

# **Environmental sustainability in hotel business: applying Finnish experience to Russian hotel business**

Anastasia Kostyukova

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JYVÄSKYLÄN AMMATTIKORKEAKOULU  
JAMK UNIVERSITY OF APPLIED SCIENCES



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Abstract  <p>The aim of the Thesis was to study various aspects of sustainability in the hotel business and, based on the experience of one of the case studies, Scandic Jyväskylä, to create a list of development recommendations for another hotel – Onego Palace Hotel.</p> <p>The theoretical basis consists of information about sustainable building, ecological technologies, ecological design and a description of some existing eco-labels and their influence on the organization. Additionally, it was necessary to define the methodology utilized in the Thesis. Thus, the research methods were thoroughly described including the information about data varieties and case studies, with the benchmarking method as the main way of hotel comparison, which was accurately reported.</p> <p>The main research question was “How might the Finnish experience of eco-sustainability be applied from the perspective of the Russian hotel business?”. All the theory supported the question and, thereafter, contributed to the creation of a list of developmental recommendations for Onego Palace hotel based on the experience of the Scandic Jyväskylä hotel.</p> <p>The theme of the Thesis was chosen according to the author's interests and the current influence of ecological aspects on human life. The research can be used as a development strategy for the Onego Palace as well as for other hotels in the area and for the future projects managed by author.</p>		
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# 1 INTRODUCTION

Nowadays the planet is suffering from human activity. All the life aspects, including production and manufacturing, entertainments, transportation, communications – everything has a negative influence on the environment. The most harmful sector is production sector. Every hour millions of factories and production sites, the sizes of which differ from giant to tiny ones (home production), throw great amounts of waste into the air, water and ground, thereby polluting the environment. Fortunately, humankind is starting to realize the results of their activity and tries to make changes. Thus, the concept of ecological sustainability emerged and is used more and more by individuals, companies, organizations. Moreover, a growing number of governments change laws and regulations paying attention to ecological aspects.

Hereby, the *topic* about *ecological sustainability*, which is also of great interest to the author, was chosen as the main issue for the Thesis, emphasizing the hotel industry as her professional field. While living in two countries – Russia and Finland in different periods of life the author decided to describe and compare both countries' experience of hotel sustainability. Anticipatorily knowing that Finland as part of Europe pays more attention to such issues as sustainability, the author determines the *research target* as *applying Finnish experience to the Russian hotel business*. After precise theoretical research and thorough studying of similar cases, a list of recommendations for the Russian Onego Palace hotel should be created.

Since the final aim of the research is applying methods used in one country to the same field in another country, the *research question* to be set for the Thesis is: "How might the Finnish experience of eco-sustainability be applied from the perspectives of the Russian hotel business?". Here the research question must be supported with a necessary theoretical basis.

## 2 METHODOLOGY

### 2.1 Research methods and data collection

It is important to mention that in each study the correctly chosen *research method* plays a significant role in the whole research process. Basically, there are two main research types: quantitative research and qualitative research. According to Given (2008), *quantitative research* is the systematic empirical investigation of observable phenomena via statistical, mathematical or numerical data or computational techniques, while *qualitative research* involves data collection procedures that result primarily in open-ended, non-numerical data which is then analysed primarily by non-statistical methods (Dörnyei 2007). Sometimes these two methods might be combined, in which case the research method is called *mixed*.

The collection of data in the Thesis is mostly done through the *qualitative research*, but some quantities are also taken into account. The data collected for the thesis could be divided into two groups: *primary data* and *secondary data*. A *primary source* is an artifact, a document, a recording, or other piece of information created in the course of the study. It serves as an original source of information about the topic (Old Dominion University Libraries 2013). According to the definition of University of Maryland Libraries (2014), the original data, which acts as a basis of the research, is designated as *primary sources*. Usually, being the first formal result derivation, primary sources are showed in a physical, printed or electronic format. Since one of the qualitative research methods is conducting an interview and that method was chosen by the author in order to gain information about the subject and object of case study, the interviews constitute the primary data in the Thesis. The interview with the general manager of Scandic Jyväskylä Birgitta Siitari was held via e-mail because of territory inaccessability. The interview with the managing director of Onego Palace Vadim Grishunin was conducted personally. Primary sources are often easier to define than the secondary ones, but generally *secondary sources* are used to interpret and evaluate

primary sources. They act as comments for the evidence, they deepen into the discussion of the fact (ibid.). In this Thesis books and scientific literature, laws and acts, regulations, personal citations, mass media articles and definitions are used as a secondary data and compose the theoretical basis.

The thesis is conducted by using the *case study method*. The deployed definition of *case studies* by Thomas (2010) describes them as analyses of persons, events, decisions, periods, projects, policies, institutions, or other systems that are studied holistically by one or more method. The case that is the subject of the inquiry will be an instance of a class of phenomena that provides an analytical frame — an object — within which the study is conducted and which the case illuminates and explicates”. For a more clear understanding of what *the objects of case studies* could be, Rolls (2005) states that the case being studied may be an individual, organization, event, or action, existing in a specific time and place. As the specificity of the thesis topic is eco-sustainability in hotel business, one of which is used as an example and another one – as an experimental subject, the two hotels are considered as case studies. One of them, Scandic Jyväskylä, is studied as a successful example of hotel’s ecological sustainability. Thus, the study is linked to sustainable principles in the hotel business and to the ways of their implementation into the operating processes. Another case study was carried out for hotel Onego Palace in Petrozavodsk, Russia. The hotel was taken into consideration because it appears to be one of the main representatives of hotel business in the area and serves plenty of international customers. However, eco-friendliness is not taken into account as much as in European countries.

## 2.2 Benchmarking

*Benchmarking is the process of comparing one's business processes and performance metrics to industry bests or best practices from other companies. Dimensions typically measured are quality, time and cost. In the process of best practice benchmarking, management identifies the best firms in their industry, or in another industry where similar processes exist, and*

*compares the results and processes of those studied to one's own results and processes. In this way, they learn how well the targets perform and, more importantly, the business processes that explain why these firms are successful* (Fifer 1989, 18).

As so as two main processes in benchmarking are *evaluation* and *comparison*, in this thesis *benchmarking* was used as a method of collation of two hotels. One of them (Scandic Jyväskylä) already has the sustainability strategy in its operating and, moreover, tends to exemplify ecological sustainability in hotel business, and the second one (Onego Palace) does not have that kind of strategy yet. *Benchmarking* can be defined as a systematic procedure of comparative measurement with the objective to achieve continuous improvement (Wöber 2002, 2). Since the aim of the thesis research is to study and compare practices concerning eco-sustainability in two different hotels and then implement the successful aspects from European Scandic hotel to Russian Onego Palace hotel for its further development, benchmarking method appeared to be very suitable and useful.

## 3 ENVIRONMENTAL SUSTAINABILITY IN HOTEL BUSINESS

Nowadays it becomes more and more obvious, that the environment is very sensitive to the production activities of humans, because of that it loses its ecological properties. Atmospheric pollution leads to respiratory diseases, mental disorders, intoxication; the pollution of hydrosphere - to various infectious diseases; noise reduces hearing sensitivity, cause nerve diseases, ionizing radiation - radiation sickness, cancer. Thereby, humankind needs to make great positive changes concerning all the life sides in order to save itself and our planet. Madu and Kuei (2012) describe *sustainability* in terms of ecology as a natural process describes how biological systems remain diverse and productive. For humans, it is the potential for



long-term maintenance of well-being, which in turn depends on the well-being of the natural world and the responsible use of natural resources (134). The organizing principle for *sustainability* is *sustainable development*, which includes the four interconnected domains: ecology, economics, politics and culture (James et al. 2015, 19). According to WCED report (1987), *sustainable development* is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Thus, with the humans' perceive of present global ecological situation and the possible future consequences of living, many companies and organizations, from small households to giant corporations, start applying sustainable development concept into their production processes.

Since hotels and other accommodation types are located in buildings, it is important to mention the influence of such constructions on humans and nature. Buildings in which people live and work could also be a source of harmful influences for the environment and for the human health. According to the publication of The International Energy Agency, constructions and buildings consume more than 40% of the global energy and generate 24% of the world's carbon dioxide emissions (Howe 2010, 33). To prevent these impacts, even at the early stages of planning the architectural projects the environmental friendliness of future buildings should be taken into account. If the project is planned carefully, the whole process of construction and maintenance of building is going to be as ecological as it could be. For example, the elements which could reduce the harmful effects include the use of modern construction materials and technologies, natural materials for facing and furniture, ecological utensils and other household items, the use of detergents and cleaning products that minimize harmful effects on the human body, animals and the environment.

In addition, ecological aspects gain popularity nowadays and people become aware of the ecological situation in all the life sides. It is typical also for tourism sphere: customers like to know about the hotel's sustainability and its

green values and try to reduce their negative influence on nature. Арбузова [Arbuzova] (2009, 36) thinks, that nowadays eco-tourism is becoming popular. Its fans expect to get modest but comfortable, clean accommodations. This gives an advantage to eco-tourism: in comparing with conventional hotel equipment costs of one accommodation place in eco-hotel is about four to five times lower. Thus, an important sphere of activity of modern hotels is the creation of life conditions which lead to the preservation of human health and the environment.

## 4 MODERN ECO-TECHNOLOGIES

### 4.1 Eco-building objectives, principles, advantages

At the moment, many people are concerned about the nature and its preservation as well as about rational and responsible usage of natural resources. This leads to the active development and spreading of the idea of using environmental technologies and materials in building.

In recent years many countries all over the world pay a lot of attention to energy-saving technologies, thereto environmental aspects of construction which reduce the negative impact on the world and save energy are taken into account. Based on this, the “green building” has an increasing popularity.

As any significant process, ecological building has its own objectives, principles, aims. Moreover, since the eco-building is directed to the whole planet’s wellbeing, it has benefits.

**Objectives of environmental construction:**

- reducing the impact of construction on human health and on the environment;
  - elaboration and applying of modern industrial materials;
  - decreasing of energy consumption;
  - diminution of costs for maintenance and construction of buildings.
- (Современные экологические технологии в строительстве и их особенности применения 2013.)

Nowadays all over the world there is an increasing number of ecologically friendly buildings, which have a complex approach to the construction and operation of structures.

#### **Principles of construction:**

- energy efficiency and rational use of building materials, resources and energy;
- environmental cleanliness, minimal negative impact on human health and on the environment;
- comfort, providing maximum convenience for the person who lives or works in a similar building (ibid.)

All green buildings should be energy efficient and environmentally friendly at all stages of construction and operation of up to demolition. Many perceive the concept of natural and green building as synonyms, but in reality it is not so, because green building does not need to apply only completely natural materials. Green building is directed to the use of advanced environmental technologies that reduce negative impacts on the environment and human health.

**Benefits of green building** could be divided in two categories: economic and social.

### 1) Economic

Green building is much more economical on the budget than usual one. These buildings have several advantages:

- reduction of electricity consumption by twenty-five percent;
- shortening of water consumption by thirty percent;
- optimization of all systems can significantly reduce maintenance costs of the building;
- the tenants of the structure (or its premises) tend to refuse the rent less often than in usual buildings, so the owners of the eco-buildings have less expenditures;
- green buildings do not harm human health, and it is especially important for large structures with a big number of offices;
- ecological construction technologies are of great interest, and this factor creates additional advertising, so the payback period is reduced and allows to make profit faster;
- environmental projects is a good way to attract investments;
- green buildings meet all the parameters and requirements of environmental standards and even pre-empted them, thereafter, tightening standards does not require upgrading of the structure.

### 2) Social

Green buildings have several advantages which are important for the health because of minimizing the negative impact on the whole environment:

- reducing the number of garbage and contaminants which enter the soil and water during construction and operation of the building;
- decreasing greenhouse gas emissions;
- optimal acoustic, thermal indicators and high indoor air quality;
- reduction of harmful effects on human health;
- extensive use of renewable energy sources to reduce the consumption of natural resources (ibid.)

## 4.2 Technologies in eco-building

In any construction which supposed to be eco-friendly, the technologies are extremely significant. Mostly because of them the building could become ecological. Modern technologies tend to reduce energy and water usage, decrease the negative impact of machinery and materials on the environment and human's health, reduce costs of building and maintenance, manage the waste. In addition, those technologies lengthen the lifespan of the construction and of all the equipment.

The main technologies used for the construction of ecological buildings can be divided into several groups:

### **Materials efficiency:**

Ecological materials for building include, for instance, the lumber from forests that have been certified according to a third-party forest standard, bamboo and straw – plants which are considered to be rapidly renewable, recycled stone and metal, as well as other products that are non-toxic, reusable,

renewable, and/or recyclable. The Environmental Protection Agency also suggests to use industrial products which could be recycled (U.S. Environmental Protection Agency 2014).

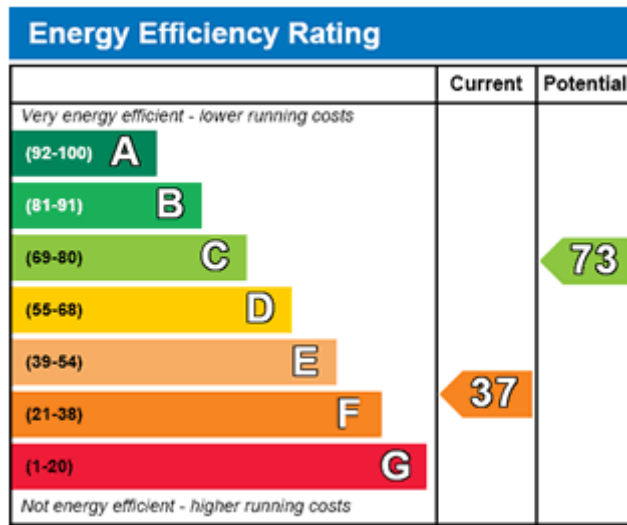
### **Waste Management:**

*Waste management* is the generation, prevention, characterization, monitoring, treatment, handling, reuse and residual disposition of solid wastes (Waste Management 2013). The management of waste is a key component in a business' ability to maintain an ISO14001 accreditation. Nowadays there are plenty of waste management methods, like recycling, reprocessing, recovery into energy or resources, incineration. Companies all over the world are encouraged by governments or third-parties to improve and support their environmental efficiency by eliminating waste through resource recovery practices, which are sustainability-related activities, and for them one possible way to do this is by shifting away from waste management to resource recovery practices like recycling materials such as glass, food scraps, paper and cardboard, plastic bottles and metal.

### **Energy-saving technologies and use of modern fuel-efficient appliances:**

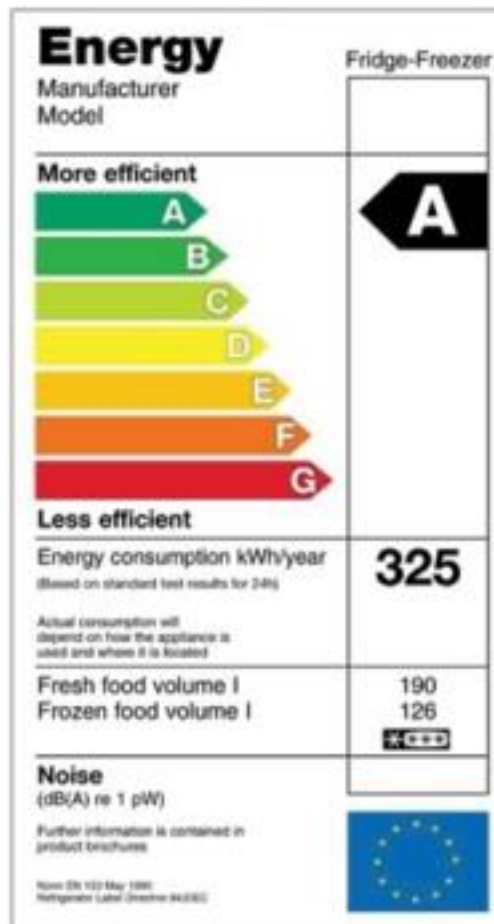
Heimberg (2014) states that the basic principle of green building is energy saving where the application of commonly accepted methods to reduce energy losses should be considered while planning new constructions. At the moment, a lot of attention is paid to the development of advanced technologies for maximum reduction of energy consumption of buildings. Improvements in energy efficiency are generally achieved by adopting a more efficient technology or production processes (Diesendorf 2007).

Figure 1: Energy rating



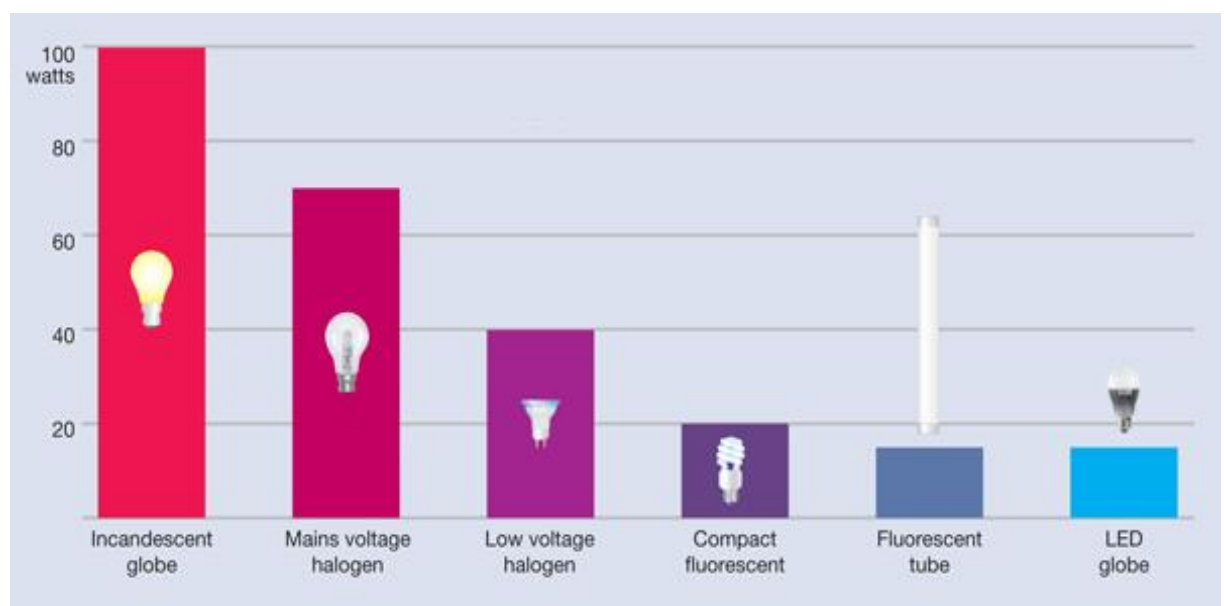
Modern appliances are made on the basis of energy-saving technologies, they belong to the class A energy consumption. These models use several times less electricity than standard machines (see Figure 2).

Figure 2: Fridge energy rating



The use of energy efficient light bulbs also helps to decrease energy consumption: they consume five times less energy than incandescent lamp. Thus, only by using energy-efficient machines and appliances electricity consumption will be reduced by a quarter (Современные экологически технологии в строительстве и их особенности применения 2013).

*Figure 3: Power consumption of different types of comparable lights*



### **Indoor air quality and effective thermal insulation:**

IAQ is part of indoor environmental quality (IEQ), which includes IAQ as well as other physical and psychological aspects of life indoors (KMC Controls 2013). Indoor air pollution in developing nations is by far the most deadly risk globally. A major source of indoor air pollution in developing countries is the burning of biomass (e.g. wood, charcoal, dung, or crop residue) for heating and cooking (Duflo et. al. 2008). Thus, a great attention should be paid on the building materials, ventilation and air-conditioning. Nowadays the market has a big range of materials which correspond to all the ecological regulations, and not only save building costs but also reduce the amount of construction waste. Additionally, most materials used in green building keep the heat inside



the building, which allows to retain the necessary level of temperature inside. It is known that houses lose about twenty-five percent of the heat through the doors and windows. Thus, the green house must be equipped with doors that provide a minimum leakage of heat, as well as the windows. There are several types of windows which are suitable for the green building: glass windows with a special coating on the inside surface which minimizes the heat loss, and glass windows filled with inert gas (Современные экологические технологии в строительстве и их особенности применения 2013).

### **Use of the solar energy:**

Along with the modern technologies, alternative energy sources are often used for ecological construction. Solar energy is one of them and, in accordance with the description of solar energy given by International Energy Agency (2011),

*...it presents radiant light and heat from the sun harnessed using a range of ever-evolving technologies such as solar heating, solar photovoltaics, solar thermal energy, solar architecture and artificial photosynthesis. What is important, that solar energy will enhance sustainability, reduce pollution, lower the costs of mitigating global warming, and keep fossil fuel prices lower than otherwise.*

As one of the option for the reduction of energy costs, solar panels could be installed on the roofs of buildings (see Figure 4). They allow not only to accumulate energy from the sun but also keep the heat in the building. Energy with solar panels reduces damage to the environment and saves maintenance costs.

*Figure 4: Building with solar pannels on the roof*



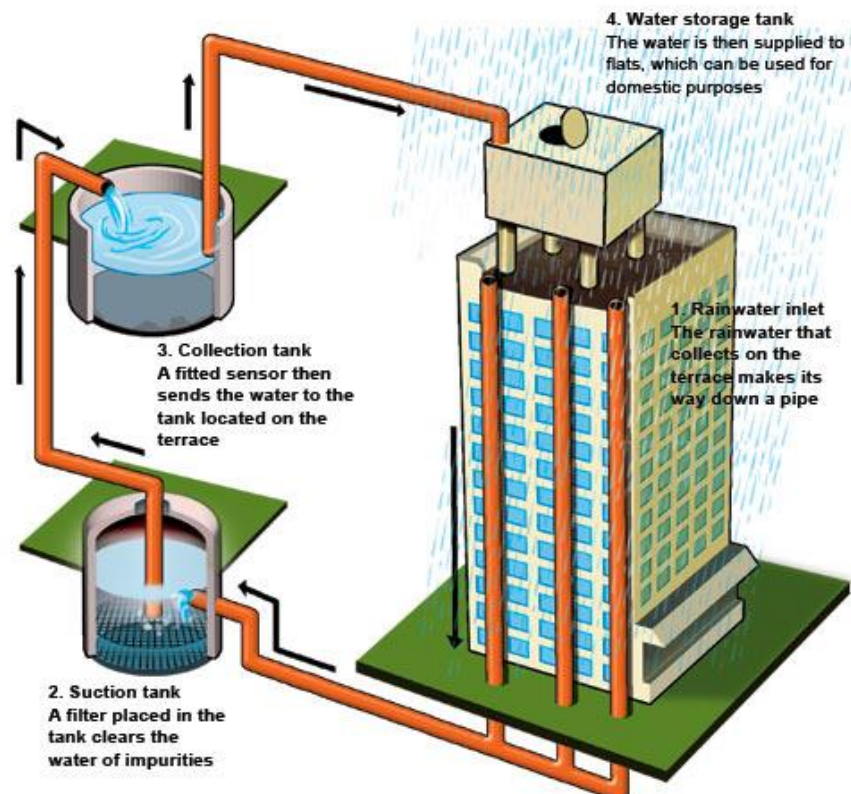
#### **Water efficiency inside and rainwater collecting:**

One of the key features for green building is smart and rational use of natural resources and water is of a high importance. There are plenty of solutions and appliances for inside water usage which are created for minimizing it and make it as smart as possible. For instance, selecting low-flow sink and bathtub faucets, showerheads and toilets can reduce indoor water use by 30-40%. The other great way to achieve the maximum water efficiency indoors is to purchase Energy Star appliances, which guarantee a certain degree of water efficiency, and save energy to boot (Rich 2014).

Conservation of water is an excellent cheap and easy way to manage the fresh water by a range of variations, one of which is rainwater collecting. Rainwater harvesting (RWH) might become an extremely sustainable solution for the urban water management system due to several reasons: solving the water crisis problem, decreasing the burden on traditional water sources, flooding prevention, reducing the volumes of pollutant loads, control water logging problems, and even climate controlling (Rahman et al. 2014). Nowadays such systems are successfully designed for private homes as well as for use in an industrial scale (see Figure 5). The system is created using

traditional knowledge, skills, and materials. During the rainy season, an individual can collect water on the rooftop and manage it on its own. Reserved rainwater on rooftops can be used for self-purposes as well as for the public ones. A piped network could help to collect and preserve the rainwater from several roofs (ibid.).

*Figure 5: Rainwater collecting system on the rooftop of the house*



### 4.3 Eco-interior

Ecological interior is often made with natural materials, which gives a feeling of freshness and unity with nature. That kind of interior is now one of the most popular contemporary styles in the design of buildings. The meaning of ecodesign is clear: interior made in this way will cause an optimal harmony with the environment. While being in the eco-friendly interior, the person can feel all the advantages of natural materials and really take a break from the

stuffy city. One of the most important principles of the eco-interior is free space, a lot of air and light.

According to Эверт [Evert] (2012), there are several important issues that should be taken into account when the eco-interior is designed:

- Facing

For the walls, there is a fairly wide range of natural materials. Preference can be given to a wooden panel, cork or bamboo. For environmental style normal wallpaper is also suitable, but in this case it is better to use monochromatic. The pattern wallpaper also suits well, but it has to be with floral or vegetal print. Moreover, the walls could be trimmed with tile of natural color and natural texture, or with facing stone. By the way, the most affordable option to meet all the requirements of eco-interior is plasterboard, which is coated with plaster and then paint in a neutral color.

As with any decoration, flooring should also be made only with natural materials. The options' range is very wide: from the floorboard, bamboo or cork to the stone and terracotta tiles. Bamboo mats, natural wool carpets and walkways could be used as nice decoration elements.

The ceiling in the eco-interior must be either made from wooden panels or a combination of wooden beams with light tension or whitewashed ceiling.

- Colors

The environmental interior can be played on the contrast of colors. Warm wood tones - beige, brown and white - contrast well with black or dark. However, the most often used color combination in ecological style is

combination of natural tones: wood, stone, grass, water, earth. They are most familiar to the eyes and do not overload the interior. The colors in different rooms could be variable.

- Lighting

Lighting should be good and as natural as possible. Unfortunately, in northern countries, such as Russia and Finland, there is not so much natural light during the year, especially in winter season. The designer Svetlana Semenova (2012) says, that firstly, it is important to put the chandelier in the center of the room. Fluorescent lights on the perimeter are not the most ideal option. It is better to think about multi-level composition of the local light sources. From the point of view of decorative luminaires suitable for frosted glass, with a structural surface, ceiling in the shape of a sphere.

- Furniture

There should not be much furniture because the interior requires space. Furniture should be deliberately simple, maintain strict forms and demonstrate the structural surface of the wood. It will look elegant, add comfort and coziness. It is very suitable if furniture is wooden or braided, or made of other natural materials.

- Decoration elements

All the textile used in interior decorating should be natural. Dishes and other decoration elements in ecological interior should be simple and monotonous, made in soft colors. It would be suitable if the material used will be ceramics or colored glass. Complex patterns are not allowed, pattern in ethnic style would look better. Wooden accessories and cotton cloth will add more comfort. Each object in the eco-interior must maintain a sense of natural touch, thus, shapes and materials should be simple and nature-like. Moreover,

aquarium and natural flowers and plant will bring life to the room and make it fresh and even healthy.

Another major feature is the combination of environmental style and healthful functions. Thus, an essential element of the environmental decor is the greenery. Plants create a favorable atmosphere of psychological comfort, as well as the good quality air in the room filled with oxygen.

Generally, one of the main principles of eco-interior - a careful use of natural resources, so taking care of the consumption of water, gas and electricity is of extreme importance.

## 5 ECO-LABELS

Ecolabels are trademarks or logos which have been developed to indicate the environmental credentials of a company, product or service for the clients. Such labels are usually sought by companies because they are perceived as communicating a particular approach to the conduct of business products which may also lead to a more advantageous market position (Middleton 2009, 240). Ecolabelling shows that the company is aware of the environmental situation and is doing everything possible to reduce their negative impact on it. Often the decision of doing sustainable business and applying for that kind of labelling enables to reduce some production costs (energy, water, waste) which will lower the price of a final product or service paid by the customer. Since one of the case study hotels of the thesis is Scandic Jyväskylä, it is reasonable to review the eco-labels given to this hotel chain, thereto it has “the industry’s leading sustainability programme” (The future is a challenge we enjoy, Scandic).

### **The Nordic Ecolabel (Swan Ecolabel)**

*Figure 6: The Nordic Ecolabel (Swan)*



The Nordic Ecolabel is the official Ecolabel of the Nordic countries and was established in 1989 by the Nordic Council of Ministers with the purpose of providing an environmental labelling scheme that would contribute to a sustainable consumption. It means voluntary, positive Ecolabelling of products and services. The Nordic Ecolabel was also initiated as a practical tool for consumers to help them actively choose environmentally-sound products. It is an ISO 14024 type 1 Ecolabelling system and is a third-party control organ (The Nordic Ecolabel - the official Ecolabel in the Nordic countries). The Nordic Ecolabel trademark is an effective and simple marketing tool which guarantee that products have fulfilled the stringent environmental and climate criteria (Benefits of Nordic Ecolabel).

The Nordic Ecolabel describes its mission as the way "to contribute to a sustainable consumption. By choosing products and services that are Nordic Ecolabelled, consumers can actively contribute to the ultimate goal of achieving a sustainable society" (The Mission of The Nordic Ecolabel). The list of the environmental issues to be considered for Nordic Ecolabel includes waste, packaging, energy usage, water usage, climate aspects, source of raw materials, hazardous effluents and the use of chemicals.

### **The EU Ecolabel**

*Figure 7: The EU Ecolabel*



The functioning of the EU Ecolabel is defined through a Regulation of the European Parliament and of the Council. It is managed by the European Commission, bodies from the Member States and other stakeholders.

The EU Ecolabel presents a voluntary scheme and it implies that producers, importers and retailers may apply for the label for their products or services by their own (More about the EU Ecolabel).

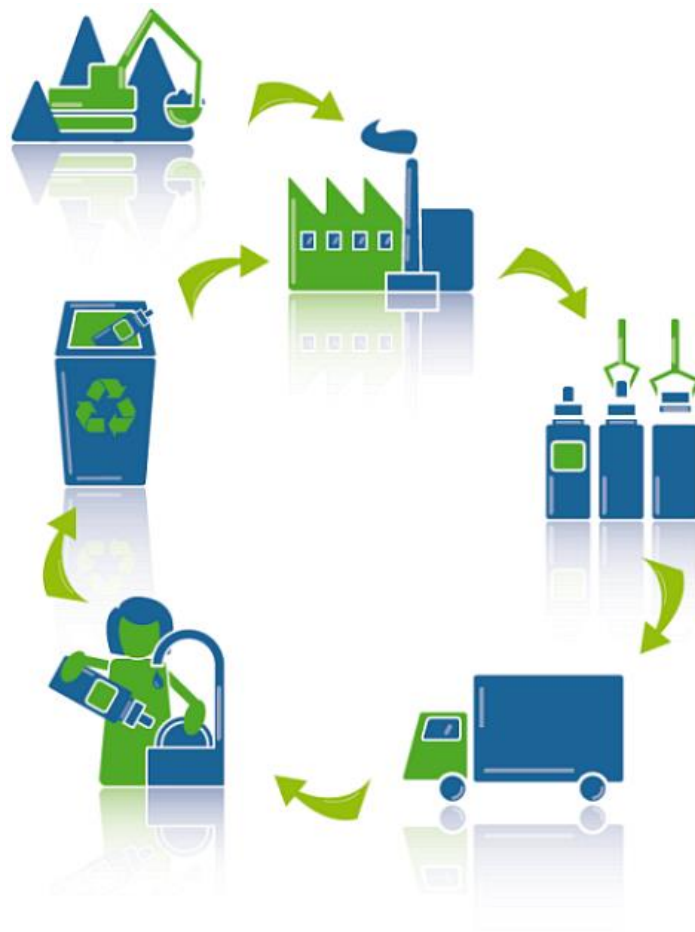
The EU Ecolabel is the only pan-European Type 1 official ecolabel, providing a suitable tool for EU Ecolabel licence holders to channel their marketing through a single label. In the Nordic countries — Denmark, Sweden, Norway,



Finland and Iceland — both the Nordic Ecolabel and the EU Ecolabel are official (Nordic Council of Ministers 2012, 124).

The lifecycle of a product (see Figure 8) starts with extraction or processing of the raw materials, continues with manufacturing and packaging, then the products is distributed, used and finally goes to the “end of life” stage, when the product is disposed of or recycled (More about the EU Ecolabel).

*Figure 8: The lifecycle of a product according to the EU Ecolabel*



**KRAV**

Figure 9: KRAV label



According to KRAV's website, "KRAV is organised as an incorporated association with, at present, 27 members, which represent farmers, processors, trade and also consumer, environmental and animal welfare interests". KRAV is also a member of IFOAM – International Federation of Organic Agriculture Movements.

One of the main missions of KRAV is to influence the EU regulation of organic production. "The label's vision explicates that all production of food is economically, organically and socially sustainable and meet the needs of the present without compromising the ability of future generations to meet their own needs". KRAV standards are adapted to the IFOAM Standards and included in IFOAM Family of Standards. They also fulfil the EU regulation for organic production (EC) No 834/2007. In some cases KRAV standards are stricter than the EU standards. KRAV standards encompass a wider variety of enterprises, such as certification of restaurants and fisheries (About KRAV 2015).

## 6 ECO-FRIENDLY ACCOMMODATION EXPERIENCE

### 6.1 Accommodation in Finland. Case: Scandic hotel Jyväskylä

#### **About Scandic chain**

Scandic Hotels is a hotel chain headquartered in Stockholm, Sweden with their main operations in the Nordic countries. Alongside with the hotels in Sweden, Norway, Finland and Denmark, the company also has a presence in Belgium and the Netherlands, Germany and Poland. The first hotel in the future Scandic chain was the Esso Motor Hotel in central Sweden opened in 1963 for both business and pleasure, and the motel appeared to be a novel concept for Europe. By 1972, the chain grew to 59 hotels Europe-wide, when Esso sold the non-Scandinavian hotels. The remaining 32 hotels formed the largest hotel chain in Sweden in 1973 (Scandic Hotels Corporate Information 2015). Now the chain has 223 hotels with 40274 rooms and 13000 employees. (About Scandic 2015).

Scandic has a wide customer segmentation since the hotels are of various kinds: family hotels, scandic-to-go hotels, romantic hotels, spa hotels, hotels near skiing, roadside hotels. Moreover, all the hotels are well-equipped for people with different kinds of problems and disabilities, and the range of facilities is amazing: hearing problems – vibrating fire alarm, impaired sight – guide dogs provided by the hotel, allergy – non-allergic food, access for all – convenient rooms and walking sticks (ibid.).

#### **Scandic Jyväskylä**

Figure 10: Scandic hotel Jyväskylä



Scandic Jyväskylä is one of the most popular hotels in the area. It is located in the city center, within a 2-minute walk from the railway and bus stations and all the city attractions and entertainment places. The hotel offers gym, sauna and swimming pool facilities for the guests, as well as restaurant and conference halls. Moreover, for a greater convenience there is a free parking lot (which is a benefit because there is no free parking in the city center area) and a possibility to hire a bicycle. The hotel has 150 rooms (Scandic Jyväskylä 2015).

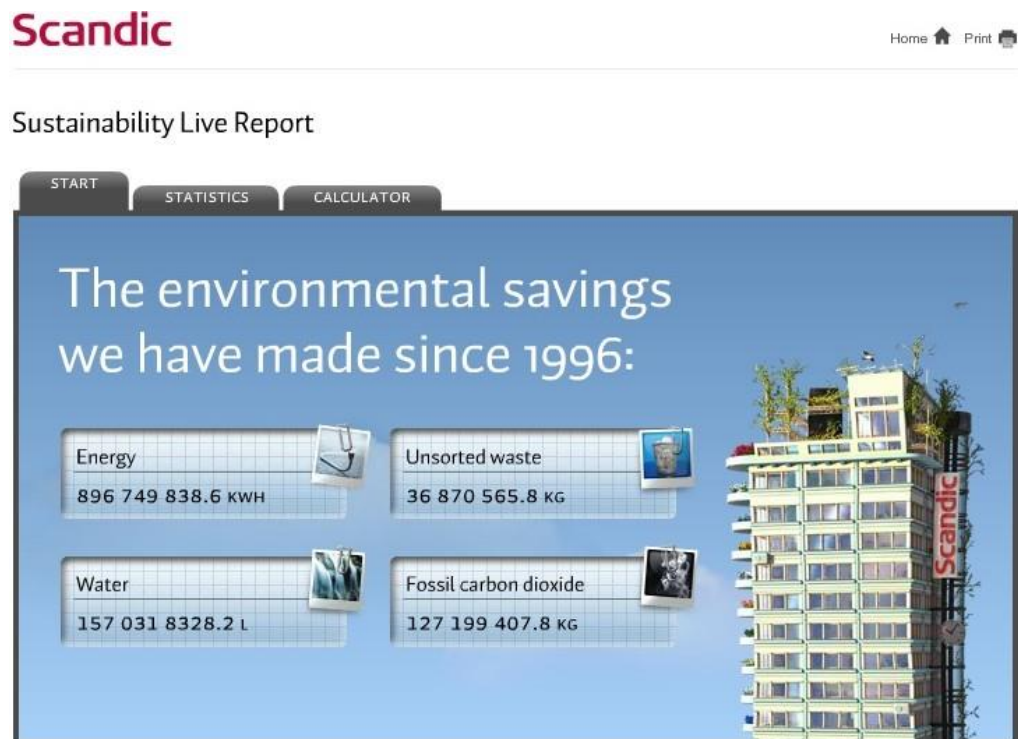
Based on the hotel reviews, it is possible to say that the main customers in Scandic Jyväskylä are business people (they come for business events like Nordic Business Forum) and tourists (individuals and families) who are coming to explore Finland and the Jyväskylä area and have a rest in a good hotel with swimming facilities.

### **Sustainability in Scandic**

Since 1994, Scandic presents itself as an ecologically sustainable business: employees receive education on sustainability and the rooms in hotels are built in an environmentally friendly way. In 2001 the breakfasts at all Swedish Scandic hotels were awarded with the KRAV ecological product certificate, and by 2004 all Swedish hotels had earned the "Swan" ecolabel. Moreover, Scandic has received plenty of national and international rewards for its environmental efforts (Bohdanowicz 2004, 4).

The fact that Europe was suffering from deforestation and acidified lakes in 90s led Scandic chain to think about the environment and the future. Scandic decided to do something for solving environmental problems. The organization The Natural Step was involved to the Scandic's environmental processes. All the team members of the hotel chain were trained and awared of the sustainability issues and the administration was open-minded to all the new ideas. The first things Scandic's team invented were the "hang-up-your-towel-if-you-want-to use-it-again" concept, which is the global standard today, and denial of the small packages in bathrooms and at the breakfast buffets. In 1996 the concept of reporting appeared, so since then all the hotels are monthly reporting energy, water and waste which also allows to calculate fossil CO2 emissions.

Figure 11: Sustainability Live Report (Accessed on 18.02.2015 14:25)



In 2004 in virtue of Nordic Ecolabel, Scandic Sweden became the world's first ecolabelled hotel chain and now almost all of our hotels are labelled (Many steps on the way to a better world, Scandic).

A hotel with either EU Ecolabel or Nordic Ecolabel

- Minimise energy consumption
- Prioritise renewable energy sources
- Sort waste
- Use ecolabelled cleaning products
- Serve organic food and rewards sustainable fishing
- Place environmental requirements on suppliers
- Customise transportation

- Provide employee training (Stay with us for a sustainable world, Scandic).

Statistical facts about Scandic's sustainable developments tells that the reductions made by Scandic chain and its guests over 10 years can be seen in terms of:

- Energy consumption would be enough electricity and heating for 9,000 households for 1 year
- Fossil carbon dioxide emissions would be enough for a petrol-powered car to travel from Stockholm to Gothenburg and back, 270,000 times
- Water consumption would fill 683 Olympic swimming pools
- Unsorted waste would fill 2,770 trucks (Climate responsibility, Scandic).

Additionally:

- Every guest who stayed the night at Scandic in 2013 emitted almost 3 kilos less carbon dioxide (-60%), used 56 litres less water (-23%), and left behind half a kilo less of unsorted waste (-49%), than when we started measuring in 1996
- 2014 was the 4th year in a row that Scandic Sweden was voted the most sustainable hotel brand by 9,000 consumers in a survey conducted by Sustainable Brand Insight

*Figure 12: Scandic's sustainable developments*

From	To
Ordinary switches	Needs-oriented lighting controlled by the room key or a presence sensor.
Bulbs	LED lighting and low-energy light bulbs
Air conditioning without controls	Needs-controlled ventilation. Sometimes even controlled by the number of guests in the room
Fossil energy sources	Renewable energy sources
Petrol-powered cars	Environmentally certified company cars
Large cold-storage rooms	Several refrigerators with glass doors, so you can look first and then open.
Gas stoves	Induction stoves

Water is considered as one of the most important natural resources in Scandic. Hence, water consumption is done with great responsibility. Among the water-saving technologies there could be found low-flow toilets, special shower heads, taps with sensors, efficient washing and dishwashing machines, automatic dispensers for cleaning chemicals. Moreover, when the reporting process just started in 1996, each guest used 240 litres of water per day. Nowadays the figure is about 200 litres per day which is lower than the required number for Nordic Ecolabel hotels.

Drinking water served in hotels comes from its traps. It is clean and filtered, so does not make a danger for people. Serving own tap water instead of transporting bottles saves 160 tonnes of CO<sub>2</sub> per year.

Furthermore, the bottles used in Scandic are specially designed and made of hand-blown, recycled glass and the corks are made from recycled materials.



As about cleaning, 90% of all the chemicals used are ecolabelled (Water – our most important resource, Scandic).

After analyzing the presented developments it is possible to assume that all those steps allow to diminish the negative production impacts on the nature and human's health, reduce the energy consumption and, consequently, costs of maintenance of the hotel. Thus, room key controlled switches save energy of lights which could be left "on" after the guest left. Another positive step – reduction of fossil fuels usage and replacing them with renewable energy sources led to decrease in CO<sub>2</sub> emissions productions. According to Scandic's statistics, an average night at Scandic in 2007 produced 2.88 kilos of fossil CO<sub>2</sub> per guest. In 2013, the figure was 1.77 kilos.

Despite the fact that Scandic's website illustrates its sustainability concept from various perspectives immensely well, the author considered that personal interview with managerial person from Scandic Jyväskylä would be important and useful. The general manager of Scandic Jyväskylä -Birgitta Siitari gave answers to several question about the chain and the particular hotel and its sustainability.

The significant question for the author is about the construction year of Scandic in Jyväskylä. Thus, Ms. Siitari was asked when the Scandic Jyväskylä was opened and was it located in a new building or in an old one.

- Birgitta: Scandic Jyväskylä was opened in 1992 (new built), when environmentally issues were not so much in focus as they are now. We are pleased, that the materials which were used then are good quality, long lasting and this was also eco friendly (Siitari 2015).

Renovation of old buildings into ecologically sustainable is much more problematic, expensive and not very efficient than building new constructions

with already planned ecological design and equipment. The fact that many Scandic hotels were located in old and even antique constructions give a great speciality to Scandic Jyväskylä.

One of the best ways to improve company's service and please its customers is giving clients an opportunity to share their views, so the author finds suitable to ask about the ways guests are able to inform the administration about their thoughts of sustainability. Ms. Siitari mentioned giving feedback directly to hotel or by e-mail and answering to the guest satisfaction survey as the methods Scandic uses for receiving customers' opinions (ibid.).

Firstly, having feedback possibilities is of an extreme importance in each service company, especially in hotels, because hotel is a place where people stay for some time instead of their homes, so customers' opinions must be "heard" and taken into account. Secondly, the big range of feedback forms gives advantages for the company – more customers could share their opinions, and for potential customers.

Inasmuch as one of each organization's missions is getting the biggest possible profit with the lowest possible costs, the author is interested if the sustainable way of doing business affects costs. Ms. Siitari states, that it is hard to compare, because sustainability is already a part of our DNA. By sorting the waste, by thinking water consumption, by choosing energy saving light bulbs and so on Scandic is for sure saving money (ibid.).

Thus, it is known that sustainable way of doing business not only reduces the negative impact on the environment, but also decreases the production and maintenance costs. Onward, final sales prices for the product or service could be also shorten.

## 6.2 Accommodation in Russia. Case: Onego Palace Petrozavodsk

### About Onego Palace

*Figure 13: Onego Palace hotel Petrozavodsk*



The Onego Palace was opened in 2010 and tends to be one of the biggest and the most popular accommodation place in Petrozavodsk. It serves Russian guests as well as international ones: Finns, Japanese, Chinese, Germans. The hotel has a great reputation among VIPs, pop-stars, and even Russian presidents because of the convenience, cozy atmosphere and excellent service. A proof of the hotel's quality is the win in the annual competition "Leaders of Karelian Tourist Industry", organized by the Ministry of Economic Development of the Republic of Karelia. Moreover, in 2012 and in 2013 the hotel was awarded the honorary title of "Best Hotel in Karelia".

The modern and luxury hotel "Onego Palace" is located in the heart of Petrozavodsk, only about ten minutes from the train station and 30 minutes

from the airport. All the cultural and entertainment facilities are easily accessible from the hotel.

The guests of "Onego Palace" like its closeness to nature: the hotel is located on the waterfront of Lake Onega, and the views from hotel rooms are breathtaking.

The hotel has 103 rooms (standard single and double rooms, suites, luxury rooms and presidential apartments. It offers modern telecommunications, three conference rooms, designed for different numbers of participants and equipped with the latest technology, gym, sauna and swimming pool, massage and beauty salon, three restaurants with European, Russian and Japanese cuisines, lobby bar (Об отеле Онего Палас 2015).

### **Sustainability in Onego Palace**

Generally, the concept of eco-friendliness in all the life aspect is not familiar to Russia, especially to its market. Nowadays it is just entering the country and its culture and people not as aware of it as, for instance, in European countries.

The hotel Onego Palace does not have any information about sustainability issues inside the hotel (e.g. in the reception area), on the website or in customer feedbacks forms. Thus, the interview with hotel's managing director – Vadim Grishunin was conducted by the author for gaining more specific information about the subject.

Familiarity with sustainability concept in general was chosen as a starting point of the interview and the author asked the managing director to tell about

the eco-sustainability concept. Mr. Grishunin describes that ecological sustainability is about reducing of negative influence on the nature, humans. It concerns efficient usage of water and energy, waste management, and other life and production aspects (Grishunin 2015).

- Author: What kinds of ecological standards are taken into account for the hotel's operation?
- Mr. Grishunin: All the standards and regulations of Russian Federation concerning hotel business, safe production of products and services, production waste, cleanliness of outdoor ponds and premises (ibid.).

It is possible to notice that the eco-sustainability concept is familiar to the hotel and is taken into account in accordance with country's laws.

The main point of interest for the author is what kinds of eco-technologies are used in Onego Palace, and Mr. Grishunin gives a deployed rede. For instance, he says that the wind power and gas fuel are used instead of coal or wood and they are also thinking about installing solar panels, but it is unreasonable in this area of the country because the amount of solar days is very small, autumns and winters are extremely dark. At the moment, they are replacing usual lamps with energy-efficient lamps, but the costs are quite perceptible, and have tabs with sensors in public areas (public toilets on each floor, in restaurants). Moreover, card locks (which are breakfast passes at the same time) in each room as well as personnel's locks control the light in the room. In the hotel the waste management is also partly done: the third-party company exports paper and cardboard waste. Another company is doing utilization of solid domestic waste for Onego Palace. Federal laboratory takes samples of wastewater for analysis to ensure us that our production follows all the sanitary and ecological regulations. Swimming pools have special coal filters which keep the water clean, and another organization is doing cleaning and chemical processes. All these actions are quite expensive, but the administration wants to do the business according to the law. If talking about movement sensors, 70% of the area and premises is equipped with that kind of sensors: rooms, elevators, public areas, outside area. Outside signboard is

programmed for particular time (each month it is renewed according to the dawn and sunset). Unfortunately, the construction itself is made of concrete blocks with facing, but inside there are wallpapers made of natural materials. Additionally, all the chemicals which are used for cleaning, washing and dishwashing are ecologically-friendly, professional and produced accordingly to all the ecological and healthy standards (ibid.).

Despite the fact that there is no information about sustainability work of hotel on its website or in other sources, Onego Palace is actually doing a great job. Many issues are taken into account alongside with future plans.

Any organization will be successful only if the team is harmonious and united. Thus, the question concerning personnel involvement to the sustainable processes is of an importance for the author:

- Mr. Grishunin: For all the team members we hold seminars about ecological issues, cleaning issues and safe use of chemicals. Twice a year the whole team (together with top-management) is going outside and clean and take care of the hotel premises (it is Russian tradition). After that I [Vadim] organize a tea pause for convergence of all the team members (ibid.).

As well as the management of hotel must be “on a short hand” with its personnel to create a welcoming atmosphere and quality services for its customers, it is necessary to help customers support services they get by themselves. So, Vadim was asked about the ways of spreading the information about sustainable living and hotel rules.

- Mr. Grishunin: In our hotel we have warning signs in each room and in public areas about dealing with different kinds of waste and about smoking (ibid.).

Finally, getting know the customer is essential for the company's development, and feedback forms with all the range of its types is a great way for everyone to tell about their experience. The director of Onego Palace understands the importance of customers feedback and finds it useful. He says, that the company wants to be kind and open for everyone and appreciate opinions as well as new ideas, suggestions. Moreover, if they get negative feedback Mr. Grishunin personally calls to client, makes apologizes and tries to solve the situation for the future (ibid.).

## 7 APPLYING FINNISH EXPERIENCE TO THE RUSSIAN HOTEL BUSINESS

Based on the whole research process, after analyzing the theoretical frame, already existing ecological concerns, as well as after a more thorough insight into another company's positive experience of sustainability, a list of recommendations for developing the Onego Palace was created:

### **Planning**

It is important to create a sustainability plan which will consider each and every company's process. The plan could be divided into months and years and take into consideration the materials for renovation, new modern equipment, facilities. Additionally, it is necessary to calculate the budget needed for all improvements and monitor the market for available materials and their prices as well as the costs of the third-parties' services possibly used. Of course, it would be necessary to make as much technological improvements as possible, because in the end they all will pay off and save the environment and production costs at the same time.

### **Teaching**

When the development process starts, the first point to be done is training the employees: teaching seminars, brochures, briefings, visible notes would be suitable. It is important to know that each member of a team become aware of the sustainability concept and will support it well.

### **Sharing**

When a potential customer want to know about the company, they usually look in the website. Hence, information about eco-friendliness must be available on the website: a description of the concept, visible ads, figures and numbers.

### **Asking**

Knowing what the customer thinks makes a company work better. Since feedback forms on the website are already used, it might be better to change them and ask particular questions (kind of trip, gender, opinions about service and sustainability, suggestions).

### **Analyzing**

Analyzing is an essential step after receiving opinions because only an analysis will lead to new ideas, improvements and changes.

### **Counting**

Statistics and numbers will visually demonstrate what has already been achieved and what should be achieved in future. Counting the kilowatts, the amount of money needed and spent, counting the hotel occupancy – everything will demonstrate how successful the business is.

### **Thinking without borders**

Sustainability is not only about efficient technologies. It also concerns human's health. Ecological food, clean drinking water solutions, concerning different



diets in the restaurant menu (for allergic people, for vegetarians), taking care of people with various diseases and disabilities – all these issues will make the hotel better and available for everyone. Own production of some product could be a solution for transportation costs and effects (e.g. baking own bread instead of buying and delivering it to the hotel will decrease the transportation impacts significantly because bread is one of the most often used products in the kitchen, and it always need to be fresh: at least during the breakfast guests may consume up to 10 loafs of bread).

## 8 DISCUSSION

Since ecological issues are becoming more important in modern society and syne people become more aware of them, individuals and companies alike should take into consideration the concept of sustainability. It is possible to find plenty of good examples – organizations with a splendid sustainability strategy. Despite the significance of the concept, there are companies, which are not as familiar with it as, for instance, European ones. Here the method of comparison might be useful – this way one organization would be able to inherit positive experience from others and create their own sustainability strategy.

The aim of the Thesis was to devise a list of recommendations based on one of the case studies – the Onego Palace hotel. Hence, at the very beginning it was necessary theoretically define and describe the sustainability concept in general, its role in the hotel business, go more in depth into studying modern eco-technologies and eco-design, mention eco-labelling – the way of recognition of company's contribution into environmental safety. Furthermore, the *case study subject* (Scandic Jyväskylä) was studied carefully and meticulously through the website information and personal interview with the general manager. This, along with the precise research of today's operation processes of the hotel, provided the needed information, based on which the list of development recommendations for *case study object* was created.

It is important to mention, that the case object was chosen in accordance with the author's personal interest. Moreover, after interviewing the managing director of the Onego Palace, it became clear that the hotel was also interested in the research results because constant improvement and market leadership are important issues for them. Thereby, the author will continue the dialogue with the case object. Additionally, this study could be used in the future as a basis for new studies and projects.

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## APPENDICES

### Appendix 1: Interview questions for Scandic hotel

1. How would you describe the concept of eco-sustainability in hotel business?
2. Why the Scandic hotel chain is aiming to be sustainable?
3. Please describe in which ways the hotel is supporting the idea of eco-sustainability?
4. How the hotel guests are able to inform the hotel's management about their thoughts of the sustainability concept in Scandic?
5. Does the sustainable way of doing hotel business affects on costs? Does it raise or low the costs?
6. What kinds of issues the hotel should concern to get the eco-label? (Nordic eco-label, EU Ecolabel)
7. Was the Scandic hotel in Jyvaskyla built as a new construction with the use of environmentally friendly materials, or was it designed in the old building?
8. How the hotel's management is planning to make Scandic even more environmentally-friendly?
9. In which ways the hotel's management involves employees and customers to keep the hotel sustainable?

### Appendix 2: Interview questions for Onego palace

1. How would you describe the concept of eco-sustainability in hotel business?
2. What kinds of ecological standards are taken into account for the hotel's operation?
3. Would it be suitable to implement that kind of innovations?/In which ways the hotel is doing its processes concerning eco-friendliness?

4. What kinds of eco-technologies are used/would be suitable to use in the hotel?
  - Energy-saving lamps
  - Movement detectors
  - Water traps with sensors
  - Flushable toilet paper rolls
  - Waste management
  - Eco-friendly materials in building and decoration
5. How the hotel management is involving/would involve the personnel to keep the hotel sustainable? (lectures, seminars, brochures)
6. Please describe how the hotel's management is spreading/would spread the information about sustainable living in the hotel among customers?
7. Why it is/would it be useful to receive feedback from the customers?

### Appendix 3: E-mail copy for interviewing Birgitta Siitari

Dear Birgitta Siitari,

I am a Facility Management degree student and now I am doing my thesis for Jyväskylän ammattikorkeakoulu. The topic is "Environmental sustainability in hotel business: applying Finnish experience to Russian hotel business. Cases: Scandic hotel, Finland and Onego Palace, Russia".

Thus, I need to gain some important information from both hotels. I am out of Finland for practical training at the moment, so I have to do the interview virtually (otherwise I would come to the hotel by myself). I would be glad if you could help me and answer a few questions about Scandic's sustainability. I would appreciate your help very much! We could arrange a Skype interview, or I would be also glad to get written answers (if there will be language problems, the answers might also be in Finnish).

I am attaching the file with questions to this e-mail. I would be really happy if you would answer the questions or if I could get a connection to the person in charge of the topic!

Thank you in advance!

Best regards,

Anastasia Kostyukova  
(the questionnaire attached to the e-mail)