Sustainable Event Management

Case Sumiainen

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1 Introduction

Events are unique gatherings that bring people together and include different types of core activities. Events can be arranged anytime anywhere and their sizes and themes differ. Events have the potential to bring forth products and services that the customer wants and needs. Events affect the environment in many ways therefore it is important for event organizers to identify and minimize these impacts. Event organizers have the chance to become pioneers in sustainable development by showing others how this is done.

The author’s purpose was to analyze the present state of sustainability at the Christmas event in Sumiainen. The author’s felt that the sustainability of the event could be developed further and that the village council of Sumiainen could benefit from the research data. The author’s chose to create a set of guidelines based on the written theories in order to help event organizers in the planning process. The author’s felt that the guidelines could provide a type of a checklist for event organizers. The guidelines are presented with realistic and practical tips on how to enhance the sustainability of the event in a simple and easy to follow form.

In this thesis the theories of event management and sustainable event management are introduced. The main focus is placed on sustainable event management practices. After the introduction of the written theories, a case study is presented in which the Christmas event and its features are disclosed. Following this the research methodology and research data is presented and analyzed. Afterwards, the results are concluded with suggestions for future adaptation of the event. This thesis offers information on how to increase the knowledge and understanding of sustainable development with the help of the present situation analysis and guidelines.
2 Events and event management

2.1 Event definitions

Shannon Kilkenny (2006, 29) defines the word event as, ‘an occasion, a gathering of people at a certain place at a certain time for a specific reason’. Getz (2005) defines special events according to their context. He offers two definitions, from the point of view of the event manager and of the customer:

1. A special event is a one-time or infrequently occurring event outside normal programs or activities of the sponsoring or organizing body.
2. To the customer or guest, a special event is an opportunity for leisure, social or cultural experience outside the normal range of choices or beyond everyday experience.

There are many different definitions given by various academic writers, websites and other publications. In simplified terms, an event can be seen as something that is temporary, that gather’s people together, sometimes displays ritual and oftentimes is referred to as an instance that is unique (Bladen, Kennell, Abson, & Wilde, 2012, 3).

Event Management definition

Event management is defined as a ‘function requiring public assembly for the purpose of celebration, education, marketing and reunion or as the process that includes research, design, planning, coordinating and evaluation of events’.

(Goldblatt & Nelson, 2001, 71)
Types of events

There are various types of events and needless to say there are many different ways of grouping or categorizing these events. In most cases, events are categorized according to their size or the content provided. Events are typically classified according to size. For example, mega-events are events that are large in size and affect whole economies on an international scale. Examples of mega-events include the Olympics Games and the FIFA World Cup. Hallmark events are defined as events that gain recognition and awareness and affect tourism. Hallmark events are a synonym for a region, city or a town; for example, Oktoberfest in Munich or the Carnival in Rio. Major events are events that gain significant media coverage and economic benefit. The event context of major events consists of competition between a numbers of nations and holds international significance. Examples of major events are Neste Rally and the Open Championship. Local/community events are staged for fun and entertainment and are targeted to locals. Some examples of local events are Yläkaupungin Yö and Sataman Yö. Events are also categorized according to their content. Cultural events express human activities, which contribute to cultural and social life, for example, festivals. Sports events are dedicated to testing sporting aptitudes, for example, Formula Grand Prix. Business events are usually conferences, corporate events or exhibitions, for example, the Nordic Business Forum. (Bowdin, Allen, O’Toole, Harris & McDonnell, 2006, 15-23)

2.2 Planning of events

Event concept

When creating the event concept, the event manager should consider the ‘five W’s’: why, who, when, where and what. Why refers to the reason for organizing the event, the essence and importance of the event. Who refers to the stakeholders and customers and any other persons expected to attend the event. It is important to consider when the event will be held in order to determine that there is adequate time to plan and execute the event. The choice of location and venue should be assessed so that it represents both the needs of the organization as well as the audience. The event context or product has to meet the demands and desires of the customers. (Bowdin, Allen, O’Toole, Harris & McDonnell, 2006, 107) Once these
questions have been answered, the answers will guide the event manager to develop the event and determine factors that will make the event unique. After the event concept has been finalized the planning process may commence.

**Planning process**

The planning process includes the establishment of the present moment and future visions and the strategies on how to accomplish these. If the event is held for the first time, the feasibility or profitability of it should be determined. If the event is pre-existing then the event manager can start the bidding process. The bidding process should be conducted in a way that the final output is in accordance with the needs of the organization, stakeholders and resources and all other personnel involved in the planning process. Meticulous planning of the event determines if the set goals are realistic and clearly defined. The planning of the event finds the best strategies and solutions to attain the set goals and objectives as well as increasing the efficiency of event operations. A clear plan helps to allocate resources better as well as making time management more efficient. (Iiskola-Ketonen, 2004, 9)

Event planning can be divided into strategic and operational planning. Strategic planning is made up of purpose, vision, mission statements, goals, objectives and situational analysis. Every event should have a clear statement, stating its purpose and vision. The mission statement should express what the event manager’s purpose of the event is, what the event organization is trying to accomplish. The mission statement acts as a foundation on which the goals and objectives of the event are set and it develops the strategies on how to attain these. The objectives of the event are something that can be measured, for example, the number of participants or net profit returns. Often the objectives are used to reflect if the planning has been a success or a failure. The situational analysis (SWOT) takes into account the possible risks and threats as well as strengths and weaknesses of the event. The situational analysis helps the event manager to explore the internal and external environment of the event and guides in the revelation of potential factors that should be observed thoroughly. (Bowdin, Allen, O’Toole, Harris & McDonnell, 2006, 124-131)
**Organization**

The event organization is responsible for hosting the event and they are also in charge of assigning the roles and responsibilities of other staff members. The event organization has the legal responsibility of the event. (Iiskola-Ketonen, 2004, 30) The staffing should be organized to comply with the specific needs of the event. The human resource functions of recruitment, selection and training should be conducted so that the jobs of each staff member should reflect their skills and qualifications. In some cases organizational charts can be used in order for the staff to fully comprehend reporting relationships and developing job descriptions in order to understand their specific roles. (Bowdin, Allen, O’Toole, Harris & McDonnell, 2006, 145)

It can help to divide the roles into key areas of interest. For example having a team for operations, financial, marketing and legal matters (Kilkenny, 2006, 54). A money saving tip is to use volunteers as staff. It is crucial to bear in mind that the volunteer jobs should be designed so that the volunteer finds it easy and motivating to take on that specific task. The event organizer should orient the volunteers for their specific jobs. When the volunteers are satisfied and feel appreciated by the organization, there is more of a guarantee to access the volunteers for future jobs. (Iiskola-Ketonen, 2004, 30-34)

It is important to keep in mind that often events are projects and the arrangements consist of many tasks and problems that need to be solved. Often the problems deal with many sectors at the same time. To reach the best conclusion it is essential for all persons in charge to co-operate and communicate openly. The whole event team should be familiarized with the event concept and its mission in order for the team to have the same motive for organizing the event.

**Event design**

The design of the event should be formalized so that it is consistent with the purpose of the event. Creating the event design considers different aspects that benefit in establishing the atmosphere. Theme is an aspect to consider, it should be appealing to all senses of the audience (touch, smell, taste, sight and hearing). The
layout/design of the event area should be formalized so that it is socially comfortable for the audience. Décor or the effects used to enhance the experience of the event is among the things to acknowledge. It is important to meet all the staging requirements (power, lights, sound and audiovisual) in order for the event to run smoothly. The entertainment should be chosen so that it accommodates the purpose of the event. Food and beverage should be selected so that quality and options suit the purpose of the event. Whereas service creates the atmosphere of the event and the uniqueness of the visitor’s experience. (Van der Wagen & White, 2010, 32-35)

**Event location**
The choice of event venue depends on the size, resources and purpose of the event. The choice of venue should meet the needs of the stakeholders as well as enhance the event experience for the customers. It is important to consider the suitability of the venue, how functional the site is and how it fits the event design. (Van der Wagen & White, 2010, 40) The venue should be easily accessed by locals and traveling participants. Venue choice should also consider what facilities and services are needed and their possible outsourcing. Defining the event budget helps in choosing the perfect location for the event.

**Quality of event**
Nowadays customers are more aware of the quality of their purchases and they are expecting to get the best quality for their money. It is important for the event manager to want to host a qualitative event. It is important to keep in mind that each participant determines the quality of the event according to their personal views and opinions of good quality. Quality of the event can be seen as being two-dimensional, consisting of technical and operational quality dimensions. The technical quality refers to anything concrete that the participant gains for attending the event, for example, a brochure or a gift bag. The operational quality then refers to any experience or service that the participants receive. (Iiskola-Ketonen, 2004, 22) The participant’s perception of the event determines if the event is regarded as qualitative. The quality perceived is good if the event fits the expectations of the participants.
2.2.1 Event Marketing

Marketing can be defined as ‘the management process responsible for identifying, anticipating and satisfying customer requirements profitably’ (CIM, 2005). In more simplified terms marketing deals with products, experiences and ideas that satisfy the needs and wants of the customer. It is crucial to understand that marketing is not just something that initiates once details have been finalized and that marketing is much more than just advertising. Marketing should be seen as a function that is essential before, during and after the event. (Bladen, Kennell, Abson & Wilde, 2012, 163)

Marketing process

The marketing process should be included in the very start of the event planning process. The first step is to set the marketing goals and objectives or to review these if they have already been stated in the planning process. Clearly stated goals and objectives will help to outline what is wanted out of the event. Marketing, on the other hand, helps to plan activities that raise awareness of the event and convert possible visitors into assured visitors (Shone & Parry, 2004, 156). Before planning the event marketing, the customer needs and wants need to be considered thoroughly. The event manager needs to identify the target markets, which furthermore can be divided into customer segments. In order to recognize the target groups, market research can be conducted. The research can help to plan the required marketing activities. It is important to consider and plan the promotional activities according to the marketing objectives. The image and sought reputation of the event is also something to be considered.

Marketing strategies

Within event marketing there is a great variety of events together with different marketing strategies and tools. Despite all this, the basic marketing functions are the same. Marketing aims to create products or services that the customers want and/or need. Marketing creates demand and obtains customers. It brings products and/or services into the reach of the customers and maintains customer relationships. (Iiskola-Kesonen, 2004, 55) The chosen marketing strategy should consider the factors of marketing and how these factors can be used in order to gain competitive
advantage. The success of event marketing can be affected by different uses of the marketing mix strategies. In event marketing these elements are usually broken down into the 7P’s, which are demonstrated in (Figure 1) below. (Bladen, Kennell, Abson & Wilde, 2012, 171).

![Diagram of 7 P's of the marketing mix](image)

**Figure 1: 7 P’s of the marketing mix**

The product can be either tangible or an intangible product or service that the event provides. The marketing of the product should concentrate on how to position the product and how its product development strategies can be furthered. Pricing strategies can be revenue, operation or market based. In revenue based pricing strategy the event manager focuses on charging the highest possible rate that the target market is willing to pay. Promotion encompasses how the product/service is advertised and promoted to the audience. Place refers to the distribution of the product in a way that it is easily accessible. The physical evidence is proof showing that a service was executed. The element of people refers to all personnel in charge
of the event, whereas the process part defines the steps that the organization has taken in order to execute the event. (Bowdin, Allen, O’Toole, Harris & McDonnell, 2006, 209-220)

**Sponsorships**

Nowadays finding sponsors and other companies with similar interests can be beneficial in the marketing process. With the event market expanding, the event managers must learn about the increasing cost-recovery possibilities that sponsorship creates. While sponsorship is a key function for some companies, the fact remains that the majority have not thought to use it as a marketing tool because event managers have not approached them. (Bladen, Kennell, Abson, & Wilde, 2012, 178) Effective sponsorship can be lead to lasting working relationships and innovative sponsorship strategies that can be the key factor in making the event a success.

2.2.2 **Budgeting**

**Budgeting process**

According to Shannon Kilkenny, (2006, 61) a budget is a written document forecasting the potential costs and income of the event. It is critical to define the financial goals in the planning process of the event. These goals will mirror the vision of the event and help the event manager to come up with the resources for the budget. The budget process includes costing and estimating income and allocating financial resources (Allen, O’Toole, Harris, McDonnell, 2008, 204). The budget needs to cover fixed, variable and indirect costs. A 10 percent contingency is recommended to cover unforeseen costs. (Kilkenny, 2006, 69)

**Source of money and break-even point**

In return the budget determines pricing for the tickets, also the venue choice and other costly attributes, such as catering. The source of the money must be determined, whether it comes from the event manager’s own reserves, sponsorships, participants or from a combination. After the expenses and incomes have been placed in the budget, the break-even point should be localized in order to help determine an appropriate accounting style (Kilkenny, 2006, 62). It is important
to keep in mind that events are different in nature and therefore the expenditures for each event vary, there is no set formula for the budget (Kilkenny, 2006, 63). The economic balance of the event is sustained by creating the budget diligently and realistically. A lucrative event is based on the simple idea that the profit is larger than the expenses (liskola-Kesonen 2004, 76).

2.2.3 Logistics

Logistics is derived from the Greek word logistikos meaning ‘skilled in calculating’ (Allen, O’Toole, Harris & McDonnell, 2008, 487). Event operations rely on the movement of materials and people, making logistics a crucial part of event management. Logistics does not just refer to the movement of products and materials but also that of information. Logistics can be seen as a plan or an operation to satisfy customer needs (Bowdin, Allen, O’Toole, Harris & McDonnell, 2006, 353).

Event logistics

Event logistics incorporates the economical supply of the customer to the product and the supply of facilities to and from the event location. Event logistics is more similar to military logistics, in a sense that it is concerned with a specific project or campaign rather than continuous management. (Allen, O’Toole, Harris & McDonnell, 2008, 487) Planning of logistics is affected by the marketing of the event. For example, the event manager has to consider ticketing, queuing, transport and accommodation according to the number of participants.
Elements of event logistics

Figure 2 demonstrates the elements of the logistics system. Furthermore, the logistics system can be divided into purchasing and the supply of customers, products, and facilities. Once the event takes place, the logistics system deals with the movement of the products and goods and customers in the venue site. After the event, the logistics system is concerned with the shutdown of the event. It is important to keep in mind that logistics is an invisible part of the event and the participants will only notice it if something goes wrong. Getting the logistics right can determine the success or failure of the event. (Allen, O’Toole, Harris & McDonnell, 2008, 488).

2.2.4 Food and beverage

Serving of food

Depending on the event, the styles of food and beverage service may vary greatly. The types of services for food can be an outsourced catering company, in-house buffet, food stalls, independent entrepreneurs, etc. The common goal is to create an
operationally practical solution, which enhances the overall experience of the event (Van de Wagen & White, 2010, 289-291).

**Food supply management**
The food supply management at an event is vast part where multiple aspects need to be considered and carefully planned. The logistics of the food products to and from the venue site can be problematic because the access to the event site can be limited. Supply chain analysis can be useful in estimating the time needed for delivery and off-loading, in order to prevent traffic delays. (Van der Wagen & White, 2010, 294) The storage of the food products is also something that must be considered, especially when preparing large quantities of food.

**Legislations**
There are national food legislations that must be abided. The Health Protection Act in Finland regulates that the event manager must act in a safe way when handling food products (Iiskola-Kesonen, 2004, 87). The event manager must also follow the national alcohol legislations, for example having the license to serve alcohol and to only serve alcohol to people that are of drinking age. The Food Act in Finland ensures that the information regarding the food products is truthful, sufficient and not misleading. It protects the consumer from possible health hazards and financial losses that could be caused by food regulation violating food products, as well as improving the conditions of operations for the business operators. (Finlex, Food Act, 2014)

**Waste management**
The waste emerging from the catering operations is considerable. The most common recycling stations include the following: cans and bottles, paper and cardboard, food waste (for composting) and residual waste (non-recyclable). (Van der Wagen & White, 2010, 299). The event manager must take into consideration that they have the responsibility of solving the waste management issues. The Waste Act helps to identify the local regulations for recycling of waste. There is also a ban against littering in Finland. In some counties it is mandatory to have a written agreement and a plan for the execution of waste management. (Lampinen & Välikylä, 2009, 22)
2.2.5 Risk management and security

Risk management is an essential part of the event planning process. The event manager is legally responsible for the overall security of the event. ‘Risk, in event context, may be formally defined as the likelihood of the event or festival not fulfilling its objectives’ (Bowdin, Allen, O’Toole, Harris & McDonnell, 2006, 319). It is critical for the event manager to plan and develop strategies for dealing with unplanned events and their consequences. The risk management process can be divided into a process that includes identifying the risk, analyzing, evaluating and treating the risk.

Laws, legislations and regulations

There are national and local legal requirements varying between countries that the event manager must abide by. Generally the larger the event, the more regulations, permits and licenses are involved. (Bladen, Kennell, Abson & Wilde, 2012, 84). The event organizer must consider the following issues and the legal activities involved: serving of alcohol, food handling, staffing, noise, fire precautions, first-aid regulations, waste disposal, electricity, public entertainment licenses and occupancy levels (Lampinen & Välikylä, 2009, 18).

In Finland the event manager has to consider the following laws and regulations: the Assembly Act, Security Stewards Act, Rescue Act, Health Protection Act (Food Act), Consumer Protection Act and Production Liability Act. The Finnish law states that there has to be a written notification delivered to the police at least five days prior to the event. The security personnel ensure the safety and security of the participants as well as preventing crimes and accidents. The Rescue Act obligates the event manager to prevent any hazardous situations and to be prepared for perils and their mandated rescue operations. The Health Protection Act obliges to handle food products in a safe manner. (Iiskola-Ketonen 2004, 87) Advice on security and the Rescue Act can be sought from the local law enforcement. The event manager has to ensure safe working conditions for all of its personnel as well as making sure that insurance covers needed policies.
Risk Assessment

It is critical to think of potential risks in the planning process of the event. The planning of these should strive to consider all the aspects that can make the event a success or a failure. The division of the risks into groups can help in the prevention of these. The risks of the event can be divided into pre-event, during the event and post-event risks. A risk assessment document that states the identified risk and the existing measures taken as well as who is responsible and what are further actions to be taken in order to minimize the occurrence can help the organization in the risk management.

2.3 Sustainable practices in event planning

The Bruntland Commission report for the World Commission on Environment and Development (WCED, 1987) defined sustainability as ‘development that meets the needs of the present without compromising the ability of the future generations to meet their own needs (Razaq & Musgrave, 2009, 2). The word sustainability is often associated as sustainable development and sometimes spoken of as ‘green’. On a world scale the events industry is continually growing with its number of participants reaching millions upon millions. The event industry now has the responsibility to provide sustainable event management (Jones, 2010, 4).

Multidimensional theory

Sustainable development is a multidimensional concept that can be divided into economic, environmental and social elements. The economic element is concerned with the limitation of resources and even suggests that economic growth cannot be eternal. Therefore economic development must retain economic capital, while improving quality of life and the environment in order to provide stable economic growth. (Razaq &Musgrave, 2009, 2) The environmental element is interested in overexploitation and mismanagement of living organisms and non-living materials of our ecological system. In order to prevent or minimize this impact reduction of waste and consumption of natural resources as well as reducing pollution must be enforced. The social element states that a stable infrastructure and cultural stability are dependent upon each other. A stable society is concerned with meeting the
needs of individual groups and having equal values and shared ideas, thus sharing the responsibility for social sustainability. In the business world, these elements are often referred to as the triple bottom line. It is becoming common for companies to take part in corporate social responsibility; which can generate more profit. (Jones, 2010, 77)

**Sustainable event management**

The activities involved in the execution of an event always impact the environment in some way. The areas of impact can be divided into resource use or emissions. (Jones, 2010, 4) The event manager should focus on the areas of purchasing, waste management, energy production, water management and transport in order to minimize the impact on the surrounding air, land and water. The event manager should keep in mind that a sustainability focus can affect the ideas, views and behavior of the participants, contractors, suppliers and the events industry (Jones, 2010, 5). The sustainability focus can raise awareness of sustainable development and its importance towards our future.

### 2.3.1 Sustainable marketing

Sustainable marketing is defined by The American Marketing Association (AMA) as follows: the marketing of products that are presumed to be environmentally safe, the development and marketing of products designed to minimize negative effects on the physical environment or to improve its quality, or as the efforts by organizations to produce, promote, package and reclaim products in a manner that is sensitive or responsive to ecological concerns. (Sloan, Legrand & Chen, 2013, 192)

Sustainable marketing still follows the basic principles of marketing. Although focus is placed on all the impacts of activities and the life cycle assessment of products or services. The most important aspects to consider in sustainable marketing planning are green positioning, stakeholder’s engagement and audience communications (Jones, 2010, 37).
**Green positioning**

In green positioning, the event manager has to consider how they want the event to be viewed by the wider audience and community. The way that the event manager places their sustainability qualifications and sustainable ambitions in relation to the overall image will impact how the participants view the event (Jones, 2010, 38). The event manager has to keep in mind that the sustainable values presented are realistic; the sustainable values should not be exaggerated. The event manager can consider branding the event, this means that all the sustainability projects will fall under one banner or slogan (Jones, 2010, 38). Branding can be valuable in catching the participant’s attention. It might be beneficial to partner with a non-governmental organization (NGOs) in order to receive credibility and to gain visibility. Choosing to have a sustainable theme or a key campaign at the event is something that can help with the green positioning. (Jones, 2010, 39-40)

**Stakeholder engagement**

It is important for the stakeholders, both internal and external as well as the organizers to have the same motivation towards sustainable practices in event management. Motivation which leads to education and in the end understanding, makes the people commit to the issue and increases the involvement in the whole project. If there is no understanding of the big picture, the sustainability of the event will most likely end up being a lot of talk and no walk, which will affect the image in a negative way (Jones, 2010, 47).

**Audience communications**

In most cases the event organizers cannot control the internal operation activities, such as reducing energy demand, using renewable resources and so forth, however influencing the way that the audience behaves is something that can be impacted (Jones, 2010, 60). The key is to understand what provokes the participants; this will help the event manager to come up with the most effective strategy for action. Sustainable working methods and choices are all a part of sustainable event planning and communicating these to the participants is an essential part of the process. It is important to keep in mind that responsible communication also includes communicating the negative impacts on the environment and the ways that these impacts have been minimized (Lindroos & Teiriö, 2012, 50).
**Sustainable marketing tools**

The means of communicating to the audience should follow sustainable practices. Printing methods should be sustainable and take advantage of using recycled paper. The recycled paper should be used for other paper-based products, such as, toilet paper, napkins, folders, etc. If the event manager decides to use a printing press for promotional material, the supplier should be chosen according to their sustainability certification. The use of promotional paper material should be at a minimum whereas social networking and online media should be focused on. The marketing team could consider using online media, such as blogs, message boards, webcams, vlogs, live chats, streaming media, podcasts and apps to advertise the event. (Goldblatt, 2012, 240-243) The event manager can consider promoting with a sustainable spectacle, such as an art installation that uses solar power etc. This spectacle can make a lasting impression and raise awareness among the participants. Another way to promote the event is to incorporate education into the event. Friendly and informative signage can remind the participants about energy consumption, public transport, etc. Incorporating interactive educational displays, games or trivia questions is a fun way to inform the participants about sustainable development. (Goldblatt, 2012, 248-250)

### 2.3.2 Energy production

The environment is impacted from energy production and the transmission of energy. The impacts can be seen as global or large-scale or local or regional, in terms of their reach and severity. Some of the problems that energy production causes to the environment are global warming, acidification, loss of natural resources and biodiversity as well as the amount of waste produced. (Energiateollisuus, 2014) In Finland, there are laws and regulations that direct energy production. The Environmental Protection Act strives to promote sustainable use of natural resources and alleviate climate change. The Emissions Trading Act promotes for reduction of greenhouse gas emissions in an economic and cost-effective way. The Land Use and Building Act is concerned with construction while the Environmental Impact Assessment Procedure mandates to carry out environmental impact assessments (EIAs) on all major construction projects. The Water Act directs water construction...
and the use of water, while the Waste Act and Decree governs waste management and the utilization of all waste. (Energiateollisuus, 2014)

In most cases the event manager is not able to influence energy production and its consumption because the event facilities come with their own contracts for energy production. The event manager should therefore concentrate on minimizing the impact of energy by reducing power consumption and looking for alternative ways to provide power. If possible the event manager should always opt for a sustainable building. Government agencies nowadays are introducing regulations and rating systems for buildings. In Europe, the Energy Performance Certificate (EPC) is used for commercial buildings. This certificate tells how energy efficient the building is by using a scale of A to G, with A-rating being the highest rating. (Jones, 2010, 81)

**Renewable energy sources**
Renewable energy sources are also known as alternative energy sources. Renewable energy means that its source is unlimited, whereas non-renewable sources are limited. In Finland energy is produced with several different energy sources and production methods. (Figure 3) The most essential sources for electricity are nuclear power, hydropower, coal, natural gas, wood fuels and peat. Wind power share is still quite small but has a lot of potential for cultivation. (Energiateollisuus, 2014)
Figure 3: Finland’s energy supply by energy sources 2013

**Hydropower**

Hydropower is binding naturally flowing water to generate hydroelectricity for useful purposes, such as powering mechanical devices (Goldblatt, 2012, 138). Hydropower is generated by using the flow of water through a turbine with a generator, in most cases the water is acquired from a river or manmade installations (Sloan, Legrand & Chen, 2013, 46). In 2013 hydropower accounted for around 15.2% of energy production in Finland. There are over 220 hydroelectric power plants in Finland that account for an output of around 3100 MW (Energiateollisuus, 2014).

The benefit of using hydropower is that it can be stored in large storage pools; therefore it can be harnessed when energy consumption is at its peak. The downside to hydropower is its dependency on the weather conditions. If rainfall and the collection of melted snow water have been limited there might be a shortage of water to be stored. Hydropower is a clean solution for the environment as it causes a minimal impact. Its environmental impacts are mostly limited to water areas situated close by. Hydropower does not produce concrete waste and there are no emissions.
to air, water or soil. Hydropower has also been beneficial in the prevention of floods and the damages caused by these. (Energiateollisuus, 2014)

**Solar power**
Solar energy is heat and radiant light collected from the sun by using different technologies. The radiation caused by the sun holds an enormously large amount of energy, although only a small part of it can be exploited for energy production. Solar energy can be used to provide electricity, mechanical power, heat and lighting. Solar technologies are divided into passive and solar based depending on the way they capture and convert solar energy. The use of photovoltaic panels and solar thermal collectors are included in the active techniques while the selection of favorable materials for construction fall under the passive technique. (Sloan, Legrand & Chen, 2013, 44-46) Solar energy is stored in batteries so that it can be used during nighttime and rainfall (Energiateollisuus, 2014). The downside to solar power is high costs, dependency on weather conditions and the limited sources that can benefit from it. The benefit of solar power is decrease of fossil fuels as well as energy costs.

**Wind power**
Wind power uses wind turbines to harness kinetic energy and converts it into electricity (Sloan, Legrand & Chen, 2013, 46). The most common place to construct wind plants is on mountains or hills where wind is plentiful. In Finland there are many areas suitable for wind power plants, especially on the coast, sea and the fells of Lapland. In the year 2013 there were 211 wind power plants in Finland, accounting for an energy production of 777 GWh. Wind power plants produced 0.9 % of Finland’s energy (Energiateollisuus, 2014). Wind power differentiates from other forms of power production due to its time sensitivity. The production of wind power depends on the amount of wind, which varies hourly and daily. Therefore the stability of the energy grid has to be adjusted with the help of other power plants. Wind power is renewable, clean, abundant, and produces no greenhouse gas emissions to land, water or air during its operations. The downside to wind power is the impact caused on scenery as well as noise pollution. As of now, wind power is not financially lucrative without measures of support but wind power has a promising future. (Energiateollisuus, 2014)
Bioenergy
Bioenergy is formed from different biomasses, such as wood, manure or any other byproducts of agricultural processes. Bioenergy releases carbon dioxide into the air, however biomass recycles the carbon dioxide from the atmosphere. If the biomass cycle of growing, processing and burning is sustained there is minimal or no net gain in atmospheric CO$_2$. (Sloan, Legrand & Chen, 2013, 48) The benefit of using bioenergy is that it decreases the carbon dioxide emissions and helps to slow down climate change. Biomass technologies use combustion processes for production and therefore can provide electricity at any given time, unlike wind and solar powers that are dependent on weather conditions (Energiateollisuus, 2014).

Geothermal energy
Geothermal power is gained by heat that is stored below the surfaces of the earth. The heat from earth’s molten core is formed by radioactive decay of minerals and then transformed into electricity. Geothermal heat circulates within the rock or is transferred to water reservoirs that spread underground in the earth’s crust. (Sloan, Legrand & Chen, 2013, 47-48) Depending on the area, the heat source can be located close to the surface where it can provide a cheap source of energy. In most surface areas, boreholes would have to be drilled to extreme depths that would prove to be uneconomical. Heat pumps are an energy efficient choice for climates with gentle heating and cooling needs. The geothermal heat pumps move heat between inside and outside of the building. Even though the installation of these heat pumps costs more, their operational costs are lower due to the fact that the heat pumps support constant ground or water temperatures. (Sloan, Legrand & Chen, 2013, 47-48) Capitol costs for construction of geothermal plants is expensive, whereas the operation and maintenance costs are inexpensive and there is no cost for fuels.

2.3.3 Sustainable heating and ventilation

Heating and ventilation
Heating and ventilation make up a big part of any facility’s utility costs. Modern technology has enabled products that are energy efficient and that need less maintenance, thus decreasing costs. The most energy efficient ventilation unit
available is the geothermal heat pump mentioned earlier, that uses the ground instead of outside air, in other words the earth’s natural heat. (Sloan, Legrand & Chen, 2013, 54) Intelligent control of heat and ventilation is quite easily moderated and the temperatures should be modified according to specific needs. The recommended temperature for living and office spaces is 20-22 degrees and in industry spaces 18 degrees. It is estimated that one degree drop in temperature equals a 5% decrease in annual energy consumption. (Lindroos & Teirio, 2010, 10) In climates that are moderate outside air can be used for ventilation purposes.

**Insulation**
Checking that the insulation of the building is up to standards is another way to conserve a significant amount of energy. The facility owner can think about upgrading single-glazed windows to double or even triple –glazed windows in order to prevent the heat from escaping. There are ways to maximize the energy efficiency of windows without replacement by making sure the window frames and sills are sealed properly. (Goldblatt, 2012, 126-127)

### 2.3.4 Lighting

**Energy efficient lighting**
Energy efficient lighting consists of replacing all lighting bulbs with LEDs (light-emitting diode) or CFLs (compact fluorescent light bulbs) bulbs. CFLs last about 10 times longer than the incandescent light bulbs and use about 75-80% less energy.
LEDs last from 100,000 hours to 1,000,000 hours compared to a 30,000 maximum life span of fluorescent bulbs. (Sloan, Legrand & Chen, 2013, 58) CFLs are the best option for general lighting and for areas that require an abundance of light (Lampputieto, 2014). LEDs are the best option for areas that require color options or different effects (Sloan, Legrand & Chen, 2013, 58).

The lighting fixtures should be chosen according the lighting levels needed. The use of motion sensors, timer switches, and dimmers for the lighting whenever they are effective, is a way to conserve energy and an inexpensive way to reduce costs and the impacts caused on the environment. Whenever possible, natural lighting and the use of candles should be adopted and if the weather permits no lighting could be
used. Having a switch-off campaign at the event is something that the management could ponder and turning the lights off whenever possible is a good and easy way to take part in sustainability. (Jones, 2010, 110-111)

**Laws and legislations**

In 2009 a law was passed banning manufacturers from producing or importing incandescent lamps (Jones, 2010, 110). It should be noted that this law bans the retail of bulbs but use is still permitted. The only problem associated with CFL bulbs is the fact that they contain mercury, making it hazardous waste. In 2013 the recycling of energy efficient light bulbs and LEDs was made easier for the customer because these bulbs can be taken to the store from which they were purchased free of charge and without the commitment of a new purchase (Lampputieto, 2014).

The downside to CFLs is that it is not one of the most effective ways to light up an outdoor event that uses mobile power generators, due to their poor power factor (Jones, 2010, 112). The savings generated by the use of CFLs are long-term, and can be seen as a decrease in the electric bill therefore they are not the best choice for temporary events. The LED bulbs are perfect for pairing up with alternative energy sources, such as, wind, solar, water, etc. due to their low loads (Jones, 2010, 111).

2.3.5  **Waste Management**

Events will create waste. In the worst case scenario, waste can be a source of ground, water or air pollution that causes different health risks, due to toxic substances or living germs. It can also interfere with the environment and harm the landscape. The event manager should focus on how to manage and minimize the amount of waste. The different ways to handle waste, such as reuse, recycling, composting or landfill deposit should be optimized. The event manager should place focus on ethical purchasing and the use of sustainable and recycled materials in order to reduce waste production. The event manager should note that there are laws and regulations that guide waste management. In Finland, the Waste Act aims to prevent the hazard and harm to human health and the environment posed by waste and waste management, to reduce the amount and harmfulness of waste, to promote the sustainable use of natural resources, to ensure functioning waste management, and to prevent littering. (Finlex, 2014)
**Ways of handling waste**

Event waste can be categorized into categories of litter, standard, recyclable and biodegradable. (Goldblatt, 2012, 104) The event manager is in charge of providing and placing of waste bins in the event area. It can help to go through the event step by step in order to recognize what rubbish is created and where. The waste planning should calculate the volume capacity by including the number of participants, types of waste, size and layout of event as well as the entry and exit points. (Jones, 2010, 326) These calculations will help the event manager with the number of waste bins and their volume as well as their correct placement. The waste bins should be well labeled and positioned and maintained. Local law enforcement can be contacted in order to ask about pre-existing color-coding or labeling techniques for different recyclables. (Jones, 2010, 327)

Composting biodegradable waste directly on the land where the event is held can help improve plant growth and add organic matter to soil. (Jones, 2010, 307)

Audience and production waste should be recycled and all excess material re-used and salvaged to their possible extent. It is recommendable to request a list of items that can be recycled from the materials recovery facility. This will help the event manager in purchasing and waste management decisions. (Jones, 2010, 304-305) In larger events, a waste management company can help in the planning of waste operations (Jones, 2010, 300).

**Eco-procurement**

The event manager should choose products and services that have the lowest impact on the surrounding environment. Eco-procurement, which can trace the origins of raw materials and any possible impacts from the manufacturing process as well as any toxins present and their environmental impacts should be favored (Sloan, Legrand & Chen, 2013, 79). All material including food products should be sourced according to the need, in order to prevent excess or leftover. In case of excess material, innovative solutions for the reuse of material should be implemented. It might be a good idea to try to get suppliers and contractors to participate in the event’s recycling program.
2.3.6 Sustainable cuisine

Sustainable food is defined by the UK government sustainable development commission as safe, healthy and nutritious, that provides a viable livelihood, respects biophysical and environmental limits and supports rural economies (Sloan, Legrand & Chen, 2013, 170). The event manager can choose to have sustainable food and beverages served at the event by choosing greener ingredients. Sustainable foods may be ethically produced, locally sourced, natural, organic, or seasonal (Goldblatt, 2012, 156).

Organic, local, natural, and seasonal cuisine

Organic food is food that is produced without the help of synthetic fertilizers or pesticides and without using genetic modifications (Jones, 2010, 242). Seasonal foods are foods that can be harvested according to the time of the year. The use of seasonal foods is beneficial because the accessibility of these products is vaster when the product is at its peak. Natural food on the other hand is produced in a natural and minimal processed way. By choosing to use organic food products the event manager is ensuring nature conservation and preservation of biodiversity as well as reducing water usage. Local and seasonal food products should be favored since the procurement of these products will lessen the impact on the environment. Local food is often fresher and the ingredients can be authenticated as homegrown.Choosing to use local food products not only decreases the carbon footprint of food miles, or the distance food travels, it also advocates small local businesses. (Goldblatt, 2012, 158) Using local, natural and seasonal food producers can be beneficial for both parties since the local producer has the chance to gain visibility and repeat customers.

Ethically produced cuisine

Fair trade system seeks to pay producers an agreed minimum price that covers the costs of sustainable production in decent working and living conditions (Sloan, Legrand & Chen, 2013, 148). Furthermore fair trade conditions include investing in projects that will enhance the quality of life of the workers and cherish mutually beneficial long-term relationships and social, environment and economic responsibility (Goldblatt, 2012, 157). The event manager is taking part in ethical and
socially responsible purchasing when using the fair trade system. When it comes to animal rights the issue gets more complicated. Meat, poultry and eggs can be purchased as free range, meaning that the producer must prove that the poultry has been allowed access to the outside. Meat products can be labeled as cage free, meaning that the animals were not kept in cages. Free range and cage free products may cost more but are a more ethical choice. (Goldblatt, 2012, 157)

**Presentation and packaging**

Packaging should be minimal for food products in order for it to comply with sustainable practices. Whenever possible bulk products should be favored opposed to purchasing many tiny packages, for example purchasing condiments like ketchup or salt and pepper or even beverages. (Goldblatt, 2012, 162-163) Recycled materials should be favored as well as bio plastics and biodegradables. Vegware products offer biodegradable cutlery made up of potato and corn to compostable tableware consisting of cassava starch and plant fibers as well as warm and cold cups. (Goldblatt, 2012, 164) Innovative solutions, such as edible tableware, are also something to be considered. (Appendix 4)

**Benefits of using sustainable cuisine**

Sustainable food seems to be popular. Many customers are used to it and expecting it and the vacancy of it has improved greatly. There are many benefits of using sustainable food at the event, it is not just good for the environment and the society but it can be used as a competitive advantage. Sustainable food can help in attracting customers and turning sustainability into a selling point while improving the event’s environmental performance. The type of menu will depend on the event type, nevertheless, sustainable vegetarian menus could be promoted in order to save costs and reduce the carbon footprint. (Goldblatt, 2012, 160-161)

**2.3.7 Sustainable transportation**

Moving of people, goods and equipment to the event is essential and necessary for the event to take place. Transport happens to be most extensive carbon dioxide contributor for events (Jones, 2010, 139). The event manager needs to place focus on
the reduction of transport and innovative ways to lessen emissions to air as well as developing strategies that will influence travel decisions of the participants.

**Freight**
The biggest challenge is to achieve sustainable movement of the goods and equipment to and from the venue site. Careful planning will help eliminate the impact caused on the environment. The areas of focus are the lengths of transport and the types of transport. Local sourcing should be included in the procurement plan. All products and hiring of contractors should be purchased from suppliers that are located as close to the event as possible. Choosing sustainable freighting companies that use of sustainable vehicles or other forms of green transport should be favored whenever possible. If possible the suppliers and contractors should have a sustainable transport policy and combining freight shipments is also something to be considered. (Jones, 2010, 146-147)

**Participant and staff transport**
The location of the event should be considered from the logistics side. The venue should be easily accessible, preferably the location somewhere central, convenient to reach by mass transport, cycling or walking or by car. Mass transport should be favored and the event manager can include mass transport tips and transport lines on the invitation to the event. Cycling and walking should be encouraged. The health benefits of these should be promoted and the event manager can offer for example, discounts on ticket prices for participants choosing this mode of transport. Carpooling is also something to consider, discounted ticket prices could be offered to cars that are full. Allocated parking spaces and parking charges can be considered in order to minimize this mode of transport. The event manager can, for example, have shuttle service for those that are coming by train or airplane in order to prevent each participant traveling to the airport or train station by a separate cab. If the event site is big the use of bicycles, Segway’s or golf carts, rigs haws can be used in order to move around the area. (Goldblatt, 2012, 92) Telecommuting is also something that can be considered for participants that cannot physically be at the event. Modern technology such as, Skype, GoTo Meeting or Face Time enable for easy face-to-face interaction even from remote areas.
2.3.8 Sustainable water use

No matter the type or location of the event, clean water will be used and waste will be produced. The event manager should concentrate on conserving water and place emphasis on wastewater management in order to affect water use. Emphasis on water production, such as pumping, delivery and wastewater treatment that cause emissions to water should be focused on.

Water conservation

Water conservation is difficult for the event manager to affect because the water is supplied to the event facility from the main water supply and the facility has its own contract for this supplier. The event manager should therefore choose a sustainable building for the event in which these features have been accounted for. Having a water saving campaign at the event will raise awareness of this topic. The campaign can feature ways of mechanical intervention in the forms of water saving devices. Ways to reduce water consumption include: reduced water pressure, using low-flow showerheads and taps, using tap fitting that have an automatic stop mechanism and using water-free hand sanitizer. (Jones, 2010, 184-185)

Waste water management

Wastewater can be divided into grey or black. Grey water is wastewater from washing operations, such as showers. Grey water does not have organic matter and therefore can be used for non-contact functions like toilet flushing. Black water on the other hand is sewage and catering waste. (Jones, 2010, 193) Emissions to water can be caused by the use of cleaning and personal products (shampoo, conditioner, etc.) as well as catering waste and human excrement. The wastewater is disposed through a sewage treatment plant or directly on the land. Local government and environmental agencies will define the correct disposal methods.

Innovative water

If possible rainwater harvesting can be implemented by landscape techniques. The main benefit of using this method is the decrease of urban runoff, also known as the excess water that increases chances of flooding. Ways of utilizing rainwater harvesting include rain gardens, green roofs and rain barrels. (Goldblatt, 2012, 145) Green roofs help keep the building cooler and reduce costs of air conditioning
whereas the rain barrels can be used for municipal irrigation. Dry composting toilets are the most water efficient toilets, using no water. The use of these dry composting toilets will also decrease the transport of sewage.
3 Case Sumiainen

3.1 Background of the project

In 2013, the Innovative Village project proposed that students of Jyväskylä University of Applied Sciences would help to organize events with the involved villages. The Innovative Village is a transnational leader cooperation project, aimed at enhancing service production in rural areas by working locally with the villagers. There are several villages involved in the area of central Finland, for example, the village of Sumiainen. Projects that were suggested for the students, involved developing different aspects of services in the village. One of the projects was to be of assistance for the village council of Sumiainen. This assistance project entailed helping in the planning of their annual Christmas event, as well as helping the villagers idealize innovative and sustainable solutions and services for the event. The village council of Sumiainen wanted to market and raise awareness of this event in hopes of increasing tourism and event participants. Ever since the event was first held, it has consisted of the same core activities. The purpose of the project was to introduce innovative and interesting concepts for the event that would improve the event’s sustainability.

3.2 History of the event

Sumiainen is a village located in central Finland close to the City of Jyväskylä. The population of the village is roughly 1300 persons. The village council of Sumiainen has been organizing an annual Christmas event for the past 30 years. Last year the event took place on December 13, 2013. Around 400 people participated in the event during that year. The Christmas event is mainly targeted to the inhabitants of village Sumiainen and other rural areas located nearby, such as Äänekoski.
3.3 Features of the event

In 2013, the Christmas event had a Christmas market, which featured Christmas presents, locally produced food and crafts sold by the villagers. Traditional Christmas foods, such as, rice porridge and a hot drink glögi were served to the participants free of charge. The students baked around 100 pieces of edible plates (Appendix 4) in which the porridge was served. For children the event featured story telling at the library and Mr. and Mrs. Santa Claus in the atmospheric local marketplace known as Aitta-tori. At the school premises Välke-Choir was performing Christmas carols and the Coffee house Korppu arranged an evening dance, which included a live band.

In Aitta-tori, it was also possible for the participants to bring pre-owned gifts to be sent to the less fortune children in Karelia, Russia. In addition Joulupuu organization was involved in the project. This organization enabled the possibility of giving a gift through the social care system to a child that would otherwise be left without a Christmas present. These Joulupuu gifts went to children living in the nearby town of Äänekoski. In exchange for a gift Santa was giving out small gift bags for children. The event also featured Keke - (kestävä kehitys = sustainable development) Christmas tree competition. The idea was to build a Christmas tree from recycled materials and the visitors could vote for their favorite tree. Competitors were student of JAMK who completed this as part of their course. Old Christmas tree ornaments were collected from the villagers to decorate a Christmas tree, which was in the same premise with the KeKe-Christmas trees.

3.4 Reason for choosing this topic

The inducement of choosing this study and topic was due to the interest in event planning and sustainable development from the authors. One of the authors was working as a project leader in the student’s project group for the Christmas event. As the event planning was going on in 2013, the idea of using this case as a basis of the Bachelor’s Thesis started to develop. By the end of the year 2013 and after the execution of the event it became clear that the event had a need for development.
The authors discussed this with the leader of the Innovative Village project, Outi Mäenpää. After coming to a mutual understanding that a need for development was relevant, the authors chose and started working on the Bachelor’s Thesis. Research was needed to identify the viewpoints of the people in charge of the planning and execution of the event, in addition to their personal experience of the event. Simple guidelines for the event planners were asked to be developed by the Innovative Village’s project manager to ensure that the results of the research could be utilized in the future.
4 Conducting the research

4.1 Purpose of the study and research questions

The main purpose of conducting this study was to determine an analysis about the current state of sustainability of the Sumiainen Christmas event. In addition the current state analysis will provide areas of improvement that will help in the planning process of future events. The analysis will also bring up the aspects that have been accounted for and that are in balance. The current state of the event’s sustainability factors can be compared to the theories presented in our thesis in order to develop practical ideas to further the sustainability of events. The output of this study is a set of guidelines that can be used as reference for any event that wishes to further sustainable development. The authors wanted the output to be something concrete that could be used in a practical way by any event organizer.

The research question of the study was

*What is the current state of sustainability in Case Sumiainen?*

The aspects of sustainable event planning were divided into the areas of marketing and communications, waste management, transport, food and beverage, and energy consumption. For each area, there were distinct questions that are based on the presented theories in order to answer the research question. From the gathered data and the written theories, the authors wanted to form a set of sustainable event management guidelines. The authors contacted the town folk of Sumiainen and gathered five representatives that were present in the planning and execution of the Christmas event to interview for the research. Based on the theory and the research data the author’s formed a set of guidelines.

4.2 Qualitative research methodology

Qualitative research refers to any type of research that strives to attain findings without using statistical methods or other quantitative methods (Kananen, 2008, 24). The main function in qualitative research is to describe a specific event, topic or
issue, to understand it and interpret it. Qualitative research mainly uses words and sentences to describe the matter at hand and the conclusion is more of a generalization that is based on the findings of the research. The reason for choosing qualitative research was the size of the event and the quantity of people to interview.

The reason the authors chose to use this form of research was to be direct contact with the research participants. The authors felt it was better be out in the field conducting fieldwork, instead of concentrating on statistical data and its analysis. The authors also felt that qualitative research in the form of interviews would raise more awareness and conversation of this topic, thus increasing the knowledge of sustainable development.

4.3 The interview

The amount of time that had passed between the actual event and the interview was a critical reason for choosing to use group interview. This enabled the author’s to facilitate discussion between the participants and bring back facts and memories of the event. The interview was held in Coffee house Korppu in Sumiainen, on the 17th of October 2014. The participants received an answer form that also covered the demographics of name, age and education, although the participants wished to remain anonymous. The interview session was also recorded in order to capture any conversation outside the questions that could be relevant to the research. The execution of the interview was conducted by reading the questions out loud to the participants and then making sure that the participants understood what was being asked. Open questions and free conversation made it possible to explore memories and experiences of the event on a personal level. Every person wrote down their own answers and the author’s role was to make sure that the participants staid focused and to provide further information about the questions.
4.4 Reliability and validity

Participants were chosen for their roles in the village’s social and functional circle. In order to get a reliable picture of the current state of the event, these were the parties that the author’s could trust to give correct and relevant information. Three out of five subjects are in the village council, which is the organization that produces the Christmas event. The other parties have important roles in the event in forms of facilitating the Aitta-tori and Coffee house Korppu. The chosen participants have the power to influence sustainable actions and processes of these facilities.
5 Results

The research answers have been analyzed according to the divided sustainability areas in order to keep the data clear, effective and on point. The research questions are presented in appendices 2 and 3. The author's have formed a generalization from the gathered data.

5.1 Analysis of the research results

5.1.1 Energy/power area

According to the answers given during the interviews, the lighting at the event was considered to be somewhat sustainable but no more sustainable than normally. The sustainability aspect of the light sources had been taken into consideration but the participants agreed that affecting the lighting is hard to implement in practice. The participants viewed the energy consumption of the event to be sustainable, due to the use of energy saving light bulbs, which were used at the market tables. Rented light sources were used to facilitate visibility in the market area and some participants felt that more lights could be rented in the future. Bonfire and candles were used and in addition the villagers placed lanterns outside their homes, by the side of the main road in Sumiainen.

The questions about energy consumption brought up the cooking facilities. The school's large-scale kitchen was used to produce the food served at the event. The participants felt that they could not influence the energy efficiency of the cooking facilities because the school provided the equipment. It was discussed that the event should be held during the weekend at daytime so that natural light could be used in order to save energy and eliminate the need for extra lightning. The need for extra lighting has been a problem in the past, because the Christmas event has been organized in the evening, which makes using the natural environment difficult. The participants discussed among themselves that changing the time of the event would create loss of ambience in the forms of bonfire, candles and lanterns, which were partly provided by the villagers. Also the village council members felt strongly that
Friday evening would be easier for the visitors when compared to arranging the event during the weekend.

It became clear during the discussion part that no alternative energy sources were used at the event. The energy source used by the village seemed to be a mystery to most of the participants. As a reference to the above-mentioned, one of the answers stated, “Electricity came from the wall, no idea how it has been produced.” Only one participant knew that the source of the energy was from district heating using wood chips.

5.1.2 Waste Management area

The answers suggest that in addition to already existing trash bins there was a waste station located at the food distribution area. There were no recycling possibilities or instructions on display. The only composted material was the wooden spoons, which were used for the porridge. One participant quoted, ”Considering the size of the event, trash bin quantity was enough.” This was the opinion of the majority, only one participant answered that there were not enough trash bins and the existing ones were somewhat hard to find. The mutual opinion was that only little or no impact on the environment was noticed and in fact there was no visible littering.

In general the planning of the quantity of the materials seemed to be on spot. It was said that there were no shortages of materials and little surplus. The surplus formed was distributed to use, for example the small amount of leftover porridge and plum soup. Food provided at the event was served to visitors in recyclable cardboard plates and there was a limited amount of edible plates available. (Appendix 4) The Christmas tree decorations were donated from the villagers and the Keke-competition trees were all made from recycled materials.

5.1.3 Logistics/Transport area

The movement inside the village and the event area was mainly conducted on foot. It was stated that, “Walking is more of a given solution in the village.” The opinion was
that there was no need for separate encouragement of walking or cycling. When asked about the transportation of the materials and supplies, it was mentioned that the ingredients for the food service came from the school’s wholesale order. The cooked products, porridge and plum soup, were delivered from the kitchen to the food serving site on foot. The tables set for the sellers were brought to the site with the help of individual volunteers and their time and equipment did not require any extra expenses or arrangements. Coffee house Korppu is notorious for using local supplies and selling hand made crafts and goods.

5.1.4 Food & Beverage area

The answers and the discussion gave the impression that it is well known that the goods sold at the Christmas market are made from local ingredients or at least by the hands of locals. Äikkää’s bread, which is made from Konnevesi mill’s flour, was mentioned by several participants. Also Coffee house Korppu was selling pastries made by locals. In the food preparation process it was agreed that sustainability was taken into consideration in accordance to already existing possibilities in the schools premises. At the site of food serving the food was stored in heat preserving boxes, which needed no electricity. No food was thrown away, excess food was shared out. The materials used in serving the food were sustainable in the participant’s viewpoint. Still one of the participants felt like the lack of recycling opportunity was a minus.

5.1.5 Marketing/Communication

The marketing of the event was seen as fairly sustainable. Social media was utilized in form of Facebook. A Facebook event was created and the event was marketed in Sumiainen’s Facebook page. Also local newspapers had a few pieces written about the event. (Appendix 5) There was even some radio coverage on the local radio stations. The participants felt that a proper amount of posters (Appendix 6) had been distributed in the nearby areas. The distribution of these required no extra travel or arrangements. When asked about the image of the event, the participants felt that the actions taken towards sustainable development were important. How the event
was seen and how people were affected by it, was said to be one of the main objectives of the event. Actions taken were, to arrange different activities in the event and communicate the sustainable side of the event. The student group from JAMK, working alongside the project arranged two different gift collections at the Aitta-tori. The participant’s felt that these brought a considerable amount of positive visibility. The edible plates raised interest and discussion among the visitors. The participants mostly felt that the edible plates were the number one way to raise interest and thoughts about sustainability.

5.2 Conclusion of the research results

The answers in the first part of the questionnaire reflect that the energy aspect had been taken into consideration and it had not been forgotten. Implementation on the other hand is still challenging due to the limited possibilities to influence the lighting, equipment, etc. within the facilities. Also, the possibilities to influence the source of energy are close to nonexistent. Options for the future energy consumption were discussed among the participants. For example, cooking the porridge in a wooden stove could be considered, although the large quantity poses a production problem. Locating the Christmas market area next to the grocery store and the village’s recycling center would eliminate the need for extra lighting. For the same reason, the area between the school and the sport hall was suggested. These possibilities should be analyzed more in depth by the organizing party and the pros and cons of these location options should be carefully thought of. In a small scale event like this and considering the location, it is nearly impossible to influence this aspect. If this aspect does not already exist then starting from choosing producers and services that support sustainable thinking could be a starting point. The result from inquiring about the knowledge levels of the energy source used in the village implies that, there is room for increasing the awareness of energy sourcing and consumption.

Waste management was considered as a fairly easy area to implement. Few ideas and discussion was generated and the participants seemed to be content with the current situation. More recycling options should be made available at future events.
In the future there could be more edible plates made because these seemed to generate interest and discussion among the visitors.

Logistics in this type of a small village event is not a substantial issue, but still an important area that needs to be managed. Events always provoke movement of people and materials and planning these pre-hand helps to manage the flow of the materials. Planning of these will make the event well functioning in addition to being as sustainable. The need for logistics planning seemed to be quite small since the movement of the villagers mainly occurred on foot and there is no public transport in Sumiainen. It seems that the event organizer did not consider this aspect for visitors coming outside of Sumiainen. For example the village council could have arranged a bus coming from nearby areas, such as Suolahti or Äänekoski. It is known that visitors come from these nearby areas and visitors coming by cars create a fair amount of traffic in the village and fill up the temporary car parking areas as well as the sides of the roads. The food and beverage sector was executed well and in accordance to existing possibilities. There is always room for using more organic, seasonal and locally produced food products. One example could be changing the porridge served at the event from rice to barley porridge, which can be made from locally produced ingredients. It is best to be partners with the producers and suppliers and synchronize the sustainability goals of the event. It is for the best to use the same promotional material with all the suppliers and contractors in order to be upfront together.

It became clear that the town council wanted to enhance the marketing of the event. In a way that it would reach more potential participants, make them aware of the event and the sustainability theme. The marketing could be targeted to areas nearby as well as for Jyväskylä. The Christmas event holds potential for example pre-Christmas parties for nearby companies. Efficient marketing requires experience, know-how and resources, in order to gain wanted results the village council has to be willing to pay for this expertise. The village council could think of using marketing students for future events that could come up with marketing strategies as a part of their course.
When asked if the participants felt that the event caused an impact on their viewpoint of sustainable development, one answer stated “Don’t think there was any effect, people enjoy consumption.” This answer encapsulates the reason why the authors chose this topic for the Bachelor’s Thesis. The authors wanted to give simple and practical instructions and enhance motivation and attitudes toward sustainable development, in order to change habits and build a better future.
6 Conclusion

The main objective of the research was to conduct an analysis of the present state of sustainability in Case Sumiainen. The purpose of the Bachelor’s Thesis was to create a set of guidelines based on the research and theories that could be used by event organizers in order to conduct sustainable event management practices. The aim was to research the theories behind event management and sustainable event management and reflect these theories to the present state of sustainability in Sumiainen. The Christmas event itself was a success, with 400 visitors. In 2013, the event managed to gain positive attention and raise awareness through its sustainable actions. The event received positive feedback from Jyväskylä University of Applied Sciences, as well as the participants and the village council.

Generally, the answers support the fact that the organizers have considered the aspects of sustainability but there is much room for improvement. The village council could in fact benefit from more education and knowledge about sustainable development and practical ways on implementing these. The village council could benefit from working with the local authorities in making the most out of the public transportation system. In rural areas, like Sumiainen, it is important to capitalize on organizing group transport and encouraging people coming by cars to network and form a car-pool. The Finnish government should implement ways to use alternative power sources in a more customer friendly way. It is quite difficult for individual persons to take advantage of renewable energy sources. Marketing of the event was a factor that the village council wanted to concentrate on and this is something that has much potential for growth. The biggest challenge for the council is the resources available and the council could think of ways to raise money in order to have more resources allocated for marketing.

The greatest potential for Sumiainen is to team up with partners, because the size of the event is small and the resources are limited. In partnering up, Sumiainen can make their event bigger, therefore attracting more customers. There is even potential for charging entry fees if more emphasis is placed on the event’s features and scope. The organization of the event is quite small and consists of village council.
members who are taking part in this while working at their daily jobs. Therefore they do not have that much time for this recreation. If they want to commercialize the event, they need to put more work into it, in the forms of resources and more planning. It is important to keep in mind that all this depends on the village council and how they want to develop this event. In conclusion many of the sustainability factors are hard to influence, motivation and dedication is therefore needed. Even the smallest acts are meaningful and taking one step at a time helps to reach the end goal.

The importance of planning and keeping up with set goals and scheduling is the most essential part of executing a successful event. Volunteers can be quite beneficial for the event, but the event organizer has to orient these volunteers well and make sure that the jobs are according to the volunteer’s skills and qualifications and that these meet the laws and legislations. After the event is over, it is important to thank the volunteers, contractors and suppliers, to give gratitude, to fully show that they were an important part of making all this happen. It is crucial that all operations of the event support each other. All operations will help to determine the image and quality of the event.

As gathered from the above data it is hard to influence many of the sustainability aspects, such as energy and water conservation, because they already come with the building, therefore it is crucial to choose a sustainable building where these things have already been considered. Harnessing a new technology and sustainable building should play an essential part in choosing the venue. If it is not possible to make use of buildings like these the event organizer needs to concentrate all their efforts on ways to minimize the use of any resources. New technology that is constantly progressing has enabled energy efficient equipment.

It is important to make sure that the participants/visitors of the event gain the maximum knowledge of how their daily actions impact on the environment and what are the simple and practical ways to influencing these actions. The author’s think it is an important part of the event organizer to communicate the positive and negative impacts and how these have been minimized to the audience in order for the people
to realize what these changes can affect. Global warming is no joke and a lot of people feel that their choices are just a small part in the big picture. If we can affect these thoughts and make people understand and motivate them to make changes, we can affect the impact on a bigger scale. Event organizers can be the pioneers of these changes in their industry. They can show others how this is done. These changes can cost more money in the beginning but in the end be more beneficial for the environment and maybe even save money in the long run.

Having studied event planning at school it was interesting to research the theories of event planning and sustainable event planning. The original idea of the author’s was to organize an actual event that would comply with sustainable practices. The author’s later found out that this would have been too time consuming and as the other author was the project leader in the Christmas Event the author’s opted for this solution. Working alongside with the village council of Sumiainen, Aitta-Tori and the Coffee house Korppu turned out to be challenging at times. The attitude towards sustainable development seemed to be all knowing and the villagers felt that enough had been done in order to reach the sustainability goals. This contradicted with the fact that not everyone seemed to understand what the sustainability concept meant. In fact sustainability seemed to be just a promotional tool with only a little action behind. Sumiainen has marketed itself as a, ‘Village of Sustainable Future ’(Kestävän tulevaisuuden kylä) (Äänekoski, 2014). With this statement they have managed to accomplish a few big actions, such as, using the district heating as an energy source with wood chips and, waste and water management project in which the villa homes in Sumiainen have been connected to the central water supply system. Besides these above mentioned, the daily actions seem to be underestimated and we encourage the villagers and the village council to consider raising awareness, knowledge and motivation among each other.

In considering the writing process, the authors felt that the actions and steps taken to end up with the end result were somewhat diverse. Staying focused with the goal of the thesis was hard at times, due to the communication with different parties. The project manager, thesis instructor and the author’s had very different ideas on how and what to do with the research problem and therefore it affected the authors to
go back and forth with some parts of the thesis, like the implementation of the research and how to approach the subject.

While writing this thesis, the authors could integrate studies of facility management and event planning, which are beneficial in terms of future career goals. The author’s gained professional writing and research experience from conducting this project. It taught the authors about the importance of time management, scheduling and delegating work. The author’s hope that the guidelines will provide simple practical ways of ensuring that the event is sustainable and give ideas on how to develop these sustainability aspects further. The guidelines and the thesis will help the event organizer to plan and execute the event in an effective and sustainable way. The author’s have gathered the most relevant and easily achievable aspects into the guidelines; some might seem like they are far fetched but again these have been compared to the theories of sustainable event planning in general.
References


Energiateollisuus. (Referred to on October 5th, 2014) http://energia.fi


Lampputieto. (Referred to on October 6th, 2014) http://www.lampputieto.fi


Appendices

Appendix 1. Guidelines for sustainable event management

Sustainable Event Management - Guidelines

To aid event managers in the achievement of sustainable events, give clear and simple tips and ideas for the planning process.

This information has been created by two Bachelor degree students of Jyväskylä University of Applied Sciences, as a part of their final thesis. This document is a part of the author’s thesis, but can be used on its own. The Innovative Village Project has received the right to use this document. This can be utilized as a tool for the participating villages of the project during the planning and execution of the event.

Anniina Manninen,
Sanna Vanha-Rauvola

In Jyväskylä, November, 2014
To plan an event one has to have a concrete concept of the event in mind and the knowledge of how to produce a unique and successful event. In the beginning it is important to determine why and to whom the event is produced to in order to meet the needs and wants of the customers, possible stakeholders and partners. It is crucial to decide when and where the event is held; these facts are essential for the strategic and operational management. Meticulous planning and a good strategy will help the event organizer meets the goals and objectives, which will determine the success of the event.

Sustainable Development should be a part of people’s daily processes. It also should be one the events main goals and be included in the mission. By showing a good example, giving ideas and raise awareness, among the customers this aspect can be reached. Careful thought should be emphasized towards sustainable development in every aspect of the event. Here are simple and easy to follow pointers on sustainable event management which hopefully can be useful for you in reaching your events sustainability goals!
TRANSPORT

- Host the event at a central location (urban)
- Make use of mass transport
- Encourage car-pooling (online networks)
- Encourage walking & cycling (exercise)
- Use sustainable on-site transport (electric vehicles, sustainable fuels)
- Use local sourcing/contractors/suppliers
- Ensure ground transport for performers, participants, etc.
- Use shuttle bus if mass transport is not suitable (inflexible routes and depart times)
- Enable telecommuting, connection via internet for people that cannot be present physically
- Offer rewards (ticket discounts, etc.) for full cars, cycling, walking and mass transport
- Charge parking fees
- Place limits on the number of car spaces allocated to groups of participants/exhibitors

MARKETING AND COMMUNICATIONS

- Distinguish how you want the event to be viewed
- Creating a sustainable theme/key campaign-> ask content programmers & activity organizers to bring sustainability into their programs
- Marketing solely through online media and social networking
- Use sponsors that attract value & support sustainability
- Make use of inspiring speakers, performers, artists that help to spread the theme/message across, consider using sustainable spectacles
- Tag sustainable messaging onto all standard promotional material
- Creative signage, installations, incorporating education into the event
- Use of recycled, sustainable paper for brochures, flyers and choosing a sustainable printer
- Partner with environmental or social justice non-governmental organizations
ENERGY/POWER

- Replace lighting with energy saving light bulbs (CFLs & LEDs) & equipment
- Make use of natural daylight and outside air whenever possible
- Consider using alternative power production [www.chooserenewables.com](http://www.chooserenewables.com)
- Choosing a sustainable venue
- Careful planning of generators
- Conduct a switch-off campaign- use candles, etc.
- Turn off electronic equipment when not used, no sleep mode
- Lower temperatures of facilities and water
- Use power strips for plugging electronics and then switch these off when not in use
- Install occupancy sensors, dimmers or timers to lighting fixtures
- Clean and maintain the facility (water pipes, windows, radiators, kitchen equipment, etc.)
- Research possible government grants, tax incentives!
- Use renewable energy certificated providers

WATER

- Use waterless urinals & toilets
- Water saving devices on taps, showers and other water devices
- Capture water and store in rainwater tanks
- Re-use grey water for non-contact uses
- Use chemical free cleaning products
- Have free water bottle refill stations
- Supply water-free hand sanitizers
- Turn off dishwashers when not in use
- Scrape, don’t rinse food off dishes, use steam table water to wash down cooking surfaces
- Clean pavement by sweeping or blowing, instead of hosing
- Reuse indoor cleaning water to clean outdoors
- Detect and repair plumbing system
FOOD & BEVERAGE

• Use local and organic food products
• Use fair trade products
• Use ethical and seasonal food products
• Create sustainable vegetarian menu
• Pay attention to presentation, serving and packaging: vegware, edible-, recyclable-, biodegradable products etc.
• Avoid bottled water, use tap->filtration systems if necessary, serve in reusable bottles
• Serve the food from bagasse, bulrush, palm leaves or potatoes
• Always prefer domestic production

WASTE

• Recycle and reuse, salvage products and materials
• Carefully plan how much to order material, foods, etc. to avoid excess
• Make sure that there are enough waste bins around the venue, clear signage and instructions
• Make sure these waste bins are well maintained, positioned and labeled
• Consider using environmental stewards (interaction with participants about the environment)
• Provide ashtrays for smokers, pocket ashtrays www.boodi.co.uk
• Minimize amount of disposable material given to participants
• Invest in reusable products (silverware)
• Whenever possible buy bulk products
• Use organic cleaning products
• Buy retro, vintage products that have been pre-owned
• Donate excess products/goods to charity
Appendix 2. Qualitative Research Interview Questions in Finnish

Energia/Valaistus

1. Oliko tapahtuman valaistuksessa huomioitu kestävä kehitys? Jos oli niin miten?
2. Kiinnitettiinkö tapahtumassa käytettyjen koneiden ja laitteiden energiatehokkuuteen huomiota? Olisiko sillä osa-alueella voitu toimia paremmin?
3. Kuinka luonnollista ympäristöä hyödynnettiin? Voisiko tätä mielestäsi hyödyntää enemmän, kuinka?
4. Kuinka vaihtoehtoiset energiamuodot hyödynnettiin tapahtumassa?
5. Mitä energiamuotoja tapahtumassa käytettiin?

Jätehuolto

6. Kuinka hyvin kierrätyspisteet oli sijoitettu tapahtuma-alueelle?
7. Oliko näitä tarpeeksi?
8. Kuinka hyvin kierrätyspisteet oli merkitty? Oliko kierrätyspisteissä selkeät lajitteluohjeet?
9. Kuinka suuri vaikutus tapahtuman jätemäärällä oli ympäristöön? Löysivätkö ihmiset keräyspisteille?
10. Kuinka hyvin tapahtumassa käytetyt materiaalit oli suunniteltu tarpeen mukaan? Loppuikko jokin kesken vai jäikö ylimäärää?
11. Miten materiaaleissa hyödynnettiin kestävän kehityksen toimintamalleja?

Logistiikka

12. Kuinka kestävän kehityksen liikkumismuodot näkyivät osana tapahtumaa? (Bussikuljetukset, kimpakyydit, jne.)
13. Kannustettiinko osallistujia pyöräilemään tai kävelemään? Miten tämä olisi sopinut tapahtuman kestävän kehityksen periaatteisiin?
14. Hyödynnettiinkö tavarankuljetuksissa paikallisia yrityksiä ja kannustaa niiden hyödyntäminen mielestäsi kestävän kehityksen periaatteisiin?

Ruoka & juoma

15. Käytettiinkö tapahtumassa paikallisia tai luomutuotteita?

16. Noudatettiinko ruokahuollossa kestävän kehityksen toimintamalleja?

17. Valittiinko tarjoilussa käytetyt materiaalit kestävän kehityksen periaatteiden mukaisesti?

Markkinointi ja viestintä

18. Kuinka tapahtumaa mainostettiin? Noudatettiinko markkinoinnissa kestävän kehityksen periaatteita?

19. Miten kestävä kehitys näkyi tapahtumassa?

20. Kuinka yhteistyökumppanit noudattivat kestävän kehityksen mukaista markkinointia ja viestintää?

21. Uskotko tapahtuman vaikuttaneen siihen miten siellä vierailleet ihmiset näkevät kestävän kehityksen?
Appendix 3. Qualitative research questions in English

Energy/Lighting

1. Was the lighting at the event implemented in the most sustainable way? How?
2. Was the equipment used at the event energy efficient? Are there better possibilities for this?
3. Was the natural environment used to its maximum? (Natural lighting, outside air, etc.) Could these be used better, if so how?
4. Did the event make use of alternative power production? (Air, solar, wind, water)
5. What energy sources were used at the event?

Waste Management

6. Were the waste stations clearly visible?
7. Were there enough waste stations?
8. Were these clearly presented? (Signs and recycling instructions)
9. How was the environment impacted from the events waste? Or not?
10. Were the materials used in the event planned according to need?
11. Were the materials used in the event in the most sustainable manner?

Logistics/Transport

12. Was the transportation of visitors organized in a sustainable manner? (Mass transport, car-pooling, etc.)
13. Were cycling and walking encouraged?
14. Were local suppliers and contractors used?
Food & Beverage

15. Were local and/or organic producers?

16. Was the food prepared in a sustainable way?

17. Were the serving materials sustainable?

Marketing/Communication

18. Were sustainable marketing materials used? (Viral Marketing, recycled paper, etc.)

19. Was sustainability visible in the event? If so, how?

20. Were the sponsors/stakeholders/partners supporting or/and-implementing sustainability?

21. Do you feel that the event had an impact on the visitor’s view of sustainable development?
Have you ever thought about eating your soup bowl after you finish your soup? Well, now you can! All you have to do is make the bowls with bread dough, using an upside down cupcake pan to shape them! Want to learn how? Here's the recipe:

**BREAD DOUGH**

- 160 g water
- 1 tbsp. olive oil
- 1 tsp. salt
- 1 tbsp. sugar
- 80 g whole-wheat flour
- 170 g bread flour
- 1 tsp. instant dry yeast
- Dry herbs to taste (optional)

If you have a bread machine, you can use the dough cycle to make your dough, according to manufacturer's instructions. The water should be at room temperature. Otherwise, follow the steps below:

In a bowl, combine wheat flour, half of the bread flour and yeast (also the herbs if you are using them). Set aside.

In another bowl, combine water, salt, sugar and olive oil. Add the flour mixture and stir vigorously until you get very wet dough. Gradually add the remaining bread flour until you get a soft ball of dough. Knead for a few minutes and let it rise in an oiled bowl, covered with a damp cloth until doubled.

Punch the dough down and transfer it to a lightly floured surface and form a ball.
Divide this ball in 12 equal pieces.

Form little balls and allow rising, covered, for another 15 to 20 minutes, enough to relax the gluten.

Roll each ball into a 10 cm diameter.

Place the disk over an upside down buttered muffin pan. Press the dough against the pan to form the bowl. Repeat with the remaining dough.
Cover and let rise until doubled again. It should take about 30 to 40 minutes. It'll look like this:

Bake in pre heated oven at 180°C until lightly browned. Be careful, because the inner of the bowl may be much browner than the outside, depending on how your oven distributes heat. My baked bowls looked like this:

Invert the bowls to a cooling rack and let cool down.
Voilà! Ready to serve soups, dips or whatever your imagination takes you!

ENJOY!!!
Appendix 5. Promotional material of the event

Appendix 6. Marketing poster of the event.

Edible plates as a showcase in student groups presentation of the project, held at JAMK.

Christmas market outside

Christmas market inside
Food serving area

Aitta-tori
Santa Claus, an elf & Mother Christmas selling pastries at the Aitta-tori

Christmas gifts brought to Aitta-tori
For the Joulupuu-collection in the left, and for the children in Karelia, Russia-collection in the right.
Christmas story telling for kids at the library

Keke-Christmas tree competition winner tree.