MTCC)
The MTTC is the national certification system of Malaysia, which was founded in 1998. The MTTC is based on international guide lines for sustainable forest management. Since may 2009 the MTCC is recognized by PEFC international. At this moment there is a area certified of 4.4 million hectare under MTCC.

Sustainable Forestry Initiative (SFI)
The SFI is a initiative from the American Forest & Paper Association. The certificate is intended for industrial forest owners. SFI is a integrated plan for sustainable production and environmental issues. All members of the American Forest & Paper Association are required to take part of the SFI. SFI is granted by PEFC and has over 54 million hectare of forest certified.

Canadian Standard Association (CSA)
This system is created by the Canadian government to stimulate sustainable forest management. It is a extensively certification system based on international environmental

*Source; http://nl.wikipedia.org/wiki/Lijst_van_landen_naar_bosareaal
guidelines and complemented by very specific forest engineered measurements. CSA is also accepted by PEFC.

**American Tree Farm System (ATFS)**
The ATFS is founded and sponsored by the American Forest Foundation. ATFS is created for small and private forest owners. The ATFS and SFI are complementary and recognize each other. In the system are a lot of forest, sustainable forest management and forest protection laws integrated. The system is recently optimized and is searching for recognition true PEFC.

**Keurhout**
Keurhout is not a real certification scheme, they act more as a filter for the different certification schemes. They are putting other certifying schemes to the test of sustainable forest management. It’s a Dutch organization which only works national. The test is done by collage of experts according to the Dutch minimum requirements. After approval the products may be certified under the Keurhout Legal or Sustainable label. Today there are around 27 MTCC-certified companies allowed under Keurhout Legal system. Keurhout is managed and facilitated by Vereniging Van Nederlandse Houtondernemingen.

### 5.2 Applicable certificates

The 2 most important schemes of the one mentioned above are determined by the size of forest area they represent. Underneath you can find table 2 were a clear overview is given of the amount of hectares each certificate has certified. The two with the most hectares are explained more in detail below.

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Hectares in million</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSC</td>
<td>127.7</td>
</tr>
<tr>
<td>PEFC*</td>
<td>221</td>
</tr>
<tr>
<td>MTCC</td>
<td>4.4</td>
</tr>
<tr>
<td>SFI</td>
<td>54</td>
</tr>
<tr>
<td>CSA</td>
<td>72.5</td>
</tr>
<tr>
<td>ATFS</td>
<td>10.5</td>
</tr>
</tbody>
</table>

**Table 2:** Shows the number of hectares in million per sustainable certificate

* Under the PEFC is included SFI and CSA. Also a part of MTCC is included under PEFC.
** Keurhout is not mentioned in the above table because this is an organization which functions as an filter for the certification schemes.

To verify that FSC and PEFC are the 2 most important certificates for the Netherlands we take a look at table 3. Here we see the total volume of sawn timber and sheet materials that was used on the Dutch market in 2005 and 2008.

<table>
<thead>
<tr>
<th></th>
<th>FSC</th>
<th>PEFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>With certificate 2008</td>
<td>747.870 m3</td>
<td>1.423.674 m3</td>
</tr>
<tr>
<td>With certificate 2005</td>
<td>588.810 m3</td>
<td>247.609 m3</td>
</tr>
</tbody>
</table>

**Table 3:** The total volume certified sawn timber and sheet material which is used on the Dutch market in 2008 and 2005.
The conclusion of these 2 table is that FSC and PEFC have the biggest area of certified forest and represent the biggest amount imported to the Netherlands. PEFC has the biggest amount of certified forest and this can also explain why they have the biggest amount of sawn timber and sheet material used in the Netherlands. This information was gathered by the interview I had with FSC and PEFC Netherlands and the information from table 3 was gathered from the report made by Probos, added in the appendix. As a result of this FSC and PEFC is applicable for the HIS, in chapter 7 there will be additional information about the supply of oak timber with these 2 certificates. But first we will go deeper into these two certification schemes.

5.2.1 FSC
FSC has not the biggest area of certified forest but it is clearly the best known certification scheme. It has a strong marketing position and due to this they have a strong position in the final consumer market. The foundation of FSC is based on 10 principles which are mentioned below;

1. Compliance with all applicable laws and international treaties
2. Demonstrated and uncontested, clearly defined, long–term land tenure and use rights
3. Recognition and respect of indigenous peoples’ rights
4. Maintenance or enhancement of long-term social and economic well-being of forest workers and local communities and respect of worker’s rights in compliance with International Labour Organisation (ILO) conventions
5. Equitable use and sharing of benefits derived from the forest
6. Reduction of environmental impact of logging activities and maintenance of the ecological functions and integrity of the forest
7. Appropriate and continuously updated management plan
8. Appropriate monitoring and assessment activities to assess the condition of the forest, management activities and their social and environmental impacts
9. Maintenance of High Conservation Value Forests (HCVFs) defined as environmental and social values that are considered to be of outstanding significance or critical importance
10. In addition to compliance with all of the above, plantations must contribute to reduce the pressures on and promote the restoration and conservation of natural forests.

FSC is the only organization that is recognized by all big environmental organizations. Organizations as WWF and Greenpeace accept FSC as a sustainable source of timber.

5.2.2 PEFC
PEFC has the biggest area of certified forest, this is due to the umbrella like structure. More and more “local/national” certification schemes are recognized by PEFC. The problem with this is that the transparency is not that high. The organization is due to this recognized true the Dutch government by their national PEFC standards. So for example its possible that PEFC Germany is recognized by a the Dutch government and PEFC Canada for example not. This applies on governmental level but on the consumer market this has no affect as its just PEFC. The PEFC standards are very similar as the ones from FSC.

The majority of the PEFC members are private forest owners, such as families and communities. For these owners PEFC is the certification scheme of choice. It is true that it is easier to get certified under PEFC then under FSC.
5.3 Comparison FSC and PEFC

It is important to get a clear idea what the differences are between FSC and PEFC. Firstly we do a comparison in numbers and afterword’s there will be a comparison on other important aspects.

5.3.1 Numbers
FSC was the first certification scheme, due to its experience it has gained a lot of market knowledge and they put this experience in their marketing activities in which FSC is very successful. Despite that they were founded much earlier then PEFC they have a smaller area certified. This has 2 reasons, the first is that the standards are more strict then PEFC and the second is that PEFC works as an umbrella organization and except other certification systems. This is the main reason why PEFC has more hectares certified under their scheme. In COC members FSC is again the main player, this also says something about their popularity and their acquaintanceship. In the Netherlands this is about 69% for FSC. For PEFC this figure isn’t known as they didn’t do any research about this. But its known in general that the acquaintanceship of PEFC is much lower then the one of FSC.

<table>
<thead>
<tr>
<th>In Numbers</th>
<th>FSC</th>
<th>PEFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation in</td>
<td>1993</td>
<td>1999</td>
</tr>
<tr>
<td>Number of hectares in million</td>
<td>127.7</td>
<td>221</td>
</tr>
<tr>
<td>Number of COC members</td>
<td>16.235</td>
<td>6259</td>
</tr>
<tr>
<td>Imported volume to the Netherland in 2008</td>
<td>747.870 m³</td>
<td>1.423.674 m³</td>
</tr>
</tbody>
</table>

Table 4: Overview on the comparison FSC and PEFC in numbers
Source: www.fsc.org www.pefc.org

5.3.2 Social
The biggest difference between these 2 certificates is the social aspect. This is an important part in FSC, in PEFC this social aspect has a much smaller role. By this social aspect we mean, the involvement and care for the local people. Some critics mention the small influence by PEFC from local inhabitants. This is especially a point of discussion by the acceptance of the Malaysian Timber Certification Scheme by PEFC. Environmental organizations like Green Peace and WWF do not support PEFC, because of the fact they lack in the social care for the local people. Fact is that PEFC has its main area of forest located in Europe and America, as the common wealth of people is much higher here the social part of providing good social terms is less important, then in tropical countries such as Africa, South America and Asia.

5.3.3 Transparent
The transparency of a certification scheme is important. People have to see how the organization works and how the structure is formed. At PEFC the decision-making and their reporting are issues of comment. As these decision makers are the ones who pay, and these are not non-profit organization such as WWF and Green Peace.

5.3.4 Recognition
Not every certificate is recognized by the Dutch government. The certificates are approved if they pas the test from the Timber Procurement Assessment Committee (TPAC). The TPAC
will put the certificates to the test and decides if they apply under the Dutch Timber Procurement Criteria. Underneath is a table were the approved systems are shown.

<table>
<thead>
<tr>
<th>Recognition by Timber Procurement Assessment Committee (TPAC) *</th>
<th>FSC International</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEFC Germany</td>
<td></td>
</tr>
<tr>
<td>PEFC Finland</td>
<td></td>
</tr>
<tr>
<td>PEFC Sweden</td>
<td></td>
</tr>
<tr>
<td>PEFC Belgium</td>
<td></td>
</tr>
<tr>
<td>PEFC Austria</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Shows the certification schemes recognized by the TPAC
Source: [http://www.tpac.smk.nl/](http://www.tpac.smk.nl/)

* PEFC International and PEFC Malaysia are currently under in the process of being recognized.

The conclusion from this table is that every product which has the FSC certification can be bought by the Dutch government. For PEFC the government has to identify from which country the product certificates comes from. This only applies for the Dutch government because for companies and consumers PEFC International is accounted durable. Of course it's possible that some companies join up with the governments decision. But the expectation is that PEFC International soon will be acknowledged by the TPAC and so by the Dutch government.

### 5.3.5 Brand awareness

The brand awareness is important for a certification scheme, because when the brand name is well known by the consumer it will decide the success of a certification system. As told before FSC has the best brand awareness under the final customer. The brand awareness of FSC is according to a recent research held by FSC Netherlands 21%. When a little bit helped this brand awareness grows to 69%. This information was gathered on the website from FSC: [ww.fsc.nl](http://www.fsc.nl). For PEFC this is not known as there isn’t any research done to examine this. But according to PEFC Netherlands the brand awareness of PEFC is very low by the final consumer. The brand awareness of FSC and PEFC by the industry is much higher, this is confirmed by FSC en PEFC Netherlands but figures do not exist. Funds are the main problem for PEFC, as the marketing cost a lot of money. Expectations of PEFC are that in the future there will be some marketing activities towards the final consumer, but at this moment the focus is on the industry. Both systems have national offices in the Netherlands and other countries to increase their brand awareness. They are responsible for the national information supply, its main goal is to increase the awareness of its own certification scheme.

Figure 1: FSC Logo  
Figure 2: PEFC Logo
6. Market Analyses

The market analyses will give a complete overview on the market for sustainable certified oak flooring. First an internal analyses is made and afterword’s the market is described. At the end the competitors on this sustainable market are described by an SWOT analyses.

6.1 Internal analyses

The internal analyses is done to give a good company description. Aspect like; Mission, Vision and Value strategy are mentioned in the first part of the Internal analyses. After the first part, the marketing mix is mentioned to complete the Internal analyses of the HIS.

6.1.1 Mission
Subcontracting and production company Hout Industrie Schijndel(HIS) obliges itself to carry out its activities in a social responsible and profitable way and strives to produce as environmental friendly as possible. HIS want to encourage the use of sustainable timber by taking sustainable certified timber in their flooring assortment. Sustainable production is very important for the HIS and they are convinced that this will distinguish themselves from their competitors. An outstanding example for this was the opening of the first timber fired energy plant in Western- Europe back in 1998. This was so special that HM Beatrix, opened the energy plant.

6.1.2 Vision
‘Providing the production of the highest quality timber products for their own floor production as for their subcontractors, and this in a sustainable entrepreneurship.’

6.1.3 Value strategy
According to the model of Treacy & Wiersma*, a company should perceive at least one value strategy. In the model three types of value strategies are identified:
Product Leadership
Operational Excellence
Customer Intimacy

In order for a company to perceive a certain value strategy the company should reach a minimal level for each or some of the strategies. If the value strategy is classified for HIS it is clear that all three value strategies are important for the HIS. The strategy that is the most important for HIS is Operational Excellence, as HIS is an production industry the way they operate and how efficient they are will depend their success. Beside this the HIS want to be a product leader in product development. HIS has introduced several new types of floors and several innovating finishes. This product development is especially stimulated in difficult times such as these. For their subcontracting you could also say that they pursue product leadership. New machines and new tools for expending their activities is common within HIS. Customer Intimacy can be identified because of the various demands that customers can place. The HIS has a wide variety of standard tools, but if there is a special request with their subcontracting as for their floor production they can make it according to the customers specification. The HIS is mostly working with a few big and regular customers, but smaller customers aren’t neglected and they will get the same treaty as their big customers.

6.2 Marketing mix

To strengthen the internal analyses and get a better marketing view of the HIS the “4P’s model”* is used. This will also give a good overview of the strengths and weaknesses of the HIS, which can compared later on in the report.

6.2.1 Product

HIS offers a very wide range of oak floors, this range is divided into three types of floors namely; Avance, In-Between and Chapel floors. These three floor types can be made with all imaginable floor finishes. This combination of products result in a satisfied customer as everything can be made to their wishes. The 3 types of floors are created to supply all kind of segments in the market, but the main aim lies at the higher segment. The floors are put in the market as the highest end quality, in Holland produced floors. Beside a good quality product the service is an important part of the floors produced by the HIS. HIS strives to give the highest service as possible. A proof for this striving is the reward for “Best timber industry for 2009”, elected by the readers of the leading timber magazine in the Netherlands; Houtwereld. The quality work and the service provided them this prestigious reward.

6.2.2 Price

The pricing strategy is according to their high end quality strategy as the HIS is aiming at the higher segment, their price is in general higher then their competitors. The pricing in the floor branch is rather competitive, there are a lot of price fighters active in the market. But the products they sell are of low quality and produced in China. Chapel is the finest quality product of the HIS and for this product the customer has to pay, if they are not willing to pay a premium, Avance is advised. This is of course also a high quality product but this product is thinner and smaller then the Chapel floors and is cheaper compared to chapel. Advantage of this pricing strategy is that the customer gets what is want for a suitable price.

The products are only sold to other companies so they only do Business to Business. The main customers are flooring companies/floor retailers which do sell their floor direct to the customers and sometimes lay the floor.

6.2.3 Place

The whole process of their oak flooring is centered in Schijndel the Netherlands. There the production and the sales takes place. For the sale of the flooring several people are active within the HIS. The HIS is an international operation company and has several customers abroad, mainly in Europe. Schijndel is strategic located in the South-East of the Netherlands with good connections to the Highways. The company never moved to a new location so its also an advantage that all the tradition is based in Schijndel. HIS has its own lorries for the transport of their floors to the customers. But its also possible for the customer to pick up their floor.

6.2.4 Promotion

HIS promotes itself through various methods. Advertisements are put into 2 magazines, Houtwereld for their subcontracting and in Parketblad for their oak flooring. These advertisements are placed on a regular base. Beside the advertisement, HIS sponsors several events which have special attention to sustainability. On the website of the HIS all the information is supplied about their activities. For prospects and existing customers its possible to order samples of the oak flooring with all kind of finishes. Once in a while a survey is held to verify the customer satisfaction. When new products are developed the existing customers

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*The marketing mix, Principles of Marketing, 4th European Edition, Page 34
will get a mailing by post to inform them about this new product. Another important promotional tool for the HIS is to apply at trade fairs, this is only done by the flooring division. National and international exhibitions are attended to maintain connection with existing customers and meet new potential customers. The main goal of this promotion, is to strengthen existing contact, generating new contacts is a second.

6.3 Branch analysis for sustainable certified oak flooring

To get a good view on the branch for certified oak flooring a inquiry was held under all the customers of the HIS. The main aim of this inquiry was to find out how the market for sustainable certified flooring is at this moment and what the expectations are for the future. This inquiry was send to over 100 customers, the response was rather low, 38 customers sent the inquiry back. But despite we had not a 100% response rate we still got enough information from the branch about sustainable certified flooring. First the results of the questions are given and after that a conclusion is made to see how the market is today and in the future for sustainable certified oak flooring. The official inquiry you can find in the appendix.

1. Are you familiar with the following certificates?
   a. FSC 100% YES
   b. PEFC 47% YES

Everyone was familiar with FSC, we got a 100% ratio. With PEFC it was a different story, 47% was familiar with PEFC and 53% was not. This supports the conclusion that is given in chapter 5 where is told that FSC has done a much better job in marketing and promotion. Due to this reason they are better known then PEFC.

2. What is the percentage oak that you sell of your total annual turnover?
   a. 0-20% 0%
   b. 20-40% 0%
   c. 60-80% 65%
   d. 80-100% 35%

The above question showed that at this moment its really a oak market. 65% answered C, and 35% answered D. This means that there are no customers of the HIS that sells less then 60% of their annual turnover in oak. Species that make up the rest percentage where also asked, these species are; Beech, Walnut, Wengé, Merbau, Afzelia and Jatoba. This high percentage could be explained that the HIS only sells oak flooring, and so their customers will probably also sell mainly oak. But being at the Parket Vakdagen in Gorinchem, I asked several manufactures which specie they sell the most and everyone answered me this was oak.

3. Do you sell or did you sold floors with sustainable certificates?
   a. Yes 76%
   b. No 24%

76% of the questionnaires answered yes on the question if they sell or sold sustainable certified floors. This is a higher percentage then I expected, this is a positive thing because almost everyone handled with sustainable certificates and even sold this kind of flooring.
4. With which sustainable certificate did you sold the flooring?
   a. FSC 85%
   b. PEFC 15%

Again FSC is the one which is favorite by the customers of the HIS and by the customers' customers. The species that consist the 85% are mainly tropical hardwood species, the species that are sold with PEFC where mainly European soft and hardwood species.

5. What is the percentage of sustainable certified flooring of the total annual turnover? 23.90%

This 23.90% is not quite accurate, as some of the questionnaire had a very high percentage like 75 and 80%. These were exceptions, as most of the questionnaire answered around 1-15%. So its better to keep the percentage of sustainable certified flooring of the total annual turnover between the 1-15%.

6. Were there customers which specific asked for sustainable certified floors?
   a. Yes 70%
   b. No 30%

This is also a positive figure, as this means that customers specifically searching for sustainable certified floors. Beside the HIS getting some demand for sustainable certified floors the customers of the HIS are getting some demand as well for it.

7. Which sustainable certificate is demanded the most by your customers?
   a. FSC 88%
   b. PEFC 12%

Again the confirmation that FSC is certainly the most demanded certificate at this moment. This has just to do with their marketing and promotional success.

8. Where lies your preference in sustainable certificate?
   a. PEFC, cheaper then FSC but less known 8%
   b. FSC, more expensive then PEFC but better known 46%
   c. Both PEFC and FSC, choice at the customer 46%

This is an important question, as here we make a statement for the customer. They can make a certain choice and this choice has a behind lying thought. As this are the three possible strategies the HIS can follow. Expected was that the customer would choose for C, but the results show that there is also a big percentage that wants to have only FSC. Only 8 percentage wants to offer only PEFC.

9. Are there enough suppliers of sustainable certified flooring?
   a. More then enough 13%
   b. Sufficient 60%
   c. Insufficient 27%
   d. Largely inadequate 0%
This question is to see if the customer see opportunities for the HIS to get into this business, and to see how big the concurrence is. As you can see the overwhelming part says that there is sufficient supply, another part says that there is insufficient supply. Remark is that some of them see the HIS already as a supplier of sustainable certified flooring. The following question was which companies can supply you sustainable certified floors. The 2 companies which were regularly mentioned were; Lieverdink and Inpa Parket. These 2 companies will be analyzed in the Competitor analyzes.

10. What is the current demand for sustainable certified flooring? 6%

This 6% mentioned for the current demand for sustainable certified flooring is a general shared figure. The figures mentioned by the customers where all close together, making this figure quite reliable. Of course there where some differences between the customers but, there were no extreme causes, making the figure reliable.

11. Do you expect growth of the demand for sustainable certified flooring?
   a. Yes 70%
   b. No 30%

A big percentage of the questionnaires expecting a growth in the demand for sustainable certified flooring. They expect this because the use of sustainable materials is an hot item these days, and will only be more in the future. The ones who think there will be a growth in the future think about an average growth of around 21% for the coming 5 years. This is based on the following up question which the ones who had answered “Yes” had to answer.

12. Do you want to sell (more) sustainable certified floorings in the future?
   a. Yes 76%
   b. No 24%

Again the biggest part of the questionnaires wants to sell (more) sustainable floorings in the future. The ones which don’t want to sell, where asked why they don’t want to sell. Some answers on that question are; to little demand from customers, to many rules to sell the product and price difference. The second reason is remarkable because it is not necessary to have many rules for a flooring retailer.

13. Are your customers prepared to pay more for a sustainable certified floor?
   a. Yes 12%
   b. Probably yes 35%
   c. Probably no 35%
   d. No 18%

Its remarkable that even in bad times like these there are people who want to pay more for the same floor, as the only difference is a certificate. This could be seen that the trend of sustainable products is still present. The percentage of people saying yes to be prepared to pay more could be certainly higher because some of the customers say that, “at this moment its impossible to sell the same products for a higher price, because the final consumer will choose for the cheaper option”. So if there is no economical crisis the percentages of “YES” will be higher. The biggest percentage lies within the middle, this means that the 35% which says “Probably no”, could be persuade to say yes and buy a sustainable certified floor which has a higher price.
14. How many is the final consumer willing to pay extra for a sustainable certified floor?
   a. 0-2%  50%
   b. 2-6%  33%
   c. 6-10% 17%
   d. 10-15% 0%

The majority of the final customer is willing to pay a small extra for the certified flooring at this moment. A price raise of over 10% is unacceptable.

15. Are you willing to pay extra for a sustainable certified floor?
   a. Yes  30%
   b. Probably Yes  30%
   c. Probably No  30%
   d. No  10%

This result is also remarkable as the majority of the customer of the HIS is willing to pay an extra for the certified floor. Only 10% don’t want to pay extra, this is important information as an extra fee for sustainable certified floor is by this accepted.

16. How many are you prepared to pay more for an sustainable certified floor?
   a. 0-2%  46%
   b. 2-6%  54%
   c. 6-10%  0%
   d. 10-15%  0%

The amount they want to pay more is less then the final customer want to pay extra, possible reason for this is that the floor retailer also want a small extra margin for selling the sustainable certified flooring. A certain problem occurs here, as the sawn product for FSC is 15 and 20% up. This doesn’t fit in what the customer want to pay. For PEFC its possible to fit this in as PEFC will be around 2% more expensive. Possible solutions for this in the future is that there will come more FSC oak on the market so that the 20% premium can go lower. Other expectations are that if the customer really want to have FSC they will accept the higher price of 15-20%.

**Conclusion of the enquiry**

The conclusion of this inquiry is that the sustainable certified floors is in its children footstep. There is demand for sustainable certified floor at this moment, but that demand is rather small. At this moment the gross sustainable certified flooring is made out of tropical hardwood species, certified oak flooring is not that common. This could be an opportunity as there is demand for certified oak flooring. FSC is at this moment the number one sustainable certificate known by the final customer, but customers of the HIS also see possibilities for PEFC to offer as a cheaper option for FSC. Demand for sustainable certified flooring will grow with around 20% in the coming 5 years according to the questioners. This is also the reason why the floor retailers want to sell more sustainable certified floors, because they think the demand will grow. The retailers accept a small price increase, but this price increase is hard to account for in the current economical situation.
6.4 Competitor analyses

There are several companies which can supply sustainable certified flooring, this information was gathered during the Parket Vakbeurs in Gorinchem. In this trade fair all the important manufactures from the Netherlands and some companies from Belgium were represented. After questioning it became clear that some companies could supply sustainable certified flooring, but this was not their regular business. Almost no one advertised with FSC or PEFC except Inpa Parket. They were the only one who had FSC logo’s on their monster boards and used the logo for promotional use.

Beside Inpa Parket the following firms can supply sustainable certified flooring; Lieverdink, T&G Wood, Houtmeester, Woodpecker, Oosterlinck, Alberts Parket and Kerkhofs Parket. The questioning is if these companies are certified, in most cases they are not. So this means someone else produce the floors for them on demand, and they will sell them on demand. The 2 real manufactures who do have a certificate are Inpa and Lieverdink. These two will be analyzed more thoroughly by a SWOT analyses.

6.4.1 SWOT

Before we do a SWOT analysis on the main competitors of the HIS on the sustainable certificated market we will make a short SWOT of the HIS itself.

<table>
<thead>
<tr>
<th>Strenght</th>
<th>Weakness</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>High quality floors</td>
<td>Rely on oak flooring</td>
<td>Become market leader in sustainable certified oak flooring</td>
<td>Trend for oak flooring will go over into another specie</td>
</tr>
<tr>
<td>Whole production process in own account. Regular customers base Flexible Have a strong assortment for every demand</td>
<td>The production of their flooring has to be combined with their subcontracting Problems with delivery Lot of different finished can cause mistakes</td>
<td>Expend assortment with other species Develop engineered flooring</td>
<td>Production cost will become to high</td>
</tr>
</tbody>
</table>

Table 6: SWOT analysis of HIS

**Inpa Parket**

Inpa Parket is the best known company in the parquet branch for supplying sustainable certified flooring. They do big affords to promote their certified floors and call themselves the market leader in sustainable certified flooring in the Netherlands. Their assortment mainly consist out of tropical species which they get from their own FSC certified concession in Bolivia. They also have some production facilities in Paraguay. Beside the tropical hardwood species Inpa has a small range of oak products which they import from China.

<table>
<thead>
<tr>
<th>Strenght</th>
<th>Weakness</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well known in the market for their sustainable certified assortment Has its own FSC certified forest concession in Bolivia Good market knowledge</td>
<td>Multi layers not 100% certified. Only top layer is certified. Species from their certified forest concession are quite unknown. Does not produce its own oak flooring</td>
<td>Produce oak flooring with sustainable certificate Get their multi layer 100% FSC certified Law for only use sustainable certified tropical timber for</td>
<td>Competition from other manufactures, if the market for certified flooring grows. Tropical timber falls out of fashion.</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>about sustainable certified floors Produces its own floors in South-Amerika</th>
<th>floor production.</th>
</tr>
</thead>
</table>

Table 7: SWOT analysis of Inpa Parket

**Lieverdink Parket**

Lieverdink is one of the market leaders in the parquet branch. They are a rather traditional manufacturer and their assortment mainly consist out of Europeans species. They have a strong base of regular customers which are keen on their quality. These customers are big retailers and smaller parquet companies. Lieverdink supplies a lot of 6 and 9mm thick floors. They also offers a wide range of finishing possibilities.

<table>
<thead>
<tr>
<th>Strenght</th>
<th>Weakness</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has a long tradition and a steady group of customers</td>
<td>Has a very wide range of activities, this can be seen as a advantage but also as a disadvantage.</td>
<td>Expand their production with the use of only certified timber Become a well know certified player in the market. Law for only use sustainable timber for floor production</td>
<td>Grow to big, so that small inquiries cant be fulfilled Competition from low labor cost countries, such as china.</td>
</tr>
<tr>
<td>Supplies to big retailers and fulfill sustainable demands for other companies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has both FSC and PEFC certificate. FSC for tropical hardwood species and PEFC for European oak.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 8: SWOT analysis of Lieverdink Parket
7. Application of certification

The certifications schemes are described, so now we will see which certifications apply for Hout Industrie Schijndel (HIS). This is done by looking what the requirements are by them and by the certifications schemes.

7.1 Mandatory of certification

The first thing to look at is when certificates are really required. Under this certificates we mean the Chain of Custody (COC) of the different certificates. To be COC certificated its means the Chain is closed and that the timber which comes from certified forest can be traced and not mixed up with non certified timber. This is the main goal of COC. The information was supplied by FSC and PEFC. The FSC Standard for Chain of Custody (COC) provided by FSC Netherlands, describes the following;

"Why certification of the Chain of Custody?"
When a company wants to process or sale timber from a FSC-certified forest, or bring it to the market as timber with the FSC-logo then the company has to be FSC COC-certified. This also applies for all the companies ahead in the chain.
Exception are companies that have the timber or the timber products not in own legal possession. For example a timber agent, but only if the timber agent doesn’t invoices to the purchaser of the timber. A special place is for the floor retail: a floor retail traders selling to the consumer doesn’t have to obtain the COC. But only if the products are prepackaged and labeled. For every process a certificate is required. Repackage counts also as a process and a COC is required. Only then the guarantee can be granted that the timber or the timber products are from a FSC-certified forest."

According to this summary, the main influencing factor is the legal ownership of the product. Maybe this text, attends that a timber industry like the HIS have to have a COC when they do processing on FSC material. But for their subcontracting this is not the case as they don’t take the legal ownership of the timber. But the HIS is also producing solid oak flooring, and this is of course a different story. As they take legal ownership of this oak timber they have to be certified if they want to produce oak flooring with a sustainable forest certification, like FSC or PEFC.

For the subcontracting of timber with a certificate , the HIS has to undersign a contract saying that they are doing their best efforts to avoid that FSC/PEFC and NON FSC/PEFC are mixed up. This type of contract is required if the subcontractor doesn’t have a FSC or PEFC Chain of Custody. Items that are mentioned in this contract are;

Products that are subcontracted to a third party may never obtain legal possession by this third party.
The certifying body must, when required, get access to this third party to control the products from the legal owner.
The third party may never subcontract the work to a fourth party.
The FSC/PEFC goods will always stay clearly recognizable as such during the whole process. This products will never be mixed with NON-certified products.
On the supplied invoice the third party will clearly specify the certified products by description and amount.

*FSC Standard for Chain of Custody Certification
**An example of this contract is added in the appendix
7.2 Product range of FSC and PEFC

Certified products are available in all different kind of products. Of course the product with FSC or PEFC starts with timber logs that are harvested from sustainable certified forest. So where the products is coming from depends on demographical location the forest is certified. FSC has mainly tropical countries, but there are also some FSC concession in Europe. PEFC has mainly European concessions. The products needed for the HIS consist of sawn oak timber. At this moment their oak timber is mainly coming from Eastern Europe. According to FSC and PEFC Nederland there are concessions in Eastern Europe which supply sustainable certified oak. In the suppliers evaluation some suppliers will be contacted and asked where they get their certified oak from in the case they can supply sustainable certified oak.

7.3 Suppliers evaluation

To get a good idea about the current supply of sawn oak timber with FSC and PEFC certificate, several timber traders in the Netherlands where contacted. These timber traders were selected on their assortment. Only traders which have oak as their main business where questioned. A total of 8 traders where selected, the first contact was to reach them by email. Only 2 companies replied on this question list, in which one of them said they didn’t want to cooperate to this research because they think the information was to personal and is being seen as secret business information. Because of the response of the email was so low, another method was being used to get information from the remaining oak suppliers. This was done by calling the companies and ask the questions direct to them. This method got a much better response, and useful information was gathered. It is important to say that the HIS doesn’t buy their timber from one of these timber traders, but despite this it gives a good overview on what availability is and who could supply from their stock. This information could be used as a kind of reserve, when the HIS can not get their hands on certified oak they could contact the oak suppliers which can supply according to this interview.

The information gathered will be described below per firm. So this will give a good idea on what the different firms are thinking and who can supply what. After that there will be a short conclusion. Key questions of theses interviews where; Do they supply certified oak timber? Which certificates? How is the supply of certified oak to them? Price differences? And do they get demand for certified oak from the market at this current time? In the appendix the contact details are described.

Van de Voort Houthandel en Zagerij

- Do supply certified timber
- FSC and PEFC from Germany or France
- Dimensions are according to the demand, and are ordered on demand so not on stock
- Growing supply of PEFC and decreasing supply in FSC
- There is not a really big grow in supply of certified oak because there is no increase of demand for certified oak
- Hopefully in the future everything will be certified
- Price difference between FSC and NON-FSC is around 15-20%
- Price difference between PEFC and NON-PEFC is around 5%
- So difference between FSC en PEFC 5-10%
- They supply once in a while certified oak to customers
Houtimport v/d Hoogenhoff

- Can possibly supply FSC and PEFC certified oak for floor production
- Their non-certified oak is coming from France, Poland and Croatia
- Certified oak is more expensive than non-certified oak, the difference in price between non and certified oak he didn’t want to mention.
- The demand for certified oak is sporadic, customers don’t want to pay the extra fee for FSC and PEFC oak timber.
- Hoogenhoff mention; “European forest management is a good system, so why this certification?”
- Hoogenhoff is not aiming at the flooring industry but can supply certified oak on demand.
- Hoogenhoff isn’t FSC or PEFC COC certified, so the question is how they want to supply certified oak.

Marius van den Berg

- Marius van den Berg is not supplying FSC or PEFC certified oak timber.
- The reason why they don’t trade in certified oak timber is because the market doesn’t require certified oak.
- They only species they sell to the floor industry with FSC certificate is tropical hardwood species.

Wicherson

- Is supplying almost no certified oak timber for the floor industry, the reason for this is that there is no demand.
- Certified oak is better available in PEFC than in FSC
- PEFC is coming in big volume from France.
- Supply in FSC oak timber is very little; little supply is available from Croatia and Slovakia.
- The problem in Eastern Europe is that there are quite a number of certified forest but the sawmills aren’t certified. So this results in a disruption of the Chain of Custody.
- The price difference he mentioned is around 15% up for FSC.
- According to Wicherson PEFC is cheaper in production and certification than PEFC, but still there is a premium for the trade.
- Wicherson is expecting an increase in demand for certified oak timber, when this demand is there he wants to deliver this market.
- Wicherson is able to deliver at this moment as they are FSC certified.
- Wicherson did know a lot about the origin and market situation of the sustainable certified oak timber and was willing to share this information.

Van de Stadt

- They can easily supply certified oak from stock, with dimensions for the floor industry.
Final Thesis Barthel van Dinther

- Oak timber with PEFC certificate is no problem for them to supply, but oak with FSC is harder to get, because of the limited supply.
- PEFC is most of the time with the “pure” label, and FSC most of the time with the “mixed” label.
- Oak timber with PEFC certificate has almost no price difference with non-certified timber. The percentage is between 0-3%.
- Oak timber with FSC, is certainly more expensive due to the lower supply. The difference in price is around 25% up.
- “FSC Pure” is more expensive than “FSC Mixed”.
- Van de Stadt can easily supply on the current demand.
- There is a quotation every now and then, which is delivered by them.

The timber traders which didn’t response or didn’t want to answer the questions are:
- LTL woodproducts
- Voorderhaak
- Houtex

Conclusion suppliers evaluation
There is a big difference between the oak suppliers in the Netherlands concerning their point of view on the supply of sustainable certified oak timber. This difference in opinion results in a variety of supply between the oak timber merchants. Most of them can supply, but only if there is a real inquiry. Only Van de Stadt says that they deliver on a regular base certified oak to their customers and have certified oak on stock. FSC is demanded the most but in reality the supply of FSC certified oak is low. PEFC certified oak is available on a bigger scale. It is not very easy to get some certified oak timber in the Netherlands, but its also not impossible. If bigger volumes are required a lead time should be counted for. But in general if you know where to search you will find sustainable certified oak timber in the Netherlands. The difference in supply is for a certain part the reason FSC is more expensive then PEFC. FSC certified oak is around 20% more expensive then NON FSC, then there is also a difference between FSC PURE or FSC MIXED. The mixed will be around 15% more expensive and the pure will be 20% more expensive then NON-FSC certified timber. The price difference for PEFC is smaller, here there is not a difference made, between MIXED and PURE. The average price difference between PEFC and NON PEFC oak timber is around 2%.

Underneath you can find a table 8 which gives an overview on the new prices for the certified timber. Also the price for m2 is found. The average price of NON-certified oak is at this moment around 550,- euro per m3. The average m2 out 1 m3 is around 38m2, this is based on 26mm thick boards.

<table>
<thead>
<tr>
<th></th>
<th>Non Certified timber</th>
<th>PEFC certified timber</th>
<th>FSC Pure</th>
<th>FSC Mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per 1m3 raw sawn oak</td>
<td>550,-</td>
<td>550*1.02 = 561 euro</td>
<td>550*1.20 = 660 euro</td>
<td>550*1.15 = 632.50 euro</td>
</tr>
<tr>
<td>Difference in Euro</td>
<td>561-550 = 11,- euro</td>
<td>660-550 = 110,- euro</td>
<td>632.50-550 = 82,50 euro</td>
<td></td>
</tr>
<tr>
<td>Timber cost for 1m2</td>
<td>550/38=14,47 euro</td>
<td>561/38=14,76 euro</td>
<td>660/38=17,36 euro</td>
<td>632.50/38 = 16,64 euro</td>
</tr>
<tr>
<td>+/- 38m² per m³</td>
<td>Difference in Euro</td>
<td>14.76-14.47= 0.29 Euro</td>
<td>17.36/14.47= 2.89 Euro</td>
<td>16.64-14.47= 2.17 Euro</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------</td>
<td>------------------------</td>
<td>------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Order 50m² Difference</td>
<td>50*0.29= 14.50 Euro</td>
<td>50*2.89= 144.50 Euro</td>
<td>50*2.17= 108.5 Euro</td>
<td></td>
</tr>
<tr>
<td>Order 25m² Difference</td>
<td>25*0.29= 7.25 Euro</td>
<td>25*2.89= 72.25 Euro</td>
<td>25*2.17= 54.25 Euro</td>
<td></td>
</tr>
</tbody>
</table>

Table 9: Overview on new prices for certified timber

The price difference for PEFC would not be too difficult to explain to the customer. The price of FSC would be much more difficult as this amount is considerable higher. This higher price has to be calculated to the customer, as it is not liable to put something of the margin. There should be even a higher margin on certified products.
8. The process of certification

In this chapter the actual certification process is described. This is one of the most important parts of this report. The process I describe is done by me to get the HIS certified. So it will be an applied description of the process.

8.1 Procedure

If its clear that there is a need for certification the procedure is started. This begins by looking at who can do the certifying of the company. This can only be done by several organizations pointed out by FSC and PEFC. More about these organizations is mentioned in chapter 8.2. When the organizations have given their tender the best offering organization is chosen. Then the underneath actions are followed:

1. Undersigning the tender from the certifying body
2. Information concerning the certification is provided by the certifying body
3. Payment of the tender
4. Making sure that all the requirements are implemented
5. Intake audit by the certifying body
6. When needed adjustments have to be made
7. Settle formalities within the certifying body
8. Handout the certificate to the company

Now the most important steps of the procedure are mentioned in detail.

1. The agreement

In the agreement/application form there are some specific details asked to get the procedure started. Beside the common information like the name of the company and contact details they also require information specific for certification. These information is;

- Responsible persons in the companies activities
  - Functions related to the certification are asked; General responsible for the company, person who is responsible for the quality system, responsible for the timber flow, production, data management, labeling, purchase, transport and sale.
- Current certification status
- Possible other certificates in possession of the company
- Which type is demanded
  - 1 site certification
  - Multiple site certification
  - Group certification
- Training description
- List of certified suppliers
- List of subcontractors

It is of own interest to implement all the data as secure as possible, because this will contribute to a flow less process. Of course its not necessary to fill in all data, but these are
actually the basis of certifying and it will give the certifying body a good overview on how quick the certification can go. If not filled in the application form the information will have to be checked afterwards by the certifying body.

2 Information concerning the certification

When the invoice is send back, the certifying body will supply all the information needed to get the company ready for certification. This information consist of several documents. The most important document is the FSC Standard for chain of custody certification (FSC-STD-40-004 version 2-0). PEFC has also his standard which is; Annex 4 Chain of custody of forest based products. Although PEFC has its own standards the one of FSC is used as guideline. If you apply under the FSC standards you also apply on the PEFC standards as both standards are look a like. There are only 2 differences between the FSC and PEFC standards. The first point is 4.2.1.1 Management responsibilities. For the PEFC COC you have to have an public sustainability declaration signed by the director of the company. The other point is 4.6 of the Annex 4 Chain of custody of forest based products. This is about internal inspection and control, the organization has to have a annual internal audit and this report of the audit has to be reviewed and discussed by the management of the organization.

Other important documents are the label requirements and the rules for logo use. FSC and PEFC are very keen on keeping their brand name under protection. This is because they want to avoid by all cost that people who are not certified use their brand marks. Even a certified company needs approval by the certifying body to apply the FSC or PEFC logo on their product.

3 Payment of the tender

When the information is provided by the certifying body the company has to pay the tender. More about the cost of getting certified will be treated in 8.3.

4 Making sure that all the requirements are implemented

By the information supplied by the certifying body it is possible to apply under all the procedures and adaptations needed. To make sure the company is ready for certification there are several checklist available, some more clear then others. These are also made available by the certifying body and some are found on the internet. Internet itself is an important source of getting information and help. If the company don’t want to do the adjustments themselves and want more guidance its possible to contact some consultant companies. They could help with the process of being ready for auditing.

If the company is ISO 9001:2000 certified, this is a big advantage and due to this certificate ist easier because all the processes in the company are already described. In general the preparation for certification can be done by the company itself, but it just cost time and time is money in a company.

For certifying the HIS I made a special certification manual, in this manual I described the several processes required for the certification. It also features the special documents needed. The content of this manual is mentioned below.

1. Sustainability declaration
2. Organization structure
3. List Sub-contractors
4. Sub-contract FSC/PEFC
5. List of relevant responsibilities within the company
6. Retention time of relevant documents
7. Training data HIS
8. Certification training HIS
9. Instruction certified material handling
10. Production process oak flooring
11. Important procedures special for certification
12. Product groups HIS
13. List of suppliers with their COC
14. Summary annual volume certified

It is not a requirement to have such a manual, but the documents mentioned in this manual are required. So the manual makes the certification easier, as all the relevant documents are bundled together and gives a good overview.

5 Intake audit by the certifying body

When the company thinks its ready for certification, the audit will take place. The audit will take place on location and is done by the certifying body. This initial audit will take half a day, depending on the size of the company and the companies activities. The auditor will check if all required documents are present, after this he will take a look on the production site and looks if there are any risk sites where mix with non certified products is high. After the initial audit it is obliged that they come back every year to do an annual audit.

6 When needed adjustments have to be made

After the initial audit, the certifying body makes an report from the audit. In this report its described if the company is according to the standards. If not, the problems are described as well. Most of this problems can be solved by making some extra documents, but if there are some problems on the production site it could be possible that the auditor have to come back.

7 Settle formalities within the certifying body

If the problems are solved and the company is totally according to the standards the certifying body will contact the certification organizations to make up all the documents.

8 Handout the certificate to the company

When all the documents are processed, the company gets it certificate. From then on, the company is part of the COC and can produce and trade in certified products.

8.2 Certifying bodies

As mentioned before not everyone can just certify companies under FSC and PEFC. There are only a few organizations in the Netherlands which can certify companies for the COC. These organizations are certified direct by FSC and PEFC. It is also possible to be certified by
organizations abroad, in some cases this could be interesting, but most of the time this is more expensive. In the Netherlands there are a total of 4 certifying bodies. These 4 are shortly described underneath, contact details can be found in the appendix.

**Control Union Certifications**
Control Union Certifications offers a wide range of certifications programs. Their goals is to act as a one stop shop for all certification programs. Their range of certificates is mainly focused on the Forest-Agricultural area.

**SCS in the Netherlands**
SCS is the abbreviation of Scientific Certification System. Its an international operating organization with a regional office in the Netherlands. They are a global leader in independent certification of environmental, sustainability, food quality and food purity claims. Originated in the United States, it want to expand its global services. In the Netherlands their office is in Hilversum. SCS only certificates FSC, for PEFC they have a working agreement with DIN CERTO, a German certification body.

**SGS Netherlands**
SGS is an international operating company specialized in inspection, verification, testing and certification. SGS has over 59,000 employees, 1000 offices and is considered as the leading company in its activities. With 21 regional offices in the Netherladns, SGS is a big player in the market. The area they are active on are; Agriculture, Automotive, Consumer testing, Environment, Goverments and Institutions, Industrial, Life science, Minerals, Oil Gas and Chemicals and Systems & Services certification.

**Stichting Keuringsbureau Hout (SKH)**
SKH is the newest FSC and PEFC certifying body in the Netherlands. They acquired their FSC and PEFC certificate in September 2009. SKH is a Dutch company with its main activity in certifying timber related companies. As a well known company in the Dutch timber branch, SKH is certifying under several certificates schemes like; KOMO, ISO 9001, CE and other quality certificates. For FSC and PEFC, SKH is aiming at customers in the construction branch and carpentry industry as they have already good contacts with these companies true their other certificates.

**8.3 Cost analyses**

To get a good idea about the cost of certification, quotations where asked from all 4 certifying bodies. From this comparison model the differences in quotations are made clear. The conclusion of this table is that there is a big difference in the quotations and that SKH is the cheapest at this moment. A reason for this could be that SKH is the youngest under the certification bodies. To be cheaper then the rest they try to achieve more market share. Because the HIS has good experience with SGS from the past they were asked to make another quotation to become more competitive. But unfortunately they were still one of the more expensive organizations and didn’t come close to the quotation of SKH.
In the appendix you can find the table that shows all the cost involved within the certification process. But because the cost come back every year and once in 5 years the certificate has to renewed, its good to have an overview from the cost for the first 5 years. Also some certification bodies have expensive first audit but the annual audits are cheaper, so its required to have such a overview. This overview you can find below, first only FSC costs are described and then only PEFC cost and finally cost for the first 5 years FSC and PEFC. Cost for only PEFC are harder to determine, because in most cases the prices of PEFC is in correspondence with combination discount. To calculate back what only PEFC would cost, the prices of FSC are taken, as these are without combination discount.

<table>
<thead>
<tr>
<th>Name of the certifying body</th>
<th>Only FSC</th>
<th>Stichting Keuringsbureau Hout (SKH)</th>
<th>Control Union Certifications</th>
<th>SCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs 1\° Year</td>
<td>1890,- + 718,- = 2608,-</td>
<td>1200,- + 575,- = 1775,-</td>
<td>1600,- + 575,- = 2175,-</td>
<td>1700,- + 575,- = 2275,-</td>
</tr>
<tr>
<td>Costs 2\° Year</td>
<td>1450,-</td>
<td>1375,-</td>
<td>1425,-</td>
<td>1425,-</td>
</tr>
<tr>
<td>Costs 3\° Year</td>
<td>1450,-</td>
<td>1375,-</td>
<td>1425,-</td>
<td>1425,-</td>
</tr>
<tr>
<td>Costs 4\° Year</td>
<td>1450,-</td>
<td>1375,-</td>
<td>1425,-</td>
<td>1425,-</td>
</tr>
<tr>
<td>Costs 5\° Year</td>
<td>1450,-</td>
<td>1575,-</td>
<td>1425,-</td>
<td>1425,-</td>
</tr>
<tr>
<td>TOTAL first 5 years</td>
<td>8803,-</td>
<td>7475,-</td>
<td>7875,-</td>
<td>7975,-</td>
</tr>
</tbody>
</table>

Table 10: Overview on the cost for the first 5 years for only FSC

<table>
<thead>
<tr>
<th>Name of the certifying body</th>
<th>Only PEFC</th>
<th>Stichting Keuringsbureau Hout (SKH)</th>
<th>Control Union Certifications</th>
<th>SCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs 1\° Year</td>
<td>1890,- + 600,- = 2690,-</td>
<td>1200,- + 600,- = 1800,-</td>
<td>1600,- + 600,- = 2200,-</td>
<td>1700,- + 600,- = 2300,-</td>
</tr>
<tr>
<td>Costs 2\° Year</td>
<td>1675,-</td>
<td>1400,-</td>
<td>1450,-</td>
<td>1410,-</td>
</tr>
<tr>
<td>Costs 3\° Year</td>
<td>1675,-</td>
<td>1400,-</td>
<td>1450,-</td>
<td>1410,-</td>
</tr>
<tr>
<td>Costs 4\° Year</td>
<td>1675,-</td>
<td>1400,-</td>
<td>1450,-</td>
<td>1410,-</td>
</tr>
<tr>
<td>Costs 5\° Year</td>
<td>1675,-</td>
<td>1575,-</td>
<td>1450,-</td>
<td>1410,-</td>
</tr>
<tr>
<td>TOTAL first 5 years</td>
<td>9390,-</td>
<td>7575,-</td>
<td>8000,-</td>
<td>7940,-</td>
</tr>
</tbody>
</table>

Table 11: Overview on the cost for the first 5 years for only PEFC

In the 2 tables above, the outcome is rather surprising. According to the tables PEFC is more expensive by 4 of the 3 certification bodies. Only SCS is with PEFC cheaper then FSC, but this certification is done by DIN CERTO. PEFC came out higher because they have an higher annual remittance then FSC. The FSC remittance has to be paid in dollars, and PEFC in euro’s. This makes up the difference in the current exchange rate. Expectation is that if you
only want to be PEFC certified, they will cut in the quotation. But this is not verified, as in fact the certification work is the same as done by FSC.

<table>
<thead>
<tr>
<th>Name of the certifying body</th>
<th>SGS</th>
<th>Stichting Keuringsbureau Hout (SKH)</th>
<th>Control Union Certifications</th>
<th>SCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs 1st Year</td>
<td>3933,-</td>
<td>3175,-</td>
<td>3575,-</td>
<td>3834,-</td>
</tr>
<tr>
<td>Costs 2nd Year</td>
<td>2918,-</td>
<td>2375,-</td>
<td>2450,-</td>
<td>2835,-</td>
</tr>
<tr>
<td>Costs 3rd Year</td>
<td>2918,-</td>
<td>2375,-</td>
<td>2450,-</td>
<td>2835,-</td>
</tr>
<tr>
<td>Costs 4th Year</td>
<td>2918,-</td>
<td>2375,-</td>
<td>2450,-</td>
<td>2835,-</td>
</tr>
<tr>
<td>Costs 5th Year</td>
<td>3313,-</td>
<td>2775,-</td>
<td>2450,-</td>
<td>2835,-</td>
</tr>
<tr>
<td>TOTAL first 5 years</td>
<td>16000,-</td>
<td>13075,-</td>
<td>13375,-</td>
<td>15174,-</td>
</tr>
</tbody>
</table>

Table 12: Overview on the cost for the first 5 years for both FSC and PEFC

Table 12 gives the final cost if is chosen for FSC and PEFC certification. Here you can see the big differences between the certifying bodies. SGS is by far out the most expensive, this is mainly because they have some rather odd cost, like; Annual remittance to certifying body and Logo license + contribution logo rating. The other certifying bodies don’t calculate this cost or don’t mention this cost separately. SGS was asked why they calculate this cost and their answer was that service has its cost. For the logo license + contribution logo rating, they explain that they mention this separately to be as transparent as possible. By the other certifying body this is included in the price and not mentioned separately. The most questioning point is the annual remittance to certifying body, they explain the following; “Because we are a regional office from SGS Qualifor South Africa concerning FSC and PEFC certification we have to contribute a certain amount to maintain the auditing.” As this is an annual post, it makes SGS unattractive in price.

Another addition to say is that it could be very useful to do another quotation round after some years. This is because if you choose for a certain certifying body it isn’t binding. The company is free to change from certifying body as they wish. Financially this can be interesting to change from certifying body after some years. All depend from the new quotations.

8.4 Comparison/Evaluation certifying bodies

To give a good evaluation of the certifying bodies, the evaluation model is used. In this model its important to determine the decisive factors. Price is in the decisive factor in this case, which ways the most. Beside the price, service is the other factor. Service is difficult to determine, because there isn’t been much interaction. This service could be best evaluated when closely worked together. But despite this its still possible to evaluate the service from the several certifying bodies.

Price
The price of the certifying process is an important factor for the choice of certifying body. To compare the prices we take table 11 as this table gives the best overview on the cost for the first 5 years. Difference between the cheapest and most expensive certification body is 2925 euro for the first 5 years. SKH is the financial most attractive and SGS the one who is not financial attractive and the most expensive of the 4.

**Service**
Price is the most important influence factor, but service is also a factor influencing the final decision. Service is more seen as an extra in the decision. In general could be said that the service by all the 4 certifying bodies are the same. They all react by reasonable time by email and they all gave some information about the certification process. Differences are the level of information supply. Some of the companies have a rather quick response level, while others don’t have this. Another thing is that its not really clear who is the main responsible at the certifying body, and several person are. This makes it rather confusing, the 2 companies where this occurred where; SKH and SGS. At SCS it was also confusing and annoying that the certification of FSC and PEFC could not by done by the company itself.

**Conclusion**
The price differences between the certifying bodies where so high, that it was rather easy to make a decision as service was rated equally for all certifying bodies. SKH is by far the cheapest and was chosen by the HIS to certify their company. As told before the certification was guided by me and this experience was a welcome completion of my report.
9. Possible strategies according to the certification of oak flooring

In this chapter, 3 possible options are mention the HIS could do according to sustainable certify their oak flooring. Behind this three possible actions is a behind lying thought which represent a strategy. One of these strategies can be chosen by the HIS to certifying their oak flooring, or not certify their flooring. All the options have different consequences and possibilities. The HIS decided within the middle of my final thesis period they want to have both FSC and PEFC certificate. But this doesn’t mean other options weren’t possible. To get an independent outcome of the report I will describe all the three options.

9.1 Option 1: Get only FSC certified
The first option is to take only the FSC certificate. This option could be considered as in chapter 6 it came out that FSC is the number one asked certificate for the customers and by the final customers. By having this certificate they would be able to supply the biggest demand they will get in. The option of only taking the FSC certificate will be cheaper then taking both FSC en PEFC. Beside this they will have no extra cost on keeping different kind of certificated timber on stock. Conclusion; Only FSC will be cheaper and easier.

9.2 Option 2: Get both FSC and PEFC certified
The second option is to get both FSC and PEFC. This option will give HIS the opportunity to supply everyone who demand a sustainable certified floor. FSC will be put in the market as the highest end of certificate oak flooring. For customers who don’t want to pay a big premium PEFC is available with only a small premium of around +2%. Of course this is a big advantage to be able to supply everyone. There are extra cost, but fortunately there are good combination discounts possible by taking both certificates. This makes it more attractive but still there is a price difference of around 5 or 6 thousand euro’s for the first 5 year, in comparison with option 1.

9.3 Option 3: Do not certify the HIS
The last option is to not certify at all. This option has of course the biggest advantage that there are no extra cost, and business can continue as usual. This option should be chosen if there is to little demand for the future to cover the cost coming with certifying the oak flooring. Other reason for not certifying the HIS could be that for the certification someone has to be responsible for the whole FSC and PEFC process. This will also bring cost with it and will take valuable time from this person who will have already a busy job within the HIS.
10. Final Conclusion

This final conclusion will give a good overview on which option is the best choice for the HIS. All options have their con’s and pro’s. To get a clear overview of these pro’s and con’s they are put in a table underneath.

<table>
<thead>
<tr>
<th></th>
<th>Option 1; only FSC</th>
<th>Option 2; Both FSC and PEFC</th>
<th>Option 3; Do not certify the HIS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pro’s</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can supply the gross of the market for sustainable certified floors</td>
<td>Can supply the whole market of sustainable certified floors</td>
<td>- No extra cost</td>
<td></td>
</tr>
<tr>
<td>Is the cheapest option, will safe up to 1000 euro a year</td>
<td>Can always offer sustainable certified products.</td>
<td>No extra work for personnel</td>
<td></td>
</tr>
<tr>
<td>Is sufficient for the moment for the supply of sustainable certificated floors</td>
<td>To have both certificates the HIS is ready for the future</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus on selling FSC</td>
<td>Both certificates are good for the HIS image</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Con’s</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can’t supply the whole market</td>
<td>Higher annual cost</td>
<td>Can not supply the tenders where a sustainable certified floor is demand.</td>
<td></td>
</tr>
<tr>
<td>Can only offer a expensive sustainable product. With the change of selling nothing at all.</td>
<td>More work to get and keep the certificate</td>
<td>Do not differentiate itself from its competitors</td>
<td></td>
</tr>
</tbody>
</table>

Table 13: Overview on the Pro’s and Con’s of the 3 options

As could be seen in the above table there is enough to discuss about..

10.1 Recommendation

HIS should chose for option 2 and get FSC and PEFC certified. Through this choice they will be ready for the future. They will be able to act as a leader in sustainable certified oak flooring, being a pioneer if they act now. The startup will be difficult but the expectations are good that the market will grow substantial. FSC and PEFC are the only certificates that are of commercial interest. To serve the market on the best way possible you have to have both certificates. This will also give them the opportunity to supply a new growing market.

Having both FSC and PEFC will give HIS the option to follow certain strategy. FSC will be the highest end certification and is much more expensive then PEFC. This price change can be counted for the higher brand awareness of FSC. If the customer doesn’t want to have this premium they will be offered the cheaper PEFC. To first offer FSC with around 20% premium, then they could easily offer PEFC with a premium of around 3-7%. This means a good margin on the PEFC products, as the extra cost for the raw material is only 2%

At the end we should not forget that the HIS main activity is their subcontracting work. Of course for this work these certificates are not necessary, but to have both certificates it makes a statement to the customers who want to have their work done by the HIS. Having both
certificates it shows that the HIS is a responsible and sustainable company, beside this it make it more easy and reliable to get certified timber processed by the HIS as no contract is required anymore
11. Appendix

1. Project plan (Dutch)
2. Enquiry (Dutch)
3. List of internet sites used
4. List of Interviewed persons
5. List of questioned oak suppliers in the Netherlands
6. List of certifying bodies in the Netherlands
7. Tender overview of the certifying bodies (English)
8. Certification sub-contracting contract (Dutch)
9. FSC Standard for Chain of Custody Certification (English)
10. Probos: Markttaandeel gecertificeerd hout meer dan verdubbeld (Dutch)
Projectplan Afstudeer opdracht Barthel van Dinther
Bij Houtindustrie Schijndel

1. Kader en aanleiding van het afstudeeronderwerp

Door het toenemende besef van mensen dat het niet goed gaat met het milieu op onze aarde, komt er steeds meer vraag naar milieu vriendelijke en duurzame producten. Houtindustrie Schijndel (HIS) is zich hier ook van bewust. Zo zien zij dat er een toenemende vraag is naar duurzame producten en zien zij een toenemende toelevering van gecertificeerde producten die zij als loonwerk moeten bewerken. Omdat deze ontwikkeling vrij recent in een stroom versnelling is geraakt, is het bij de HIS duidelijk geworden dat er op vrij korte termijn moet worden uitgezocht hoe zij deze ontwikkeling op het duurzaam vlak kunnen volgen.

2. Probleembeschrijving / Analyse

Hout Industrie Schijndel is al geruime tijd bezig op duurzaam vlak, zo hebben zij een eigen energie centrale die 3500 huishoudens van elektriciteit voorziet. Zij doen dit door het verbranden van hun restproducten. Deze restproducten zijn o.a.; Zaagsel, krullen en overige stukken hout. Hiermee is de HIS een van de weinige houtverwerkingsbedrijven in Nederland die bijdraagt aan een duurzame energie voorziening in Nederland. Zoals al eerder beschreven komt er tegenwoordig meer en meer vraag naar duurzaamheid van producten. Dit komt zowel voor bij het loonwerk als bij de productie van eikenhouten vloeren. Chapel het merk van de HIS wil graag de mogelijkheid hebben om gecertificeerde producten aan hun klanten aan te bieden. Daarnaast wil men de eikenhouten vloeren ook meer gaan verkopen in het buitenland. Op dit moment word er al aan het buitenland verkocht, maar men wil dit gaan uitbreiden. Er moet daarom ook worden gekeken wat er in het buitenland belangrijk is op het gebied van certificering. Landen waar de HIS interesse in heeft zijn o.a.; Spanje, Italië, landen in Scandinavië, UK, Ierland en landen in Oost-Europa.

3. Onderzoeksvragen en Subvragen

Om tot een goede conclusie te komen is het van belang om goede onderzoeksvragen en subvragen te hebben. Deze vragen zorgen voor een duidelijke opbouw in de conclusie. Door te overleggen over het probleem is de volgende hoofdvraag naar voren gekomen;

Onderzoeken welke duurzame certificaten voor de HIS in de nabije toekomst nodig zijn om de markt in binnen en buitenland succesvol te kunnen blijven leiden?

Algemeen
- Welke duurzaamheids certificaten zijn er?
- Wat is de intentie van deze certificaten?
- Wat zijn de verschillen tussen de certificaten?
- Waar staan deze certificaten voor?
- Welke certificaten zijn van toepassing?
- Wat zijn de vereisten voor certificering?
Klanten / Markt
- Hoe groot is de vraag bij klanten?
- Hoe bereid zijn klanten om te kiezen voor gecertificeerde producten?
- Is een meerprijs voor gecertificeerde producten acceptabel?
- Hoeveel is men bereid meer te betalen voor gecertificeerde producten?
- Hoe is de bekendheid van certificaten in het buitenland?
- Is er verschil in landen zoals; Spanje, Italië, Scandinavië, UK, Ierland en Oost – Europa?

Toepassing
- Wanneer zijn deze certificaten nodig en wanneer niet?
- Welke producten kun je met welke certificaten krijgen?
- Zijn er voldoende leveranciers met voldoende voorraad?
- Hoe groot is het prijsverschil tussen gecertificeerd materiaal en niet gecertificeerd materiaal?

Proces
- Hoe kan men gecertificeerd worden?
- Wie kan er certificeren?
- Hoe is de aanvraag procedure?
- Wat zijn de kosten?
- Welke certificaten zijn daadwerkelijk nodig?
- Wat zijn de verschillen tussen de aanbieders?

4. Beoogde producten

Het beoogde eindresultaat is een scriptie waarin een duidelijk beeld word gegeven van welke certificaten in de huidige markt gewenst zijn. Deze certificaten worden uitgelicht en vergeleken. Daarnaast word er uitgelegd hoe men zulke certificaten kan bemachtigen en wat hiervoor nodig is. Uiteindelijk word een conclusie geschreven met eventueel een aanbeveling. De scriptie wordt maximaal 40 bladzijden van A4 formaat met een maximum van 25 bladzijden bijlagen. De scriptie moet op de eerste plaatst antwoord geven op de vragen van de HIS, daarnaast is het de bedoeling dat het ook interessant is voor buitenstaanders. Het product moet worden geschreven op HBO niveau, en het is de bedoeling dat de scriptie demonstreert dat het geen probleem is een probleem te analyseren, adequate gegevens te verzamelen, deze te ordenen, te interpreteren en op eigen wijze een bruikbare oplossing te bieden voor het gestelde probleem.

5. Projectorganisatie
- Beschrijving deelnemers
  Barthel van Dinther, 5de jaars student aan de Hogeschool van Hall Larenstein. Major in International Timber Trade.

- Begeleiding
  Intern Houtindustrie Schijndel:
  Job Jansen
  Jordi de Jongh

  Extern Hogeschool Larenstein:
John Raggers

- **Overleg intern en extern**
  Communicatie intern word direct besproken met de betrokken personen. Deze zijn altijd te bereiken.

Communicatie extern word ook direct gevoerd, maar dit gebeurd vooral via email. Als er zich grote problemen voordoen is het mogelijk een afspraak te maken om dit op te lossen.

- **Verantwoordelijkheden**

**Barthel van Dinther**
Zorgt voor een goed en degelijk rapport. Overlegt sociaal met zijn collega’s op de werkvloer en houd zich netjes aan de afspraken die binnen het bedrijf zijn gesteld.

**Job Jansen**
Begeleid Barthel van Dinther waar nodig. Geeft feedback op de verschillende afgeleverde producten.

**Jordi de Jongh**
Begeleid Barthel van Dinther waar nodig. Geeft feedback op de verschillende afgeleverde producten.

**John Raggers**
Controleert of word voldaan aan alle voorwaarden van de producten die tijdens het afstuderen moeten worden gefabriceerd. Daarnaast is hij een aanspreek punt bij het voordoen van problemen.

### 6. Planning

<table>
<thead>
<tr>
<th>Maand</th>
<th>Taken</th>
<th>fase</th>
<th>Belangrijke data</th>
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<tr>
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<td>Januari</td>
<td>Starten</td>
<td>Voortraject</td>
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<tr>
<td></td>
<td></td>
<td>Duidelijk formuleren probleem / onderzoeksvraag</td>
<td></td>
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<tr>
<td>Week 5</td>
<td>Februari</td>
<td>Projectplan</td>
<td>Voortraject</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td>Week 6</td>
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<td>Voortraject</td>
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<td>Week 7</td>
<td>Februari</td>
<td>Gegevens verzamelen</td>
<td>Uitvoeringstraject</td>
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<table>
<thead>
<tr>
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<th>Januari</th>
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<th>Voortraject</th>
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<td>Februari</td>
<td>Gegevens verzamelen</td>
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</table>
7. Risicoanalyse en mogelijke oplossingen

Het mogelijke eindresultaat van dit rapport is een breder beeld van de certificering en het draagvlak hiervan. Het is de bedoeling dat het uiteindelijk rapport interessant is voor zowel de opdrachtgever als een buitenstaander. Het risico dat kan insluipen bij het rapport is dat het te

<table>
<thead>
<tr>
<th>Week</th>
<th>Maand</th>
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<td>Maart</td>
<td>Gegevens verzamelen Toepassing Process</td>
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<td>13</td>
<td>Maart /April</td>
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<td>Uitvoeringstraject</td>
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<tr>
<td>14</td>
<td>April</td>
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<tr>
<td>15</td>
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<td>17</td>
<td>April / Mei</td>
<td>Opmaken rapport</td>
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<tr>
<td>18</td>
<td>Mei</td>
<td>Opmaken rapport</td>
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<tr>
<td>19</td>
<td>Mei</td>
<td>Bruikbare oplossing/conclusie</td>
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<td></td>
<td></td>
<td>- 21 Mei = Inleveren concept rapport</td>
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<tr>
<td>20</td>
<td>Mei</td>
<td>Certificering afronden</td>
<td>Presenteer en beoordelingstraject</td>
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<tr>
<td>21</td>
<td>Mei</td>
<td>Verbeteren afstudeer rapport</td>
<td>Presenteer en beoordelingstraject</td>
</tr>
<tr>
<td>22</td>
<td>Mei / Juni</td>
<td>Verbeteren afstudeer rapport</td>
<td>Presenteer en beoordelingstraject</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>- 4 Juni = Inleveren definitief afstudeer rapport</td>
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<tr>
<td>23</td>
<td>Juni</td>
<td>Voorbereiden presentatie</td>
<td></td>
</tr>
</tbody>
</table>

- 21 Mei = Inleveren concept rapport
- 4 Juni = Inleveren definitief afstudeer rapport
oppervlakkig kan worden. Dit moet voorkomen worden door een duidelijke diepgang te geven waardoor een waardig afstudeer rapport ontstaat. Er is een duidelijk beeld gegeven van de oplossing door een antwoord te geven op de onderzoeksvraag.

**Opdrachtlingschrijving:** Onderzoeken welke duurzame certificaten voor de HIS in de nabije toekomst nodig zijn om de markt in binnen en buitenland succesvol te kunnen blijven leiden?
Enquête FSC/PEFC gecertificeerde vloerdelen

Beste Heer/Mevrouw

Mijn naam is Barthel van Dinther, op dit moment ben ik bezig met een afstudeerproject in samenwerking met Hout Industrie Schijndel. Mijn afstudeerproject gaat over FSC (Forest Stewardschip Council) en PEFC (Programme for the Endorsement of Forest Certification Schemes) gecertificeerde houten vloerdelen. Zowel FSC als PEFC zijn certificaten die aantonen dat het hout dat wordt gebruikt in de vloerdelen afkomstig is uit duurzaam beheerde bossen, waarbij aandacht is besteed aan flora en fauna. Hierdoor dragen we een steentje bij om onze natuur te behouden voor nu en latere generaties.

Voor meer informatie over FSC of PEFC kijkt u op:
www.fsc.org of www.fsc.nl
www.pefc.org of www.pefcnederland.nl

Zoals u wellicht weet onderneemt Hout Industrie reeds zeer milieu bewust, in de eigen Bio Energie Centrale bijvoorbeeld worden alle restproducten die tijdens de machinale houtbewerking vrijkomen omgezet in Groene Energie voor ca. 3500 huishoudens. Om dit milieu bewuste karakter uit te breiden gaat Hout Industrie Schijndel FSC en PEFC gecertificeerde houten vloerdelen aanbieden. Over dit onderwerp zou ik u graag een aantal vragen stellen, om zodoende een beter beeld te krijgen van wat er in de markt leeft met betrekking tot deze gecertificeerde vloerdelen. Door het invullen van deze enquête, wat niet meer dan 6 minuten in beslag zal nemen, helpt u mij met het succesvol afronden van mijn afstudeerproject.

Bij voorbaat dank voor uw tijd en medewerking,

Met vriendelijke groet,

Barthel van Dinther
4de jaars student aan Hogeschool van Hall Larenstein
International Timber Trade
Tel; 0657532999        Email: barthel.vandinther@wur.nl
Enquête FSC/PEFC gecertificeerde vloerdelen

1. Bent u bekend met de volgende certificaten?
   a. FSC → Forest Stewardschip Council
      Ja/Nee
   b. PEFC → Programme for the endorsement of
      Forest Certification schemes
      Ja/Nee

2. Hoeveel vierkante meter houten vloerdelen verkoopt u op jaarbasis?
   a. .................. M2

3. Hoe groot is het aandeel eiken daarin?
   a. 0-20%
   b. 20-40%
   c. 60-80%
   d. 80-100%

4. Welke 3 houtsoorten worden naast eiken veel verkocht?
   1. .....................
   2. .....................
   3. .....................

5. Weet u de herkomst van het hout dat gebruikt word in de vloeren die u verkoopt?
   - Ja, namelijk uit;
     a. ......................... b. ......................... c. .........................
   - Nee

6. Verkoopt u op dit moment al vloeren met duurzaamheids certificaat of heeft u in het verleden vloeren met een duurzaamheids certificaat verkocht?
   Ja/Nee naar vraag 10

7. Zo ja, met welk certificaat(en)?
   a. FSC
   b. PEFC
   c. Anders namelijk .....................
8. Hoeveel vierkante meter van uw jaarlijkse totaal word als gecertificeerd verkocht?
   a. ...........% 

9. Welke houtsoort (en) verkoopt u gecertificeerd of kunt u gecertificeerd aanbieden?
   a. ................................
   b. ................................
   c. ................................
   d. ................................

10. Zijn er in het verleden klanten geweest die specifiek naar een duurzaam gecertificeerde vloer hebben gevraagd?
    Ja/Nee 

11. Welk certificaat is volgens u bij uw klanten het meest gewild?
    a. FSC
    b. PEFC
    c. Anders namelijk ....................

12. Waar ligt uw voorkeur?
    a. PEFC: Goedkoper dan FSC maar iets minder bekend
    b. FSC: Duurder dan PEFC maar redelijk bekend bij de consument.
    c. Beide FSC en PEFC, de keuze bij de klant

13. Is er op dit moment voldoende aanbod voor u van gecertificeerde vloeren?
    a. Ruim voldoende
    b. Voldoende
    c. Onvoldoende
    d. Ruim onvoldoende

14. Wat is de huidige vraag van uw klanten naar gecertificeerde houten vloerendelen?
    a. ..................% 

15. Verwacht u een groei in de vraag naar gecertificeerde houten vloeren in de toekomst? 
    Ja/Nee naar vraag

17

16. Kunt u een aannname doen naar de te verwachten stijging in de vraag naar gecertificeerde vloerendelen in de komende 5 jaar?
    a. ..................%
17. Wilt u in de toekomst (meer) gecertificeerde producten gaan verkopen?
   a. Ja
   b. Nee, omdat: .................................................................

18. Zijn uw klanten bereid meer te betalen voor een gecertificeerde vloer?
   a. Ja
   b. Waarschijnlijk wel
   c. Waarschijnlijk niet
   d. Nee ga naar vraag 18

19. Hoeveel verwacht u dat uw klanten bereid zijn meer te betalen voor een gecertificeerde vloer?
   a. 0-2%
   b. 2-6%
   c. 6-10%
   d. 10-15%

20. Bent u bereid meer te betalen voor een gecertificeerde vloer?
   a. Ja
   b. Waarschijnlijk wel
   c. Waarschijnlijk niet
   d. Nee naar vraag 22

21. Hoeveel bent u bereid meer te betalen voor een gecertificeerde vloer?
   a. 0-2%
   b. 2-6%
   c. 6-10%
   d. 10-15%

22. Wilt u een bericht ontvangen op het moment dat Hout Industrie Schijndel u gecertificeerde producten uit eigen productie kan aanbieden?
   Ja/Nee

Ik wil u bij deze bedanken voor het invullen van deze enquête. Indien u vragen over deze enquête heeft of andere informatie omtrent het onderzoek wilt u contact opnemen met:

Barthel van Dinther
Tel; 0657539929
Email: barthel.vandinther@wur.nl
List of internet sites used

- www.fsc.org  www.fsc.nl
- www.pefc.org  www.pefcnederland.nl
- www.keurhout.nl
- www.whyfsc.com
- www.skh.org
- www.tpac.smk.nl
- www.hisbv.biz
- www.inpa.net
- www.lieverdink.nl
- www.vandevooort.nl
- www.hoogenhoff.com
- www.mariusvdberg.nl
- www.wicherson.nl
- www.vandestadt.nl
- www.wikpedia.com
List of Interviewed persons and companies

Hout Industrie Schijndel
  - Job Janssen
  - Jordi de Jongh
  - Peter van Roy
  - Martin Uipkes

Stichting Keuringbureau Hout
  - Edo Barmentloo
  - Peter van Graauw

PEFC Nederland
  - Johan de Vlieger

FSC Nederland
  - Arjan Alkema

Parket Vakbeurs te Gorinchem
  - T&G Wood
  - Inpa Parket
  - Combi Wood
  - Houtmeester
  - Kerkhofs Parket
  - Oosterlinck
  - Greenwood
List of questioned Oak suppliers in the Netherlands

1. Van de Voort Houthandel en Zagerij
Kreitenmolenstraat 83a
5070 AA Udenhout
Tel: 013-5111318
Email: info@vandevoort.nl
www.vandevoort.nl

2. Houtimport v/d Hoogenhoff
Karstraat 32
5451 AV Mill
Tel: 0485-451532
Email: info@hoogenhoff.com
www.hoogenhoff.com

3. Marius van den Berg
Barwoutswaarder 89a
3449 HK Woerden
Tel: 0348-688641
Email: Verkoop@mariusvdberg.nl
www.mariusvdberg.nl

4. Wicherson
Steenwijkerdiep 82
8331 LL Steenwijk
Tel: 0521-512323
Email: info@wicherson.nl
www.wicherson.nl

5. Van de Stadt
Noorder IJ- en Zeeweg 2-4
1505 HG Zaandam
tel. 075-6554000
E-mail: info@vandestadt.nl
www.vandestadt.nl
List of Certifying bodies in the Netherlands

*Control Union Certifications B.V.*
Dhr. J. de Jong (COC)
Dhr. G. Stegeman (FM)
Postbus 161
8000 AD Zwolle
T: 038 426 0100
E: fsc@controlunion.com
W: [www.controlunion.com](http://www.controlunion.com)

*SCS in Nederland*
Mevr. M. van Zomeren
Witte Kruislaan 39
1217 AM Hilversum
T: 035 685 9650
E: scs-benelux@tri-p.nl
W: [www.tri-p.nl](http://www.tri-p.nl)

*SGS Nederland B.V.*
AgroControl
Dhr. A. Afman
Postbus 200
3200 AE Spijkenisse
T: 0181-693280
E: nl.houtenpapier@sgs.com
W: [www.nl.sgs.com/houtenpapier](http://www.nl.sgs.com/houtenpapier)

*Stichting Keuringsbureau Hout (SKH)*
Dhr. E. Barmentloo
“Het Cambium”
Nieuwe Kanaal 9e
Postbus 159
6700 AD, Wageningen
Tel: 0317 453 425
E: mail@skh.org
W: [www.skh.org](http://www.skh.org)
## Tender overview of the certifying bodies

<table>
<thead>
<tr>
<th>Name of the Certifying body</th>
<th>SGS</th>
<th>Stichting Keuringsbureau Hout (SKH)</th>
<th>Control Union Certifications</th>
<th>SCS</th>
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<td>First Audit and reporting cost FSC</td>
<td>(1900,-) 1685,-</td>
<td>1200,-</td>
<td>1600,-</td>
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<tr>
<td>First Audit and reporting cost PEFC = combination discount</td>
<td>(600,-) 525,-</td>
<td>800,-</td>
<td>800,-</td>
<td>1009,-</td>
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<tr>
<td>Logo license + contribution logo rating</td>
<td>205,-</td>
<td>0,-</td>
<td>0,-</td>
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<td><strong>(2705,-)</strong> 2415,-</td>
<td><strong>2000,-</strong></td>
<td><strong>2400,-</strong></td>
<td><strong>2659,-</strong></td>
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<td>Annual follow up audit FSC</td>
<td>(1000,-) 875,-</td>
<td>800,-</td>
<td>850,-</td>
<td>850,-</td>
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<tr>
<td>Annual follow up audit PEFC Combination discount</td>
<td>(600,-) 525,-</td>
<td>400,-</td>
<td>425,-</td>
<td>810,-</td>
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<td><strong>(1943,-)</strong> 1743,-</td>
<td><strong>1200,-</strong></td>
<td><strong>1275,-</strong></td>
<td><strong>1660,-</strong></td>
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<td>$800,- = 575,-</td>
<td>$800,- = 575,-</td>
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<td>Annual remittance to PEFC</td>
<td>600,-</td>
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<td><strong>Total annual remittance to FSC and PEFC</strong></td>
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<td><strong>1175,-</strong></td>
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<tr>
<td><strong>Total annual cost FSC</strong></td>
<td><strong>(1718,-)</strong> 1593,-</td>
<td><strong>1375,-</strong></td>
<td><strong>1425,-</strong></td>
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<td>PEFC</td>
<td>1000,-</td>
<td>1025,-</td>
<td>1410,-</td>
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<td>(1400,-) 1325,-</td>
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<td>(3118,-) 2918,-</td>
<td>2375,-</td>
<td>2450,-</td>
<td>2865,-</td>
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<tr>
<td>Re-assessment once every 5 years FSC and PEFC</td>
<td>1018,- + 725,- = 1743,-</td>
<td>1000,- + 600,- = 1600,-</td>
<td>850,- + 425,- = 1275,-</td>
<td>850,- + 810,- = 1460,-</td>
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<td>Transportation cost; 0.45p/km No extra cost all inclusive</td>
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<tr>
<td>Remark / explanation</td>
<td>Prices standing between the brackets are prices from the first quotation</td>
<td>PEFC is not done by SCS but outsource to DIN CERTO from Germany. This is the reason why there is no combination discount.</td>
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