

## **Sustainable Event – Case 10 Days 100 Challenges**

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<p>Phrases “eco-friendly” and “go green” become more and more common nowadays since society gains more understandings and concerns about climate change, environmental sustainability. The meetings and events industry offers valuable economic, social and educational benefits for the community. However, it also leaves a significant environmental footprint through its activities. Thus, sustainability becomes a critical factor in creating a responsible event.</p> <p>This study aims to discuss sustainability in event planning and sustainable suggestions to apply it in a real case, the event 10 Days 100 Challenges. The theoretical framework of this thesis displays theories about the sustainable events covering all the aspects from management to development of standards and policies. It provides more knowledge about sustainability so that event organisers can plan more sustainable events. The first part of this thesis answers the following questions: What is sustainability and sustainable practices in the event industry; why events should become sustainable and what are the effective ways to implement environmentally friendly events.</p> <p>In the second part of this thesis, the author will identify what potential sustainable environmental impacts 10 days 100 Challenges event would cause by its activities. Guiding plans and suggestions will also be introduced and considered to enhance the sustainability of the event. These suggestions aim to offer alternative solutions that would have less negative ecological impacts by raising the awareness and engaging people in sustainable activities at the event. Evaluation of the sustainability plan is conducted through observation and communication with the participants.</p> <p>Findings from this study provide practical insight on opportunities, obstacles and limitations of sustainable event design. Finally, the thesis presents a guideline and a checklist for event planners, which helps in organising more sustainable 10 Days 100 Challenges event in the future.</p>	
<b>Keywords</b> Sustainable event, event planning, environmental sustainability, handbook	

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# 1 Introduction

One of the most significant and most dreadful issues that our society is faced with is global warming. Consequences of this problem are clearly seen in many parts of our world, such as extreme weather conditions, air pollution, flooding, and droughts. All of these changes threaten all living creatures across the globe, including human. Therefore, people have started to pay more attention to keeping the planet cleaner and safer and in addition to reducing as much as possible unnecessary impacts on the earth. It has become a major trend around the globe.

The meetings and event industry is a fascinating field of study, offering valuable economic, social and educational benefits (Mokhtar & Deng, 2014). However, the industry can leave a significant environmental footprint through its activities. The challenge for the event industry is to become more responsible in making managerial decisions to produce more sustainable outcomes, which can meet criteria and positive environmental impacts. According to several event organisers, sustainability was one of the top trends in the event industry in 2018 and this trend has no sign of stopping (Colston, 2018).

In this thesis, the author aims to suggest effective plans to organize a sustainable 10 Days 100 Challenges event and evaluate the current state of sustainability in the event. 10 Days 100 Challenges is an event where participants come to learn new working skills and solve real problems presented by companies, together with professional experts and coaches (10 days 100 Challenges, 2019). The author wanted to apply the sustainable design in the 10 Days 100 Challenges event to raise the awareness of sustainability among people, especially among young people and businesses. Young people create the future of the world, while businesses are influencers, providers and trend makers of the society through their services and goods. Therefore, in the 10 Days 100 Challenges event, participants can experience a sustainable environment enabled by the event planning and design, which includes the venue and services as well as the program.

Furthermore, the participants of 10 Days 100 Challenges can gain knowledge about sustainability by participating in the event's activities and through the practical tips that can be easily applied in their daily life at the workplace or at home. Ignorance of people is the most dangerous thing to the sustainability of the world as the explorer Robert Swan warned us (Acciona, 2019):

“The greatest threat to our planet is the belief that someone else will save it.”

The author aims to make all participants to think about sustainability after the event so that they can change their own behaviours to contribute gradually to the sustainability of the whole planet by personal and practical actions.

Outcomes of this thesis offer information about sustainable development in event planning. It helps the event organisers to have an overview of opportunities and limitations when applying sustainability at the event. The first part of the thesis presents theories about sustainable event management including definitions and factors of sustainability in event planning. The second part will focus on analysing impacts that the 10 Days 100 Challenges event might have on the environmental. The author also provides a guideline and checklist, which is based on the theoretical framework, to support event organizers in the planning of environmentally sustainable events.

Additionally, the author benchmarks on other sustainable events to suggest plans and ideas to enhance sustainability of the event study case. She creates infographic content and suggests side-event activities to raise awareness and engage people in sustainability actions during the event. The author collects data to measure and evaluate how attendees reacted to the sustainable values that the organiser set up for, which plans failed and which ones worked effectively at the event. The results suggest improvement for the 10 Days 100 Challenges in order to enhance the sustainability of the event in the future, especially to enhance attendees' behavior to be more sustainable at the event.

### **1.1 Study case - 10 Days 100 Challenges**

The event 10 Days 100 Challenges took place in the summer 2017 for the first time. This two-week event was one of the first co-development programs organized in Finland, which united students and organizers by three polytechnics Haaga-Helia, Laurea and Metropolia and several working life representatives. In this unique programme, anyone who was willing learn new skills and had an open mind to cooperate and work with a multi-background team could register. The event 10 Days 100 Challenges described the event's purposes in its handbook in 2018 (Spokes & Vuorio, 2018) in the following way: during 10 days of the event, organizations, students and professionals can have a chance to meet, build up a network and create new connections between companies and individuals.

Additionally, the event benefits all contributors by gaining knowledge, and learning methods for solving practical problems in real life with supports from leading companies, experts and coaches. Notably, participants will solve given challenges within multi-disciplinary teams representing people with different backgrounds to practice lean methods and teambuilding principles (Spokes & Vuorio, 2018). In 2018, the event attracted about 100 attendees, of which 70% were students (Metropolia, 2018). Furthermore, 50% of the participants were international. These diverse backgrounds and age groups made the event very interesting. The event has received positive feedback from the attendees about its

concept and new experiences. In the year 2019, the 10 Days 100 Challenges had the future of work and sustainability as themes. The event was located in Harald Herlin Centre and Arabia Campus from 3<sup>rd</sup> June to 14<sup>th</sup> June (10 days 100 Challenges, 2019).

## **1.2 Reasons to organize sustainable 10D100C event**

Events, meetings, conferences and festivals play a significant role in our lives nowadays. They gather people, connect and bring communities together. They also provide social opportunities for networking, and entertainment, and create jobs and tourism attractions. In addition to reducing negative impacts on ecological issues, implementing the sustainable plan at the event 10D100C will bring more benefits for the event itself. According to the content marketing team of Meeting Hand, the event could get many benefits when applying sustainable factors in the organizing plan (Team, 2016).

### **Positive reputation and image**

Hosting and organising a sustainable event will highlight the profile of the event, firstly attract a specific group of participants who are already pursuing and implement the sustainable initiative in their own business or life routine. Secondly, sustainability is an emerging trend in the event and meeting industry (Goldblatt, 2012). It will attract other groups of people who come to experience an outstanding and memorable event. It does not only promote the image of the event itself but it also increases the reputation and positive image of the organizers.

### **Social benefits**

The event's purpose is to fulfill needs and provide benefits for all stakeholders (Spokes & Vuorio, 2018). It creates a chance for both students and teachers to improve knowledge, and skills about real business cases, and come up with creative solutions for attending business partners. It also connects and opens a more extensive network for attendees and businesses to get to know each other. Students or job seekers could gain a general knowledge of challenges in business nowadays. On the other hand, entrepreneurs can find creative initiatives to solve their business' problems and get inspired by ideas and the solutions of other businesses at the event. It is also a chance for them to search for potential employees for their companies.

### **Trigger innovation**

A sustainable event requires more sustainable products and ideas instead of using traditional ones. It is about creating new ways to achieve the same targets and using resources more efficiently. Opting for products made by new eco-friendly materials like ink, food packing, and decorating stuff is a way to enhance sustainability. Seeking creative

ways to reuse materials or available resources from venues for the event's utilization not only inspires and creates unique experiences for attendees but also cuts off an excess building or set-up costs for the organizer. Technology plays an essential role in events, from both planning and experimental perspectives (Cooper, 2018). 10D100C can promote the development of innovative technologies and techniques by using more apps or digitizing some steps in the organizing process such as online registration, electronic documents, virtual marketing tools, and virtual attendance for attendees or keynote speakers with a live stream.

### **Raising awareness and inspiring change**

The event is an excellent opportunity to raise the awareness and inspire ideas among participants, event staff and the local community (Team, 2016). Designing a sustainable venue with the sustainable management system and atmosphere motivate all stakeholders to take responsibility in decisions, encourage them to change unsustainable regular habits into new eco-friendly spirits such as using public transport, and reusing bottles. Giving gifts or prizes are also ways to recognize and encourage attendees who implement sustainable actions during the event. The gifts or prize could become a reminder for sustainable actions participants did at the event, and it might inspire them to continue to apply those actions on daily life. Making positive changes in society can leave a positive legacy for the event.



## **2 Theoretical framework**

This section will discuss the definition of sustainability in the event industry. The section also describes potential impacts that an event can have on nature so that organizers could consider sustainability factors when planning an event. Finally, policies and certifications are tools to assist organizers in complying with sustainability standards and evaluating them during and after the event.

### **2.1 Sustainable development**

The term “sustainability” has a wide range of definitions. At the moment, the definition of this term has about 215 million results of top hits on Google search. There are many notions of sustainable development. Some focused more on humans while the others are more environmentally focused. However, according to Holmes, Hughes and Carlsen (2015), the common elements include maintaining or enhancing human well-being and natural resources concerning the term “sustainability” and that might change over time.

Sustainability originates from the Latin word “sustinere”, which means hold and sustain in English. Its literal meaning, something that has the ability to support, maintain and endure for a long time (Smith & Melissen, 2018). Henderson and Mc Ilwraith (2013) also extend the definition with ideas around the environment, economy, and society, where all of these factors will integrate with each other. In general, most people nowadays think about it as a concept with eco-friendly, green, long lasting and efficient resources, reducing negative influences on the environment and society. However, there is no unanimous definition of sustainability and its interconnection with the concept of sustainable development.

In 1987, the United Nations firstly introduced the term “sustainable development” under the named Our Common Future. The publication defined this term as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987). This famous definition as referred to by many authors in their publications such as Meegan Jones (2014), Godblatt (2012), Herderson and McIlwraith (2013), and Smit and Melission (2018).

The Brundtland Commission explained that there are two critical concepts included in the “sustainability” definition. Those are the concept of the needs and the idea of limitations. In regards to the first key concept about the needs of current and future generations, Smit and Melission (2018) interpreted that sustainable development ensures that all people have a chance to have all their needs fulfilled. Equity in sustainability refers to the whole world with any backgrounds and circumstances, not to any privileged people or a specific

group. ISO 26000 also asserted with this point through its Agenda for sustainable development, published in 2016. “The objective of sustainable development is to achieve sustainability for society as a whole and the planet.” (ISO26000, 2016).

However, authors Marshall and Toffel (2005) criticized this concept in their work about Sustainable Hierarchy. They pointed out that it is difficult and impossible to operationalize and implement. Predicting the needs of future generations requires forecasting their abilities and technological capacities. Practical actions are essential compared with only satisfying their needs.

The second idea linked to sustainable development is the concept of limitations, which refers to the way sustainable development works based on environmental protection, economic prosperity, and social justice meanwhile meets the needs of all generations. We all know that natural resources are limited. All people can fairly access and utilise these resources, but it must be bearable, considering the earth’s regeneration ability (Jones, 2014).

In the comprehension of the author, building and maintain fairness in sustainability does not only apply for the current generation but also future ones. Goldblatt (2012) that sustainability means ethical behaviour with a long-term perspective for many years later. All generations need to be responsible and equitable with the future. The overexploitation natural resources might not create immediate negative consequences but leads losses that the next generation must suffer. It makes them impossible to attain their needs.

Therefore, preserving the planet’s resources is a wise way to ensure that needs from all generations fulfilled.

## **2.2 Sustainability Framework**

Sustainability is the final target of sustainable development. Holmes, Hughes, Mair and Carlsen (2015) defined that sustainability requires a balance or stability in condition between consumption and renewal of resources so that conditions for human survival can continue forever.

Traditionally, sustainability is based on three pillars: economic, social and environmental sustainability. In 1994, John Elkington coined the term “Triple Bottom Line” with the same meaning Profit, People and Planet. All these aspects need to be considered relatively and simultaneously to generate a sustainable solution. This model has direct relevance to the event industry. The figure 1 illustrates the relations between three factors in the Triple Bottom Line.

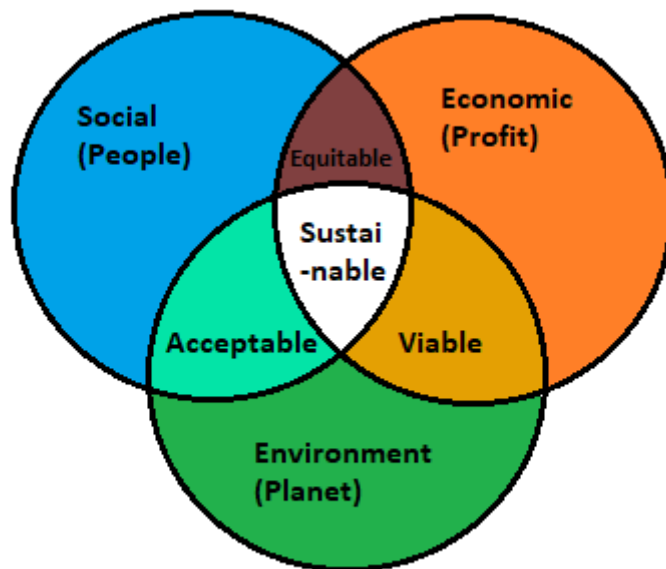


Figure 1: Triple Bottom Line (adapted from Research Gate (Tedeschi, 2015) )

### 2.2.1 Social (People)

Event is based on socially ethical and equitable principles (Holmes, Kristen; Hughes, Michael; Mair, Judith; Carlsen, Jack, 2015). It strengthens people's connections with a shared interest, promotes civic pride, culture heritages and creates equal opportunities in many aspects for attendees, stakeholders and local communities. According to Deery and Jago in *Social impacts of event and the role of anti-social behaviour*, the majority of the negative social impacts occur during the event. It is tangible with something that can be observed and felt, such as overcrowding and anti-social behaviour by attendees.

Meanwhile, positive impacts could be intangible and last beyond the duration of the event. Participants enjoy the prestige of the event and share their experience. Long-term positive impacts might include training and skills development, improving perspective and awareness of the community about some specific issues. The study of McMillan and Chavis (1986) pointed out that festivals and events contribute to form the sense of community, which comprises many aspects of community life. They are membership, influence, integration and fulfilment of needs and shared emotional connection. It means that attendees joining an event will have a feeling of being safe, involved, having an influence on the group and its members. They also want to have their needs met through their membership. Naturally, participants after receiving benefits will tend to contribute and make some influence over the community Last but not least, during the event and even in post-event,

they share understandings and experiences to each other and the event itself. Social impacts also focus on the fair treatment of employees and off-site labour, as well as assure beneficial practices for the communities where the event takes place.

### **2.2.2 Environment (Planet)**

Any planned event might cause a range of positive and negative outcomes on ecological issues, depending on the type and size of the event. Many researches pointed out that the link between human activities and ecological processes (Holmes, Kristen; Hughes, Michael; Mair, Judith; Carlsen, Jack, 2015). In other words, environment quality and human wellbeing affect each other. Environmental issues are a core concept of sustainable development. Common problems relating to ecological issues in events are the amount of litter, noise pollution, traffic congestion, vegetation damage, and emissions. Holmes (2015) claims that planned events degraded the environmental quality will likely reduce support and trust from community and stakeholders. Therefore, it is vital to conduct a sustainable plan to minimise negative impacts. Many researchers agree that the Ecological Footprint is a useful tool to measure the environmental sustainability of an event. The ecological footprint model was conceived in 1990 by Mathis Wackernagel and William Rees (Henderson & McIlwraith, 2013). This model compares the environmental impacts of specific actions on the Earth's capacity of natural resources to maintain those activities. "It calculates a ration of "how many earths" would be required to provide enough biologically productive land area to maintain the flows of resources and wastes" (Marshall & Toffel, 2005, p. 674). Measuring environmental factors at events can be implemented; however, in practice, due to limited resources, it might be difficult and involve some increased leg-work for the event planners. The measurement can be executed by comparing the percentage of ecological factors at the event with environmental standards or requirements relying on certifications and green ratings. There are many carbon footprint calculator websites available for event planners to use and get references to organize an event meeting environmental sustainability.

### **2.2.3 Economic (Profit)**

Depending on the size or scale, the events contribute economically to the development of viable enterprises in the area it takes place. Festivals, sport events such as World Cup, Olympics or Tomorrow Land are types of example events, which obviously and notably show economic impacts on the local region. Despite spending a massive sum of money to construct the event venue and upgrade local infrastructures, those events attract a lot of investments and sponsorships from domestic and foreign businesses. Additionally, mega-

events often produce many new jobs for local people, effectively increase event tourism arrivals and expenditure, and create advantages of transportation, accommodation and services for retail sectors (2015). If the investment of public monies is managed and utilized correctly, the long-term benefits for legacy are not only enhancing the image and branding of the host destination but also increasing the pride among the host community. On the other hands, events also cause adverse effects on economic issues. For example, mega events might require a considerable amount of labour, especially volunteers. Therefore, the employment rate the event created was temporary, and many of team members are non-paid staff as the position of volunteers. This issue might bring benefit to event organizers to reduce labour cost; however, it would not create long-term profits for financial local.

Furthermore, as mentioned above in the part about Environmental impacts, events can generate much trouble with traffic congestions, wastes, and even social security issues. These problems might cost the government or local authorities big fees in order to solve and clean up the mess after the event. Many factors related to an event can cause an economic burden on the host destination, and might even last for generations such as public debt crisis due to cost overruns, maintenance costs, under-utilized “white elephant” venue, and long-lasting negative images at hosting destination due to unexpected problem at the event (2015). The phrase “white elephant” originate literally from ancient holy white elephants in Thailand and other Asian countries. Keeping a white elephant was an expensive undertaking and a burdensome possession (Martin, 2019). In event management, white elephant phenomenon means structures, constructions, or buildings that not only put a financial strain on cities but also become useless after the event (Ledermann, 2015). White elephants happen mostly at mega sporting events since they have significant investments in infrastructure like stadiums.

There are many examples of event failures relating to economic impacts, according to collecting data and information of McBride in his article about The Economics of Hosting the Olympic Games (McBride, 2018):

- Rio de Janeiro’s 2016 games: “more than a year later, the city still struggles with debt incurred, maintenance cost for abandoned facilities, underequipped public services, and rising crime.”
- “Beijing’s famous “Bird Nest” stadium cost \$460 million to build and requires \$10 million a year to maintain and sit mostly unused.”

- Poor planning and security monitoring led to deaths or hospitalized cases due to drug shock in 2018 in music festivals Australia: The Defqon.1 Music Festival in Penrith (15<sup>th</sup> Sept) 2 death and 13 people hospitalized, Sydney Olympic Park (9<sup>th</sup> Dec), and the Lost Paradise Festival (29<sup>th</sup> Dec). The latest recorded incident is the five dead in the Fomo festival on 12nd Jan 2019 (McGowan, 2019).

Nevertheless, there are records about positive impacts that meetings and events contributed to the national or regional economy. Adam Sacks, a founder and president of Tourism Economics stated (Oxford Economics, 2018)

“The meetings and events industry continues to grow across all segments as it contributes hundreds of billions of dollars in revenue to the U.S. economy and supports 5.9 million jobs.”

According to the report of Oxford Economics, meetings in 2016 contributed enormous profits for the economy, supported more jobs and increased GDP for the region (Lezard, 2018).

“Meetings generated \$325 billion of direct spending and \$845 billion in business sales. These numbers represent a contribution of \$446 billion in GDP and \$104 billion of federal, state and local taxes.”

The Events industry Council Economic Significance of Meetings to the U.S Economy illustrates the potential economic impacts of event industry by an infographic. Here is the information they defined by collected data: (Events Industrial Council, 2018)

- In 2016, the meeting industry produced 845 billion US dollar in business sales.
- 5.9 million jobs from event industry provided 249 billion US dollar in labor income.
- It contributed 446 US dollar in the US GDO and 104 US dollar in federal, state and local taxes.

In general, economic sustainability is essential to view from the aspect of the financial health of event planning, or profits from the event to its stakeholders, community and supply chain (Green Event Book, 2019). The economic effects of events can be both positive and negative, direct or indirect. Direct factors include the financial success of the event, return on investment, local economy, and market capacity. They occur when enterprises or event-related firms supply products and services directly to event’s attendees a through the forms of ticket sales, local food and beverages, accommodation, transportation, and create financial benefits for a society like employment of the local workforce. Meanwhile,

indirect impacts arise through business-to-business dealings in the host destination because of event activities. Increasing residual tourism income or visitation from event participants due to entertainment is also a direct impact. Another economic effect that could be a positive impact of the event is “market presence”. In order to avoid wasting well-equipped specific infrastructures and services, the region that held previous events could also become an upcoming event destination. Measuring economic impacts can include a percentage of event labour locally, provision of infrastructure resources, total additional expenditure, and cost savings due to sustainable initiatives.

Those three sustainability pillars of the Triple Bottom Line are inseparably linked to each other. They have to be considered together and at once equitable, acceptable and viable (Jones, 2014). It means all people are equitable and have fair access and utilization of natural resources and economic profitability. Besides, all of the benefits have to be acceptable with the Earth’s capacity and its regeneration ability. On the other hands, natural resource exploitation to develop the economy and ensure the people’s right also need to be viable and minimize as much negative impacts on the environment. None of those links should be dismissed when conducting and maintaining a sustainable event.

In June 2018, at an article on Harvard Business Review, Elkington recalled his concept of the “Triple Bottom Line” to do some fine-tuning. He stated that:

“Success or failure of sustainability goals cannot be measured only in terms of profit and loss. It must also be measured in terms of the wellbeing of billions of people and the health of our planet, and the sustainability sector’s record in moving the needle on those goals has been decidedly mixed. While there have been successes, our climate, water resources, oceans, forests, soils and biodiversity are all increasingly threatened. It is time to either step up — or to get out of the way.” (Elkington, 2018)

### **2.3 Corporate Social Responsibility (CRS)**

There has been an increasing awareness by organizations and their stakeholders of the concept of Corporate Social Responsibility (CRS). In 1998, the World Business Council for sustainable development defined CRS as “the continuing commitment by businesses to contribute to economic development while improving the quality of life of the workforce and their families as well as the community of society at large” (Lee, 2015). In this definition, it shows that many people or stakeholders involve and get affected by CRS: employees, families, and communities. In 2010, the International Standards Organization also published ISO26000 Social Responsibility as the guidelines for organizations. It defines

that responsibility of an organization for the impacts of its decision and activities on society and environment (Jones, 2014):

- contributing sustainable development including health and welfare of society
- considering the expectations of stakeholders
- complying with applicable law and international norms of behaviours
- consolidate the organization and practising in its relationship

To emphasize ethical value in the business's mission statement and gain the public trust, nowadays; many major corporations have committed with CRS, a policy promoting ethical and charitable corporate behaviour (Goldblatt, 2012). Larry Fink, CEO of BlackRock, also indicated the importance of CRS (Cievents, 2018):

“Society is demanding that companies, both public and private, serve a social purpose. To prosper over time, every company must not only deliver financial performance but also show how it makes a positive contribution to society”.

In practice, the meetings and event industry can apply CRS and Ethics into a green event by implementing the following strategies:

- Conservation: there are many ways that meetings and events can become a resource conserver through energy management, resources responsible usage, waste reduction. Practising conservation method in regard to energy and materials consumption not only leaves positive impacts on environment aspects but also increase the efficient use of financial resources.
- Innovation: meetings and events can produce positive changes and sustainable improvements in communities and the environment. Goldblatt criticised that “sustainable strategies do not just improve the planet; they improve the event experience” (Goldblatt, 2012). In the context of creating new experiences for attendees, event planner could creatively exploit emerging strategies, green technology and initiatives to create a positive legacy for the events.
- Catalysts: meetings and event have an exceptional chance to change behaviours and social awareness through education and motivations. Each event is the opportunity for event planners to create memorable event experiences, contact, disseminate and inspire participants to integrate sustainable practices in their business operations and their daily routine. In regards to the aspects of events and meetings aspects, the event organizers can promote sustainable



behaviours such as educating sustainable practices at an education conference, recognizing and awarding the best sustainable ideas, replacing gifts and materials into ones that encourage sustainable behaviours.

Each event is often a temporary gathering of many individuals and organizations in the industry. Thus, it is more important that every stakeholder commits to principles of social responsibility and ethical behaviour at both personal levels and professional levels.

## **2.4 Sustainable policy**

Sustainable Policy is an essential tool for an event planner to concentrate the efforts and keeping the event on the right path. According to Jones, a sustainability management policy can be organization-wide or event-specific. It should include (Jones, 2014):

- commitment to sustainable development principles
- objectives relating to sustainable outcomes
- indicators against sustainable performance
- commitment to legal rules and international norms of sustainable development
- description of sustainable pathways, consultation process, training staff and key stakeholders
- commitment to continual improvement

The sustainable policy should also comprise the critical operational aspects of event production regarding environmental, social and economic sustainability.

## **2.5 Standards and Certifications**

In this part, there are some standard and certifications about sustainability in event management. They comprise essential factors that the organizer should consider when planning the event with sustainable goals.

### **British Standard 8901**

In 2007, the British Standards Institution (BSI) invented an official name as “Specification for a sustainable event management system with guidance for use”, as known as BS 8901 for short (Sustainable event alliance, 2019). This standard is designed specifically for the event industry to assist with the specification and methodology to create and operate a sustainable event management system. BS 8901 concentrates mostly on managerial tools such as defining objectives, performance level, criteria, and using key performance indicators (KPI) to measure progress (Goldblatt, 2012). This standard helps event planners define the requirements and thereby identify the potential effects of their activities on sustainable requirements. Accordingly, event professionals can conduct correct measures to

diminish ecological impacts coming from the organization but also leverage positive economic impacts. BS 8901 comprises the following essential requirements (2019):

- sustainability policy
- issue identification and evaluation
- stakeholder identification and engagement
- objectives, targets and plans
- performance against principles of sustainable development
- operational controls
- competence and training
- supply chain management
- communication
- monitoring and measurement
- corrective and preventive action
- management system audits
- management review

An organization that is certificated by BSI will have the advantage of using the BSI logo that holds UK super brand status. According to the Annual Report and Financial Statement 2010 of The British Standards Institution, about 80 per cent of customers choose BSI to improve their business performance. Meanwhile, 91 per cent is the average satisfaction rating of BSI client managers (The British Standard Institution, 2010).

### **APEC/ASTM Standards**

Inspired by BS 8901, Shawna McKinley and the first executive director of the Green Meetings Industry Council has been working with Acceptable Practices Exchange (APEX), American Society for Testing and Materials (ASTM), international standards agency and the U.S Environmental Protection Agency (EPA) to create a U.S greener event standards, especially made for U.S meetings and event industry (Goldblatt, 2012). The APEC/ASTM standards propose nine categories and standards developed for the MICEs and events industry. They are (blog.cevent.com, 2019):

- accommodation
- audio-visual
- communication and marketing materials
- destination
- exhibits
- food and beverage
- meeting venue
- onsite office
- transportation

Inside those standards, there are eight impacts that meeting and event professionals need to address:

- staff management and environmental policy
- communication
- waste management
- energy
- air quality
- water
- procurement
- community partners

### **The European Ecolabel**

This label was established in 1992 and recognized across Europe and all over the world. It is a label of environmental excellence that is granted to products and services meeting superior ecological standards and requirements throughout their life cycle, from initial raw materials to production and disposal. Through exigent guidelines and its criteria, the EU Ecolabel instructs and encourages producers to minimize waste and negative impacts on the environment. Instead, they could develop products more durable and recyclable easily (European Commissions, 2019).



Figure 2: Image of European Ecolabel (adapted from European Commissions (2019) )

### **Nordic Swan**

This label is established in 1989 by the Nordic Council of Ministers and became the official eco-label for the Nordic countries including Finland, Sweden, Denmark, Norway and Iceland. The Nordic Swan ecolabel set strict requirements and specific limits relating to environmental sustainability and chemicals used in eco-labelled products (Nordic Ecolabel, 2019). Publishing this label is a useful tool to encourage business commit with sustainable

solutions and thereby give more chances to consumers to choose the best sustainable services and products.



Figure 3: Image of Nordic Swan label (adapted from Nordic Eco-label (2019) )

### Key Flag symbol

This symbol is a registered collective mark, owned by the Association for Finnish Work, to demonstrate the products or services are produced in Finland. Products with Key Flag symbol adhere to requirements in Terms and Conditions (2018).



Figure 4: Key flag symbol (adapted from Suomen Terveysravinto (2018) )

### ISO

The International Standards Organization is the place where develops and publish international standards. According to the definition on the official website of ISO, it states:

“ISO creates documents that provide requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes and services are fit for their purpose.” (ISO, 2019)

Regarding sustainable event and meetings planning, there are standards to support event professionals.

ISO 1401: Environmental Management Systems

ISO 9001: Quality Management Systems

In 2012, ISO published a new standard to assist the event organizers in producing sustainable events relating to sustainability in people, plants and profits. It is ISO 20121, Event Sustainability management systems. While other standards are for the general industry sector, Publishing ISO 20121 is specifically for the event industry, especially on

sustainable perspectives. This standard applies to all stakeholders of the event industry, such as event organizers, managers, logistics suppliers, staff, etc. ISO 20121 provides the framework to implement a system to identify and manage event sustainable issues, intensify positive legacy and embed continual improvement (Jones, 2014). Fiona Pelham, Chair of the ISO team of experts about ISO 20121 indicated its critical benefits that (Frost, 2012):

“Best business practice:

It makes sense to take an organized, processed approach to manage economic, environmental and social impacts. In addition, what gets monitored and measured gets reduced, so there are likely to be lower overheads.

Reputational advantage:

Using a recognized international framework will enable leaders in sustainability to demonstrate their actions in a credible and transparent way”.

## **Ekokompassi**

Ekokompassi (Eco-compass) is a certificate, which demonstrates the commitment of an organization to improve and comply with the ten criteria of Eco-compass (Ekokompassi, 2019). Furthermore, it is based on the respective Nordic environmental management systems and international standards on environmental management. The city of Helsinki, Espoo, Vantaa and Kauniainen, HSY, HSL and Helen are forces behind Eco-compass. There are many small and medium-sized enterprises, and events use Ekokompassi Certificate as proof for their commitment to the environmental issues. They are Helsinki City Run, Flow Festival, Slush, World in the village, Helsinki City Library.

The following list is criteria for the Eco-compass event (2019):

1. The event acts according to environmental laws and regulations.
2. The event has appointed someone as responsible for environmental matters.
3. The event organises an environmental assessment where the initial situation is charted and the most significant environmental impacts ensuing from the event are assessed.
4. The event has its own environmental policy, which forms the basis for the environmental goals.
5. The key persons appointed by the event for environmental issues take part in the environmental training provided by Eco-Compass. The key persons instruct the rest of the staff to take environmental issues into account in their actions.
6. The event has a waste management plan. Waste is sorted at least according to the regional waste management regulations.
7. The event records its hazardous waste, stores it safely and delivers it for due treatment.

8. The event has a list of all chemicals used. Safety data sheets are available for the staff, and the employees have been primed for the safe use of the chemicals. The event stores its chemicals according to regulations.
9. The event prepares annually an environmental programme which includes goals and measures in the following sub-sectors:
  - a. Reducing the amount of waste
  - b. Saving energy and changing over to green electricity.
  - c. Steering the procurements in an environmentally-friendly direction.
  - d. Taking environmental issues into account also in products and services acquired through subcontracting.
  - e. Improving the material efficiency in product development, product manufacturing or service processes.
  - f. Intensification of logistics and commuting.
  - g. Minimisation of noise impacts.
  - h. Environmental communications or some other sector defined together with Eco-Compass.
10. The event reports to Eco-Compass every year about the outcome and fulfilment of goals and key ratios describing the event's environmental actions. The monitoring report is available for the event staff.

### **3 Guidelines for Sustainable event**

#### **3.1 Scope of the event**

##### **3.1.1 Basic information**

The event type of 10 Days and 100 Challenges (10D100C) is a conference and a small local event. It gathers staff and participants to carry out planning, discuss, and suggest solutions for practical business' problems and improve attendees' knowledge and skills by training sessions. The event will take place in ten days within two weeks from 3<sup>rd</sup> to 14<sup>th</sup> June 2019. According to the records of the previous year, the 10D100C expected to have over a hundred of participants joining the event. The event happens in two places: Harald Herlin Learning Centre in Espoo and Arabia Campus in Helsinki.

##### **3.1.2 Activities**

At the event, there will be many activities during the 10-day event. The below event schedules illustrate main activities such as registration, serving food and beverages, coaching, teamwork for challenges, keynote speakers' speeches, pitching, networking during the event. There are indoor activities and they take place only inside the venue's area. Therefore, ecological problems of outdoor events such as noise pollution and vegetation damage will be no need to consider in this event.

Below is the planned schedule with specific activities during the event 10 Days 100 Challenges:

<b>Mon 3.6.2019</b>	
9:00- 10:00	Registration and breakfast
10:00 - 12:00	Introduction to 10 Days 100 Challenges + Guest speakers
12:00 - 13:00	Lunch
13:00 - 14:00	Guest speakers
14:00 - 16:00	Companies' challenge pitching + company booths
<b>Tues 4.6.2019</b>	
9:00 - 12:00	Team Building
12:00 -13:00	Lunch
13:00 - 16:00	Service Design - sprint starts
<b>Wed 5.6.2019</b>	
9:00 - 12:00	Service design tools
12:00 - 13:00	Lunch
13:00 - 16:00	Customer Interviews
16:00 - 18:00	Barbeque
<b>Thurs 6.6.2019</b>	
9:00 - 10:00	Guest speakers
10:00 - 12:00	Working with challenges
12:00 - 13:00	Lunch
13:00 - 16:00	Working with challenges, company coaching
<b>Fri 7.6.2019</b>	
9:00 - 12:00	Working with challenges
12:00 - 13:00	Lunch
13:00 - 16:00	First round presentations in small groups. Feedback and discussions

Figure 5: Schedule of the first week 10D100C (10 days 100 Challenges, 2019)

<b>Mon 10.6.2019</b>	
9:00 - 12:00	Experimenting, prototyping principles
12:00 - 13:00	Lunch
13:00 - 16:00	Working with challenges
<b>Tuesday 11.6.2019</b>	
9:00 - 12:00	Working with prototyping
12:00 - 13:00	Lunch
13:00 - 16:00	Company coaching
<b>Wed 12.06.2019</b>	
9:00 - 10:00	Guest speakers
10:00 - 11:00	Working with prototyping
12:00 - 13:00	Lunch
13:00 - 16:00	Validating prototype
16:00 - 18:00	Barbeque
<b>Thurs 13.06.2019</b>	
9:00 - 12:00	Pitching training
12:00 - 13:00	Lunch
13:00 - 16:00	Working with presentations
<b>Fri 14.06.2019</b>	
9:00 - 12:00	Pitching Day
12:00 - 13:00	Lunch

Figure 6: Schedule of the second week 10D100C (10 days 100 Challenges, 2019)



Regarding the above schedule, there are specific activities that might cause unsustainable impacts if the organizers do not carefully plan:

- Material for marketing, communication, decoration and on-site event's use
- Activities of attendees and guest speakers at the on-site event
- Services and products from suppliers: venue, food and beverage, stationaries.
- Training programs about sustainability
- The waste amount and energy use during the event

All of these activities the author will sort to below aspects and analyse further on the next chapter 3.2

- Communication and marketing
- Venue and Location
- Transportation
- Food and beverage
- Resources use and waste management

### **3.1.3 Event stakeholders**

Meegan Jones defined that event stakeholders are individuals or organization who have interest or needs or any expectations around the event activities (Jones, 2014). To identify stakeholders, organizers need to answer some questions:

- Will they involve in event activities?
- Will they affect the event, support, or interfere us from reaching our targets?
- Can they contribute to the solutions?
- Do we have the possibility to regulate or change their actions?

According to the handbook of the 10D100C in 2018, there are two main involved groups in the event: participants and partners (Spokes & Vuorio, 2018)

- Participants: this group includes the students, professionals, and highly educated immigrants without work or networks. Eighty per cent of attended students come to the event as a part of the course to collect study credits.
- Partners: this group consists of challenge companies and cooperation companies. Challenge companies will pay a fee to participate as sponsors and provide theme related challenges in real cases for the event. They also have coaching programs for attendees to understand better about their business' problems. The other partner is cooperation companies. They are mentors, speakers, and support with technology.

Participants and partners are central components in the event and are involved in most of the activities. Sustainable plan is created for them to experience. Thus, they are both support and a hinderance to us for achieving sustainability goals. Our event targets will inspire attendees if the event has a detailed and practical plan to organize an event with sustainable factors. Simultaneously, educating and suggesting initiatives can partly affect these stakeholders to change behavior in an ecological oriented way.

Moreover, the event staff is an internal stakeholder that might affect the sustainability of 10D100C. They consist of event manager, event assistant, coordinator, and site crew. They play roles to make managerial and planning decisions. They need to have certain skills and knowledge in sustainability management to make appropriate and efficient decisions. Event staff can also include volunteers. All of them need to get inspired and engage in the theme of sustainability and have enough understanding of performance expectations for the event (Jones, 2014). The event's sustainability messages are conveyed to other participants through event staff, especially on-site crew and volunteers.

Last but not least, suppliers are external stakeholders that the organizer needs to consider when planning a sustainable event. Suppliers are individuals or organization providing goods and services for an event such as venue, caterers, and stationary. Choosing suitable suppliers complying with sustainable standards is a way to support the event's theme of 10D100C and reduce the impacts of consumption.

### **3.2 Communication Challenges and Solutions**

It is no doubt that communication is crucial in most of the fields in life, from home to work, from personal daily life to social life. There are common definitions of communication, which are "transferring," "interaction," and "sharing with others." Ruhet Genc, in his report about the importance of communication in sustainability, claimed that communication also plays a vital role in sustainable development and strategies (Genc, 2017).

About the relation of communication and sustainability, Genc stated that sustainability targets could cause people mixed feelings and deliberation involving conflicts of interests and conflicts of values. For example, using plastic bottles in single-use is very convenient actions, but it burdens the recycling system. Using a bicycle instead of a car takes a long time to move, but it brings value for the user in health and environmental sustainability. Therefore, communication is crucial for creating a shared understanding of societal values on sustainability and determining some concrete goals, which requires compliance (Genc, 2017).

To design a way to communicate effectively, the planner should first define what could be troubling to communicate with the public about sustainability, what the better way to communicate, and affect and change behaviours to improve sustainability.

Nowadays, everywhere we can see many messages and campaigns about sustainability in the media. Nevertheless, there are still many people, who are not willing to change habits to reduce impacts on the environment. Gifford claimed that one of the barriers to sustainable behaviour change is ignorance (White & Habib, 2018). It includes people who are not aware of their unsustainable actions on the environment and people who are unsure about the way create positive impacts on the planet in daily life. According to Mahajan and Graves, "information alone will not change behaviour", but building empathy to motivate people can do it. Researches show that people tend to act based on positive feelings and social desirability (Mahajan & Graves, 2018). For an instant, messages that make viewers feel positive and themselves useful are more effective than negative ones about environmental issues that make them only feel pessimistic and guilty. Javier Flaim also supported this point that creating a culture of hope instead of fear around sustainability. Creating fear could bring out a strong reaction, but it might not be an effective way in the sustainability and environment industry (Flaim, 2014). He suggested that an alternative way is to educate and motivate people about a greener life by giving smarter choices that can benefit and enhance their lives daily.

Additionally, Erving Goffman stated in his journal about Presentation of Self in Everyday Life that people are motivated to convey a positive image and impression of the self to others in public contexts (Genc, 2017). Social desirability plays a tool of social influence on people. There is a way to leverage social desirability and improve engagement in sustainable behaviours is to encourage people to make public commitments. Research shows that people are likely to comply with their promises after publishing and tend to keep it in the future once they did it (White & Habib, 2018). They also would like to have recognition and do something visible to others to have social approval or evaluation. In this case, social media could be a tool for people to publish their sustainable commitments and changes in their behaviours to prove it to the society.

Many people think that they are too small to contribute to improving environmental problems. The planner needs to convey the message that each choice does matter to the earth. Christie Manning stated that action at a time from an individual might seem like a slow route to contribute to sustainability in the world. However, it does change at a fundamental level that opens the gateways and makes the possibility for broader social change (Manning, 2009). The more numbers of individuals change to be sustainable; the more routine the sustainable behaviours become in society. In this aspect, social acceptability

takes a substantial role in changing behaviours and lifestyle. It means the more people living in a certain way like a sustainable lifestyle, the more other people will accept it as a healthy and normative way to live and follow it. At the event 10D100C, organisers, staff, and volunteers are people who should play model roles of choosing sustainable choices to lead other groups of people like all attendees and create a sustainable event as a very conscious lifestyle. Therefore, training staff on-site about sustainability is crucial to effectively communicate with the public.

Policy improvement could push the change in individual behaviour quickly (Manning, 2009). Regarding the event industry, policies can come from the government, organizers, and suppliers. It is unrealistic to assume that campaign messages can reach and leave an effect on all attendees. Sometimes putting a force or applying policy will push and increase impacts on people about a particular issue. For example, the government requires the venue owners to have to apply ISO 1400, environmental management system on their place. Suppliers have the policy to pursue sustainable waste management by using only biodegradable material for food packing. Organizers apply a sustainable policy by using electric documentations instead of papers, encouraging using refill bottles by setting up water fountains and stopping selling plastic bottles. Additionally, organizers should make sustainable commitments at the event as policies they want themselves and all attendees to comply during the event. Publishing the commitments and sharing the event specific targets to the public is also a way to motivate people to join in the effort (Boyle, 2015). To sum up, there are some points that event planner should pay attention when creating a communication tool with the public to affect and change their behaviours into sustainability:

- Not only provide basic information but build empathy to motivate behaviour change by giving practical information and tips for daily life
- Provide positive information and alternative options for people to let them feel relevant, joyful and useful to do sustainable work
- Encourage people to make public commitments to raise sustainability awareness and social desirability
- Build up a well-trained staff about sustainability to create a role model to inspire people
- Organizers, suppliers create commitments and policies to make a push and inspire people with a sustainable target.

Katherin and Rishad in their study about Encouraging Ecology in Consumer Behaviour also suggested tools to foster good habits: (White & Habib, 2018)

- Make it easy: Make sustainable behaviour cost less and less effort to do, relevant to life. Set green options to be the default choice
- Incentives: Provide non-monetary incentives, encourage good behaviours
- Prompts: use prompts to remind people to engage in the desired sustainable consumer behaviour. Ensure they are noticeable, clear, and near where the actual behaviour will be carried out.

### 3.3 Potential impacts and suggestions

Firstly, the event organizer can set the table with the main impacts and domains that should consider at the event. It is the general sustainability implementation plan. After that, the planner can mark on the square where the impact and domains can meet. The marked box implies that there is sustainability initiative possible for that combination of the objective and main domain (Muller, 2014). Here is an example:

Table 1: General sustainability implementation plan

	Venues	Transport	On-site establishments	Resource use and waste management	Food and beverages	Communication and Marketing
Encouraging waste sorting and recycling	X		X	X		
Minimise the production of waste			X		X	
Extend the use of material and products (rent, re-use, etc.)	X		X	X		X

<b>Favourite using ecological transport</b>	X	X				
<b>Use sustainable products</b>	X		X	X	X	X
<b>Involve, share and raise awareness</b>		X	X		X	X
<b>Optimize or reduce freight transport</b>		X			X	
<b>Reduce carbon footprint</b>			X	X		X
<b>Using existing building, facilities and material</b>	X		X	X		
<b>Effective energy use</b>	X			X		

After defining the overall impacts and domains, the detailed plan with practical actions is designed as a form of a checklist table from the eleven main domains above.

### 3.3.1 Communication and Marketing

In the checklist of communication and marketing, there are suggestions to make sure the messages of sustainability from the organizer can reach attendees efficiently and engage them with the theme during the event.

Table 2: Communication and marketing checklist

<b>COMMUNICATION AND MARKETING</b>	<b>Suggestions</b>
<b>Minimise the production of waste</b>	Communicate electronically with suppliers, staff, companies, attendees by emails, mobile applications
	Digitalise management process (online ticket, online registration, event program, etc.)
	Minimize printing handouts, flyers at the event
<b>Extend the use of material and products (rent, re-use, etc.)</b>	Rent or re-use available signage, TV-screens, projectors, whiteboard, at the event premises to produce paper waste and transportation cost
	Reuse the materials about the sustainability program of the venue (e.g. recycling instruction, recycling trash bin)
<b>Use sustainable products</b>	Use certified paper for any printed materials
	Choose local printing companies or printing service at the event premises to minimize deliver distance
	If there are gifts for speakers and participants, consider sustainable ones (local products, recycled material, sustainable functions, etc.)
	Using social media, websites, blogs, online channels to promote the event instead of choosing a newspaper
<b>Involve, share and raise awareness</b>	Provide sustainable info at the event to participants (e.g. inspiring presentations about the environment, menu, suppliers, tips for a sustainable lifestyle, activities, campaigns at the event)
	Send instructions and suggestions about sustainability in advance to participants by email (e.g. map with public transport stations, tips for being sustainable at the event, recycling guideline)
	Design infographics with practical, sustainable tips for attendees

	Create catching slogan or hashtag for some sustainable activities to wrap participants' attention.
	Organize fun activities relating to sustainability to inspire and engage people during the event
	Promote training and speeches about sustainability to educate and inspire people
	Build a staff with efficient knowledge about sustainable to play a role model to instruct and inspire participants
	Live stream the training program and speeches relating to sustainability to spread the knowledge to more people who cannot attend

Manning mentioned in his work about the Psychology of Sustainable Behaviour that understanding individual motivation and thinking about environmental issues would help to find effective ways to communicate with them (Manning, 2009). Therefore, the event planner should define the benefits of the stakeholders to be sustainable so that we can find a better way to communicate and engage them with sustainability messages. Here are values that stakeholders at the event 10D100C can take:

- Students: knowledge and experiences about sustainability, especially practical tips in daily life
- Suppliers: inspire and motivate new ideas to produce sustainable services/ products
- Companies/ organizations:
  - With companies who have challenges relating to Sustainability: have challenge solved
  - Other companies: learn initiatives from other businesses; get inspired by sustainable tips and ideas, which is used at the event.

At the event 10D100C, attendees, especially students, are the target group that the author wants to focus on communicating and inspiring about sustainability. Therefore, the content of infographics and side activities will relate to the student's daily life and activities of attendees at an on-site event.

### **Infographic content**

Regarding the infographic, the author used a free online website - Pikochart for designing. The author created five areas of content:



- Sustainable tips that attendees can do at the 10D100C. It includes actions relating to transportation, food, resource use, waste management. The message in this content emphasizes that each person can do practical actions, even they are small, to become sustainable.
- The sustainable menu is where participants can see the list of the plant-based menu during the week and ingredients. In this menu, there is information about the food provider, the reason why the organizer chose it as a sustainable supplier for the event.
- Transportation maps for both event premises Harald Herlin Learning Center and Arabia Campus. The purpose of this content is to encourage people using sustainable transports by providing available options for public vehicles and parking stations such as bus station and City Bike stations. The organizer can send this content to all participants along with confirmed registration email so that they can plan themselves to choose a suitable vehicle to go to the event.
- Recycling guide is designed to assist participants in sorting waste correctly at the event venue. This guide will be posted right above the trash bins so that people can read before they decide which recycling bins are suitable for their waste.
- Water saving slogan will be pinned up on the mirror in the toilet to remind users to turn off the faucet when not in use.

All these infographics will be saved as photos and motion clips and showed on TV-screens, which will be placed around the event area. This will increase the visibility of the contents and attract attendees' attention due to its colourful images and motions.

In addition to infographic, the side activities are necessary to highlight sustainable theme at the event. It also engages and encourages participants to be sustainable during the event

### **Activity 1: Team photo**

Slush 2018 photo booth inspires the author about the team photo activity. At the event, Slush asked people to write down a message of their sustainable choice, pose for a picture, and spread them on social media (Sparkling Stories, 2018).

The time to apply the team photo activity is on the second day of the event when the teams form up, and they start to build connections with their members. In this activity, the organizer can require check-in photo from each team by using the photo booth machine named MyPose or a selfie by themselves. They should write down their sustainability

commitments of the team on a paper or whiteboard and take the photo with it. With My-Pose machine, the commitments can be added directly to the photo by the effects on My-Pose or can be written on a small board to take a photo. The last action is encouraging teams to share it on social media with the hashtag #green10D100C for both marketing purpose and environmental theme purpose.

This #green10D100C can be promoted as a main hashtag for the theme sustainability at the event. We encourage participants to add this hashtag in all photos that they think it is a sustainable plan or actions happening at the event.

Objectives:

- To create a connection between team members at the beginning
- To encourage attendees to make commitments themselves about sustainability
- To raise the awareness of sustainable issues through their commitments
- To increase social recognition for attendees on social media and do marketing for the event with the theme
- To remind them about their commitments after the event

Evaluation:

- How many teams took photos and shared on social media? The tool counts the number of team photos and hashtags on social media.
- After a week, the author will interview random participants to know if they keep their commitments during the event.
- The target is 50 results with the hashtags #green10D100C, photos from all teams, and most of the participants claim that they keep their sustainable commitments.

## **Activity 2: Name the bottle**

The time for this activity is the first day of the event. The purpose of this side-activity is to reduce the waste of plastic bottles at the event. In addition, to encourage participants to bring their own refillable bottles, the organizer will only provide water bottles on the first day of the event. After that, there is no plastic cups or bottles are provided at the event. The organizer only set up water stations around the event. Therefore, the participants are encouraged to write their name on the bottles or cups to refill and reuse them during the event.

Objectives:

- To promote awareness of sustainable issues through practical actions

- To connect all attendees by names on cups as a quick introduction during networking time
- To reduce the waste of trash since participants re-use one cup per day

Evaluation:

- How many people write their names on bottles? How many people ask for cups? Tools are observing bottles or cups on meeting tables and data from survey questions.
- Targets are most of the bottles with name on them, and most people bring their bottles and reused bottles or cups during the 10-days event.

### **Activity 3: Are you a sustainable guru?**

This activity is a quiz about sustainability with prizes for all participants. The last day of the event is the final pitches for all teams. Hence, the suitable time for this quiz is one day before the last day of the event. The quiz is designed on the application Kahoot. Kahoot is a game based classroom response system played by the whole class in real time. Multiple-choice questions are shown on the screen. Participants answer the questions with their phone or computer.

Before lunchtime, there will be an announcement that there is a game with prizes after lunchtime. Therefore, all attendees can have time to prepare by download the app in advance. This activity is a method to provide knowledge for attendees about sustainability in a fun way and provide practical tips to have a sustainable lifestyle. In this game, the organizer can add some survey questions to evaluate the effectiveness of the event.

Objectives:

- To provide useful knowledge about sustainability
- To remind sustainable tips the participants can do at the event and even in their daily life

Evaluation:

- How many people join the game? Do they stay until the end of the game? What is the result of the survey questions?
- The tool is observation and data from survey questions.

#### **3.3.2 Venue and Location**

The table below described the checklist for the section venue and location with a sustainable theme.

Table 3: Venue and location checklist

<b>VENUE</b>	<b>Suggestions</b>
<b>Encourage waste sorting</b>	Negotiate with the owner to set up and arrange sorting recycle bins with highlight sorting labels and recycling guideline at the recycling stations to instruct people
	Encourage the event provider to use sustainable policy at the venue (energy, water, waste management)
	Provide different waste types of bins (paper, glass, bio, metal) and deploy them across the venue (meeting rooms, halls, parking place)
<b>Extend the use of material and products (rent, reuse, etc.)</b>	Share or donate surplus material to schools or library to maximize its use (sticky notes, papers, etc.)
	Reuse or rent stuff for decoration and supports the event's activities (e.g. signage stand, fencing, etc.)
	Benchmark the previous or other events with the same scope for data to estimate specific needs and avoid excess materials (stationary,
	Consider using the services such as restaurant, the coffee shop at the event venue to reduce delivery cost and utilize all the venue's functions
	Plan long-term relationships with partners (venue, sponsors, suppliers, etc.) to develop event products for multi-year use
<b>Favourite using ecological transport (walking, biking, public transport or electric vehicles)</b>	Choose a venue with walking distance to local transport connections

<b>Use sustainable products (locally produced, recycled, certificated, etc.)</b>	Choose a venue having certifications and applying sustainable policies on their system such as renewable energy, solar energy, Eco-compass, ISO 14001, ISO 20121, building standards like LEED®
<b>Using existing building, facilities and material</b>	Choose a venue, which has an architect and facilities available for the event. Avoid creating new construction. (e.g. available stage, meeting hall, etc.)
	Design the venue to allow flexibility and multiple uses. The same area can be used as an auditorium, working areas for groups,
<b>Effective energy use</b>	Educate staff and participants to save water and electricity
	Communicate and negotiate with the venue owner to have a sustainable plan to use energy during the event (light system, heating system)
	Design the venue to minimise the need for energy (using natural light, open windows for cooling)

This year 2019, the event organizer team chose Harald Herlin Learning Center in Espoo and Metropolia Arabia campus as event venues during 10-days event 10 Days 100 Challenges. This is the second time that the organizer chooses Harald Herlin to hold the event, as the last time was 10 Days 100 Challenges 2017. Harald Herlin Learning Centre is about 600 meters from the Metro Station Aalto-Yliopisto. There are also many bus stations and city bike stations nearby this Learning Center. It satisfied the sustainable requirement to be easily accessible, especially by public transportation. The second venue that the organizer chose is Metropolia Arabia Campus. There are bus and tram stations available around the campus. The city bike station is right in front of the entrance, so it is convenient for participants to travel by bike to the event on sunny days.

Harald Herlin Centre belongs to Aalto University, and Arabia Campus belongs to Metropolia University of Applied Sciences. Therefore, these venues are excellent options for the event 10D100C. Firstly, due to organizers' possessions and cooperation between Universities of the area, the renting fee for these places could be negotiated and lower than renting from an outside provider. Moreover, infrastructure and available equipment of these venues completely satisfy the requirements of the event about conferences and meetings. Reusing and utilizing available resources is one of way to reduce waste and negative impacts on the environment. Applying sustainability to the event in these education centres also contribute ideas for venue owner to improve the sustainability at their venues. This contribution will be the legacy that the event can leave after the event.

### 3.3.3 Transport

The checklist below lists the main points that the organizer should consider regarding planning about sustainable transportation.

Table 4: Transport checklist

<b>TRANSPORT</b>	<b>Sustainability Suggestions</b>
<b>Favourite using ecological transport (walking, biking, public transport or electric vehicles)</b>	Mention options for public transportation: metro, bus, city bike, shared electric scooters
	Send detail map and transport instruction to attendees in advance before the event
<b>Involve, share and raise awareness</b>	Encourage using bicycles to the event by providing beautiful bike routes around the area
	Mention about health benefit to use bikes or walk
<b>Optimize or reduce freight transport</b>	Use local materials and product to build/set up at the event to avoid long way transport
	Find suppliers or shipping companies who use sustainable vehicles to transport products in need (avoid aeroplane, use trains, electric cars)

As mentioned above, the event premises locate nearby public transport stations. That is why the organizer should promote the use of public transport to attendees. The instruction with different transportations to reach the venue could be sent by email in advance together with registration confirmation. Moreover, the organizer can encourage people to walk and ride the bike by promoting and introducing bike routes leading to the venue. Meanwhile, applying parking fees will discourage car users to the event.

Using electric vehicles seems to be the new phenomenon in Helsinki during this summer 2019, like electric scooters. People can see them everywhere on many streets. The users are various from young people to mid-age office workers. The shared scooter is a great option for a short journey in the summer. Tier and VOI are the leading scooter service providers in Helsinki area. Voi is a Swedish start-up company providing shared electric scooters to the streets of Europe (VOI, 2019). In March 2019, this company launched 120 electric scooters mostly in the downtown of Helsinki (Iltalehti, 2019). This is an alternative vehicle for a bicycle but remains ecological in its orientation. After that, Tier Company from Berlin also joined the market in Helsinki in the same month (Aalto, 2019). Unlike the city bike with fixed stations, these shared electric scooters can be parked in any public place after driving. The service company will find and pick up their product by searching GPS location. To some users, this point is convenient to them since they do not need to find a station but drive directly to the final destination.

However, there is a controversial topic about the dark side of these electric vehicles, which claims that riding shared electric scooters is unsustainable. People complained about blocked sidewalks since the number of scooter riders is rising. With regard to the economic issue, Andrew Hawkins mentioned that the profit that a scooter can produce is not enough to cover costs or have any benefit (J.Hawkins, 2019). The company needs the profit from each vehicle for over five months, with five users per day to recoup the initial cost. Nevertheless, in countries like America, where there is a significant number of shared scooter users, the average lifespan of the vehicle is only about two months. The average lifespan can vary depending on different cities, the amount of use and specific society's culture. The fact is that scooters without fixed stations will take much damage and shorten the lifespan by users' maltreatment such as dropping, knocking down, leaving outside under weather and other vandalizing actions. It might cause those scooters to end up in a mass graveyard if the business cannot cover the maintenance anymore.

In the author's opinion, using electric vehicles is a natural step for people to get to know and change their habits from using traditional, convenient transport like a car to a more sustainable one. E-car, e-scooter or other electric vehicles can easily attract user by its new technology in advertisement, especially with a younger people group. In some ways,

the users are aware of environmental impact if they are encouraged to use electric transport instead of fuel-consumed ones. The using attitude towards the scooters of the users could be improved by education, propaganda and business's terms and agreements with users to restrict vandalizing.

### 3.3.4 On-site establishment

One of the critical parts in the planning of a sustainable event is how to set up and perform the sustainability theme clearly at the on-site event. The following table is the checklist.

Table 5: On-site establishment checklist

<b>ON-SITE ESTABLISHMENT</b>	<b>Sustainability Suggestions</b>
<b>Encouraging waste sorting and recycling</b>	Provide recycling bins with a mark of paper recycling across the different areas of the event, especially meeting rooms
	Post the recycling guideline at the recycling point to instruct attendees to sort waste correctly
	Reserve enough trash bins for attendees' use, especially for lunchtime or break time (a lot of lunch boxes or coffee cups)
	Consider volunteers or staff supervising and providing the waste advice by the recycling points
<b>Minimise the production of waste</b>	The registration at the on-site event will be done with computer
	Digitalize most of the documentation. Share them by emails or online apps
	Minimise printed handouts. Use both side printing if necessary.
	Donate surplus office supplies to organizations or store them for the next event



	Utilize virtual means for communication and sharing information such as mobile apps, email, website
	Asking companies sponsors not to distribute printed handouts or freebies at the event.
	Encourage companies to send presentation files and relevant information by email or mobile app and the organizer can resend to attendees
	Collect the name badges and lanyards of attendees at the end of the event to reuse later on. Should inform it to the attendees in advance so that they do not forget them at home.
<b>Extend the use of material and products (rent, re-use, etc.)</b>	Avoid date marking on banners and signage to reuse at the next or other events
	Rent or reuse decoration material from the venue or previous events (table clothes, chair, flower vases, backdrop, etc.)
<b>Use sustainable products</b>	Use recycled materials at the event (paper, signage, decoration)
	Make sure gifts and freebies are sustainable products (eco-friendly packaging, sustainable material, reusable products)
	Choose local suppliers for office supplies and equipment
	Using TV screens to show programs, notices, news at the event to reduce using printing materials
<b>Involve, share and raise awareness</b>	Create a slideshow with sustainable information and messages at the event and show on TV screens.
	TV screens set up around the venue. Make sure the position is easy to see and catch the attention

	Any updates or side-activities relating to sustainability, which happens on a specific the event day should be sent to attendees by email or event's communication channel/ app (e.g. sustainable menu of each day, campaign, game, etc.)
	Organize fun activities relating to sustainability to inspire and engage people during the event
	Give training and speeches about sustainability to educate and inspire people
	Hand out freebies, gifts as incentives to encourage attendees to have sustainable behaviours.
<b>Reduce carbon footprint</b>	Reduce printing and using toxic ink
	Find alternatives for unsustainable office supplies (erasable pens, ecological ink, a virtual platform for planning and brainstorming)
	Aim to reduce paper as much as possible
<b>Using existing building, facilities and material</b>	Rent or use facilities at the venue for registration (chairs, tables, rooms). Try to design the event's space follow the venue's interior design, made use of the venue's available space. Avoid constructing extra areas.

The characteristic of the event is a conference and meeting. Therefore, the amount of material used for writing, recording, presenting will be massive. In traditional ways, people will use mostly printed documents, papers, pens in this case. However, reducing ecological impacts means trying to reuse the material or perform and utilize intangible products more than a tangible one. Instead of printed documents, digitalizing them into electronic material is a way to reduce physical paper waste. There should be no flyers or information documents in the form of paper. Instead, the organizer should digitalize all contents and send to attendees by emails or specific mobile applications. At the venue, essential information such as announcements and daily event schedule will be displayed on the television screens.

Reducing the use of sticky notes for brainstorming and the formation of ideas during teamwork, utilizing a virtual platform is an alternative from the traditional paper planning. It

could also create a new experience for attendees. Deskle is an online application visual framework used to assist multidisciplinary teams to be more organized and efficient (Deskle, 2019). On this platform, there are features such as actionable graphics, sticky notes so that the participant can create and plan their idea on a virtual base. It also helps the team member to collaborate faster in real-time by letting an unlimited amount of members join the platform and freely edit and discuss. This app can help to reduce a lot of paper waste at the event.

During the teamwork at the event, to some people, writing notes and creating a mind map on paper is easier for them to perform and visualize the ideas to the group. To lessen the waste of paper in this case, the erasable pen is a solution to reuse paper material. Thermal sensitive ink technology offers the writer to correct any writing mistakes by rubbing the special eraser on the pen without damaging the paper (Pilot, 2019). In Finland, some brands produce erasable pens. They are Muji, Biltema, and Pilot Nordic. The event organizer can consider and combine virtual platform and partly paper using sustainable material, depending on the training or meeting activities at the event.

Investing in promoting a specific mobile app for an event brings many advantages. Firstly, it lessens an amount of physical material for the event. Secondly, attendees can easily keep track better with the program and activities of their team. In 10D100C, there will be some public sessions and teamwork sessions. In the mobile app, the user can have a personalized schedule for their team project management and general event program. In this platform, each team can share with team members their topic's documents, work, feedback, and discussion. For small businesses or small teams in 10D100C, there are some favourite team management apps like Slack, Asana and Evernote Business. Meanwhile Slack offers a communication hub where user can set up threads for specific projects, Asana also designs functions help users keep track on the team's progress by assigning tasks and setting deadlines. Additionally, Evernote is a popular note-taking app that helps manage workflow and integrates with other apps like Slack, Outlook, and Google Drive (Pilon, 2019).

The targets for applying sustainability at an on-site event are:

- Reduce using paper
- Reduce using single-use plastic

Tools: observation and interview

### 3.3.5 Food and beverages

Serving food and beverages at the event 10D100C is an essential part to express sustainability. Here there is a checklist for the organizer to make sure the lunchtime or coffee break leave the positive impacts on the participants and inspire them with sustainable options.

Table 6: Food and beverage checklist

<b>FOOD AND BEVERAGE</b>	<b>Sustainability Suggestions</b>
<b>Minimise the production of waste</b>	Estimate the number of attendees carefully for food ordering to avoid food waste
	Cooperate with business solving food waste (e.g. mobile apps to sell the surplus)
	Discourage attendees at the event using plastic bottled water. Encourage they reuse paper coffee cup during a coffee break.
<b>Use sustainable products</b>	Cooperate with local caterers, vendors, suppliers. Prefer suppliers who provide sustainable services and products
	Use local food ingredients, food with local and eco-labels
	Use seasonal ingredients for menus
	Discuss with the caterers to create plant-based menus to reduce environmental impacts from the meat industry
	Encourage suppliers to use recycled or biodegradable material for food packing
	Opt serving service using proper utensils (ceramic plates, steel spoons) instead of disposable items

	Choose refillable jug for storing water and put on the table for the speaker's use and participants' use Freshwater or tap water served in glass jug is always available for use
<b>Involve, share and raise awareness</b>	Publish the information about sustainable food suppliers, food origins
	Provide health benefits from a vegetarian diet to encourage participants using more green menus
	The sustainable food provider gives a presentation about their products and sustainable system (food ingredients, the material of the packaging, etc.)
<b>Optimize or reduce freight transport</b>	Negotiate with the vendors to find a sustainable way to deliver food to the venue
	Opt local suppliers or nearby business the venue to reduce food miles

a. Sustainable food resources and menu

The organizer should relay the requirements and negotiate with the food supplier in order to create a sustainable menu at the event. Firstly, the food ingredients should come from the local resources or food with a fair trade label and eco-labels like EU eco-label and Key Flag. The author suggests the organizer choose a menu with more seasonal vegetables than red meat. The meat industry produces a large amount of emissions into the environment. However, instead of red meat, chicken and turkey could be options for more environmentally friendly meat on the menu. There is also suggested that using cold meals more than warm meals helps reduce 15% CO2 emissions (AKU, 2017). Additionally, the organizer should be aware of allergies of the attendee, such as gluten-free, lactose free, nut free. Sending a form of allergy information to an attendee in the registration stage can help the organizer to plan for the menu.

On the process of creating sustainable menus, some challenges and opportunities are existing. (Goldblatt, 2012)

Table 7: Challenges and Opportunities of creating sustainable menu

Challenges	Opportunities
Working with caterers to create menu options take time to negotiate and plan.	Inspire chefs/ food suppliers about sustainability Creating innovative and creative menu options for attendees
Using mostly organic, natural, and seasonal ingredients are high cost.	Provide healthy cuisine for attendees Reduce ecological impacts Introduce and promote unique local food
Cooperating with small local suppliers and not many of them could fit the sustainable requirements from the event.	Support local, sustainable business Explore new concepts and food regard to sustainability

b. Sustainable food suppliers

Food supplier is vital in sustainable food planning. It is necessary to search for sustainable restaurants and food suppliers who have sustainable commitments and business concept. Delivery for food also needs to be with a low-emission vehicle such as bike, electric or bio-gas cars.

c. Food serving and packing

Food packing should use eco-friendly materials. The food supplier and event organizer need to publish the information about the material of food packaging and cutlery so that the user can be aware of sustainable factors applying in their lunchtime. It also helps them to sort waste correctly.

d. Food waste management

According to the Natural Resources Institute, in Finland, there are some 80 million kilograms of food going to waste every year (Yle, 2016). In facts, to restaurant managers, this problem comes from difficulty to predict the exact amount of food to prepare for any given day. Much delicious food in good condition had to end up in trash bin meanwhile there are many people with low budget need better food. Therefore, an organization or a business who could collect, distribute or inform those excess foods to hungry consumers is a perfect solution for food waste.

In the case of 10D100C, the organizer will choose vegetarian menus for lunches to serve for around 100 attendees throughout ten days of the event. This action is keen to direct

participants into practical actions to reduce environmental impact, starting by their diet during the event. However, the risk of food waste might be high due to changing menu option from some amount of attendees or the absence of them on a specific day. Notably, the number of attendees could reduce significantly after the first day if they do not find interest in the event. Since from the second day, all participants need to form up their teams, they can decide to accompany the event and their team for the next nine days or not on the first day. Therefore, the need for food waste solution is essential at 10D100C to ensure food sustainability.

ResQ Club is a virtual marketplace where restaurants or food suppliers can sell their leftovers with a discounted price to consumers. In this platform, stores or food suppliers can sell the surplus amount of food for 50 per cent of the original price. It provides quality ready-to-eat food for consumers with affordable price and reduces the cost of waste management for businesses. This service supplier is running in around 45 cities in Finland, Sweden, and German. They estimate that their platform saved more than 67000 portions of quality food from waste streams each month and 167 tonnes of CO2 emissions (Sustainia, 2018). The workflow of ResQ is simple. After registering as a partner, the business can publish surplus portions they have on the platform with discounted prices. Consumers can easily access to the available food, order and pay on the mobile app. At the last step, the consumer would come to the venue to pick up their ordered food. There is no fee for using ResQ. They will only earn benefit from 25% commission out of pre-tax sales the business made with the app and pay back the rest of sales once a month with all necessary procedures for bookkeeping (ResQ, 2019).

In 10D100C case, using ResQ platform is a solution for excess food after lunches on event days. The author contacted to ResQ Sales Director – Antti Tuomola by email for advice to apply ResQ in 10D100C. He suggested that there are two options. The first option is selling the surplus with prices and using it to cover some event's expenses even though it will not make extra profit. The second one is using ResQ to give excess food away without prices. On the system, we can set the price to zero, and there is no charge for the event as well.

To reduce unnecessary paperwork at the event, the second option is optimal for us. Through the ResQ Club app, we can set the pickup time for excess food about one hour after the event's lunchtime. Assigned staff will present at the info desk to hand out surplus food. In addition to using ResQ, we can also encourage participants or staff to have excess portions during lunch or take them home.

Sustainable targets for food and beverage management:

- No food waste
- People choose a vegetarian menu option
- Supplier provide sustainable service such as vegetarian option, eco-friendly material of food packaging

The tools record the surplus every lunch, observation and interview

### 3.3.6 Resource use and waste management

Waste management is a crucial part to reduce negative impacts on the environment in most of the events. Here is the checklist:

Table 8: Waste management checklist

<b>RESOURCES USE AND WASTE MANAGEMENT</b>	<b>Sustainability Suggestions</b>
<b>Encouraging waste sorting and recycling</b>	Publish the recycling guide and post it at the place of recycling bins
	Plan recycling bins for easy access
<b>Extend the use of material and products (rent, re-use, etc.)</b>	Collect pens and unused papers to reuse in another event
	Collect all badges from participants at the end of the event and reuse it in another event
<b>Using existing building, facilities and material</b>	Utilize the recycling trash bins at the venue
	Ask the venue owner for extra trash bins if there is some other type of trash need to be sorted (e.g. lunch boxes)
<b>Effective energy use</b>	Turn off devices, screens or projectors that are not in use



<b>Involve, share and raise awareness</b>	Educate staff, volunteers, and participants about sorting trash
	Staff and volunteers stay nearby the recycle stations to remind and assist people for correct sorting

In this section, the targets to be sustainable at the event are:

- Attendees follow the recycling instruction to sort trash correctly
- Food waste is solved properly

The tools are observation and interview

## 4 Measurement and Evaluation

In this part, the author will measure and analyze the following sections to evaluate the success of applying sustainable factor at the event 10 Days 100 Challenges:

- Side-activities: team photo, name the bottle, Kahoot game
- Food and beverage management
- Waste management
- Communication and marketing
- On-site event establishment

The main tools to measure and evaluate sustainability at the event are:

- Observation
- Feedbacks in interviews during the on-site event
- Survey questions that are embedded in Kahoot game

### 4.1 Interview results

The author interviewed 17 attendees at the event to get feedback about applying sustainability at the event 10D100C. She also collected suggestions from them to improve the event on the next time. The tables below show the result of different groups of opinions relying on the various topic:

- Sustainability towards participants
- Awareness of sustainability at the event
- Opinions about the Food
- On-site event
- Visibility of sustainable information
- Suggestions

The outcomes from the interview's result provide to the organizer the participants' feedback in some sections. It also shows expectations and suggestions so that the next event can improve to be more sustainable from the participants' perspectives. The following tables are results from the interviews.

Table 9: Sustainability towards participant with different opinions (interview result)

	<b>Sustainability towards participants</b>
<b>Opinion 1</b>	Recycle

	To do something not harm the environment Reduce meat Do not use extra – reduce Public transportation
<b>Opinion 2</b>	I'm trying to speak with my friend, family and relatives about this topic
<b>Opinion 3</b>	I know which type of waste bin I can throw my garbage
<b>Opinion 4</b>	Every day's life choice like using public transportation, recycling

Table 10: Awareness of sustainability at the event (interview)

	<b>Awareness of sustainability at the event</b>
<b>Opinion 1</b>	Yes, I know about the food concept and recycling
<b>Opinion 2</b>	Not really. I think that firstly they should inform us. It is not everyone knows about sustainability, or everyone knows about the concept behind it.  They sent email in advance, but I am not aware that we are apply something sustainable at the event.

Table 11: Feedback for Food (interview)

	<b>Opinions about Food</b>
<b>Opinion 1</b>	I do not like vegan food. I do not think it should be a push for anybody. I feel it is natural when people eat meat. It should not be a way to work.  I like the choice of food but not the food. It is sometimes too spicy or plain.
<b>Opinion 2</b>	I like the food. It is interesting. I would not choose that if I were in a restaurant.  It is the first time I try vegan food.  It balances the need for participants and the event theme. Everybody can eat but not harm the environment.  I am happy because they choose a vegetarian option here, so I do not need to prepare my own food.
<b>Opinion 3</b>	I did not like fork and the lunch boxes because it is plastic. I think we can have plates as we have in school and people can come to have food on that.  I did not know the food package is eco-friendly

Table 12: On-site event feedback (interview)

	<b>On-site event</b>
<b>Opinion 1</b>	I like the idea of the bottle. Inspire me to reuse bottles.
<b>Opinion 2</b>	<p>I like the ideas that we have real problems, real business. Real companies come to us and want to hear our critical ideas, how students think.</p> <p>It provides us with all the tools and facilities so that we can focus on working and ideas.</p> <p>I like teamwork. They are young people, and they know many things in creative ways.</p> <p>I want to promote this course. It is one of the best courses, in my opinion.</p> <p>I think the event, which is combined with education; propaganda about sustainability is very good.</p>
<b>Opinion 3</b>	<p>I like using paper, because I like to write down stuff.</p> <p>It is necessary to have paper, but it is a bit wasteful.</p> <p>I would prefer something more physical and visible. Sticker notes are small stuff to change.</p>
<b>Opinion 4</b>	<p>To me, using many papers here annoys me. Everybody has a laptop, and we can digitalize on good applications and programme.</p> <p>I dislike the sticky note and tons of paper.</p> <p>The event is organizing in a very traditional way. I do not like a lot of papers and sticky notes.</p>
<b>Option 5</b>	<p>I will prefer coffee in reusable mugs more than plastic and paper cups.</p> <p>On the first day, I was surprised by plastic cups and paper cups. Why do not they have the option for reusable cups like in my school?</p> <p>I did not like the take-away cup we have in the morning and afternoon. It is not sustainable.</p>
<b>Option 6</b>	<p>I like the recycling part because it is something everybody can do.</p> <p>With this course, I understand the true meaning of sustainability, sustainable lifestyle. It triggers my mind, so I want to know more about it. The way I can improve myself.</p>

Table 13: Visibility of sustainable information (interview)

	<b>Visibility of sustainable information</b>
<b>Opinion 1</b>	I see the recycling instruction, but my waste does not belong to any.

	I quickly see something on the screen, but I do not remember. I focus on my work mostly and do not pay attention to my surroundings. I see some info on the first day, but mainly I remember the menu.
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Table 14: Suggestions of participants (interview)

	<b>Suggestions</b>
<b>Opinion 1</b>	There should be an option like chicken or fish for the menu.
<b>Opinion 2</b>	You can set up the learning material in an editable form so we can work with our laptop. It would be quite an idea to have something on the laptop, which three people in a group can work on it at the same time. Whiteboard, more digitalized, or some kind of apps. Everybody has a laptop, and we can digitalize on good applications and programme.
<b>Opinion 3</b>	I would expect there are some keynote speakers about recycling, sustainability.
<b>Opinion 4</b>	I think the official presentation will be more effective. It is just needed only 5 minutes to mention about sustainability at the event so that everyone can be aware of it. It is good if we do it on the very first day. I think they should focus on teaching us as well. You do not know what exactly where to throw the thing.
<b>Option 5</b>	About Epic food providers: I would still recommend you make the food can be suitable for everyone. It is ok to have vegetarian food every lunch. However, separate it with spicy and not spicy
<b>Option 6</b>	Get rid of plastic single-use cups in coffee serving

The author will use the data in the interview results as a source of data to analyse and evaluate the following sections.

## 4.2 Side-activities

### Activity 1: Team photo

Table 15: Targets and Results of Team Photo activity

<b>Targets</b>	<b>Results</b>	<b>Rate</b>
Photo of all team	13 teams over 21 teams joined the activities	Success

Hashtag	only used by the event organizer when posting photos on social media	Fail
Raise awareness	Most of the participants claimed that they started to think more about sustainability with practical actions when making commitments.	Success



Figure 7: Team Microsoft with their sustainable commitment

The table 15 is the results of the team photo activity. On the second day of the event, the author came to each group to ask for a team photo with sustainable commitments. The result was that 13 teams agreed to join the activities over 21 teams in total. About the request for the commitment, many participants admitted that it triggered them to think more about sustainability personally. All photos were posted on the event Facebook's page with the hashtag #green10D100C. However, there were still some participants denied to make commitments due to personal opinions about sustainability and making a promise for the things they were not sure to keep. The reason that only 50per cent of the group took part in to commit is that most of the teams were busy with challenges. They would like to focus on their projects.



Figure 8: the hashtag #green10D100C at the event

The hashtag is a fail tool to promote the event and sustainability on social media. There are only three posts with the hashtag #green10D100C on Instagram and only a post on the Facebook page. Most of the posts are from the event staff. It seemed to be no interaction and contribution from participants. The main feature of the event activities can explain this failure partly. According to the interview results, participants came to the event mainly for getting the course's credits and working for the company's challenge. The event program was only presentations, training and teamwork

Additionally, the content on the event's social media channels was not active enough with photos and new posts. Hence, there was no attraction and purpose for attendees to connect with the event's social media channels. If the event organizer can want to attract more potential attendees other than students from schools, they should establish a small team or assign staff to create a better marketing plan and social media content. Recruiting a thesis writer with marketing education background is a good choice.

### Activity 2: Name the bottle

Table 16: Targets and results of the activity Name the bottle

Targets	Results	Rate
Name the bottle	most people write their names on the bottles	Success
Bring their bottle	About 1/3 of attendees bring their bottle. The rest reuses the plastic bottles with/without a written name	Success

No asking for extra cups/bottles	Only one or two people asked for cups/bottles because they did not take it on the first day of the event	Success
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At the first day of the event, plastic bottles are provided to all participants and staff. On the next days, the organizer set up a big jug as a water station nearby the entrance and kept it refilled with fresh water during the event. There was no bottles or cups available at the water station. The staff only provided bottles for participants who did not take the bottle on the first day.

Table 17: result of the participants' vote about reusing bottles in game Kahoot

Do you bring bottles or reuse bottles at the event 10D100C?			
▲	"YES - I bring my bottle most of the time."	◆	"YES - I reuse the bottles most of the time."
✓	✓	●	"NO - I buy new bottles most of the time"
✓	✓	✓	✓
25	20	2	5



Figure 9: participants wrote names on their own bottles at the event

According to the question in the survey, among 52 answers, there are 45 people claimed that they bring their own bottles or reusable bottles. The rest of the repliers drank coffee or carbonated water, so they could not bring bottles themselves. This is the positive sign that the organizer was a success to lead people to reduce using plastic at the event. Many participants like this idea.



“I like the ideas of reusable bottles because I usually forget to bring my own. However, I now start to think about it, and today I bring the bottle with me” – Thy

### Activity 3: Game Kahoot

Table 18: target and results of the game Kahoot

Targets	Results	Rate
Most of the attendees join	67 players out of 90 participants	Success (over 50% attended)
Participants learn new knowledge	100%	Success

Kahoot took place on one day before the final presentation day so that all attendees can have a short relaxing time, as well as education time about the sustainability with the game. The author created a quiz with twenty questions in total. Among them, there are fifteen questions about sustainable tips and knowledge. The other five questions are survey questions.

The time for the game is planning to last for ten to fifteen minutes. The initial number of attended players was 67. However, the game was longer than the expectation. It took over twenty minutes to go to the end. Consequently, there were ten to fifteen players leaving the game in a middle way. It was a small failure for the organizer. The solution is that the game creator should reduce the number of questions to fifteen in total. It means ten questions for sustainability and five for survey questions.

The feedback for the Kahoot game is 100 per cent positive and recommended. The participants rated four out of five for the game's level of fun. Seventy-five percent of players agreed that they learned useful knowledge from the game.

Table 19: The result of Feedback for the game Kahoot

Feedback		
How fun was it? (out of 5)	4,00 out of 5	
Did you learn something?	75,00% Yes	25,00% No
Do you recommend it?	100,00% Yes	0,00% No

How do you feel?	100,00% Positive	0,00% Neutral	0,00% Negative
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### 4.3 Food and beverage management

On the first day, the organizer served both breakfast and lunches for all attendees. Due to the unknown actual amount of attendees, the food waste of the first day was 50 pieces of bread from breakfast and 30 portions for lunches.

Table 20: Targets and results of food management

Targets	Results	Rate
No food waste	All surplus was solved by ResQ	Success
People accept a 100% vegetarian menu	The excess food was stable during the week. However, in the interview, many participants complained about this plan.	Partly success

During the 7-day event at the Harald Herlin Learning Center, the organizer chose Epic Food as the primary food supplier for lunches. The CEO of Epic also had a short presentation about sustainability in their food and services on the first day of the event. This is a good way to introduce one of the sustainable partners at the event. In addition, the participants can understand more about the fact of food and services they use. Nevertheless, there were many attendees who claimed that they did not know that the food packaging is eco-friendly. It is wasteful because Epic had a presentation in front of all participants on the first day of the event. Unfortunately, the business did not highlight enough their sustainable concepts to audiences.

“I did not like fork and the lunch boxes because it is plastic. I think we can have plates like we have in school, and people can come to have food on that.” – Ha

“I didn't know the food package is eco-friendly.” – Lotta and Kiia

Vegetarian plant-based menus were applied for all lunches at the venue of Otaniemi. To many people, it was exciting to try the vegetarian menu for many days in rows. Participants voted 7-day vegetarian food experience to be the most favourite activity at the 10D100C.

“I like food. It is interesting. I would not choose that if I were in a restaurant.” - Kiira

“It balances the need for participants and the event theme. Everybody can eat but not harm the environment.” – Mike

However, there were some adverse reactions from meat eaters because there was no other more comfortable menu option for them. “I do not like vegan food. I do not think it should be a push for anybody. I feel it is natural when people eat meat. It should not be a way to work” – Carl.

Therefore, it could be a considerable idea to combine the vegetarian menu and some meals with white meat like chicken or turkey between. Additionally, the organizer should discuss with the food supplier about seasoning since there is some feedback about separating spicy food or providing seasoning pots like salt and pepper to adjust the taste for attendees.

The average surplus for lunches was from fifteen to twenty portions. ResQ is chosen as a tool to solve food waste at the event. The excess food will be given away for free. On the first day of using the application, the order on ResQ came slowly. Some people ordered, but they did not come and pick up the food. Nevertheless, on following days, students and people living nearby the venue started to pay attention more on the ResQ offers. ResQ is an effect tool for food waste management at the event 10 Days 100 Challenges.

#### **4.4 Waste management**

On the first day, the participants did not follow the recycling guide. Consequently, there was a mixing up between all kinds of trash in the recycling bins. During lunchtime, participants were confused about the material of lunch boxes. Therefore, energy waste bins were overload with wrong sorting. Staff had to supervise and instructed participants to solve the problem. On the next days, the organizer arranged the extra trash bins only for lunch boxes. After some days at Harald Herlin Center, the organizer controlled the waste management better and improved, notably the recycling habit of attendees.

In addition, the venue service provider in Harald Herlin Center would like to keep and reuse the recycling guideline infographic after the event. They consider it as a legacy from the event to their premises.

Table 21: Targets and results of Waste mangement

Targets	Results	Rate
Sorting trash	It fail on the first day but worked better on the following days thank to supervision and support of the staff	Success

There was a problem with the recycling system in the Arabia campus. At the event's area, there were mostly mixed waste bins and a few of paper waste bins. The labels of recycling signal on each bin were not clear and instructive. The venue provider did not set up the recycling points; that is why it was not easy to post the recycling guideline to support the participants. It was a big disadvantage of the Arabia campus venue.

In this case, the author suggests that the event organizer should encourage and negotiate with the premises provider to improve their recycling system. Metropolia University of Applied Sciences is one of the event organizers, and the Arabia campus belongs to this institution. Thus, the improvement to be more sustainable at its own premises would be an appropriate action to do. It will bring the benefit not only for the students of the school to raise the awareness of recycling but also for all attendees who come to the campus for any kind of events.

#### 4.5 On-site event establishment

Table 22: Targets and results of on-site establishment

Targets	Results	Rate
Reduce paper use	A big amount of papers and sticky notes was used for planning, brainstorming	Fail
Reduce plastic use	There were single-use paper and plastic cups	Fail

The event carefully set up and prepared all facilities to support all the team to have the best environment to come up with excellent solutions for business challenges. However, the event organizer needs to consider some existing problem at the on-site establishment.

Firstly, the beverage provider – Robert's Coffee served many plastic cups on the first day of the event for a coffee break. The author received much feedback about the first negative impression at the event from attendees.

“I will prefer coffee in reusable mugs more than plastic and paper cups. “ – Sofia

“On the first day, I was surprised by plastic cups and paper cups. Why do not they have an option for reusable cups like in my school?” – Ha

“I did not like the take-away cup we have in the morning and afternoon. It is not sustainable.” – Kristen



Figure 2: Robert's Coffee used plastic cups in a coffee break

Agreed with these comments, the author suggests the organizer to negotiate with the local coffee supplier to serve reusable mugs or at least paper cups to create a sustainable atmosphere for the participants. The requirement of using sustainable materials should be discussed with all service providers at the first contracts, so that they can prepare and cooperate with the organizer to provide sustainable products and eco-friendly alternatives. The presence of plastic cups does not perform the positive image for a sustainable event.

In term of participants' planning and brainstorming activities, using a number of papers and sticky notes are a remarkable issue that many attendees pointed out its unsustainable and showed their will to experience a new alternative.

“To me, using many papers here annoys me. Everybody has a laptop, and we can digitalize on good applications and programme.” – Minna

“The event is organizing in a very traditional way. I do not like a lot of papers and sticky notes.” – Mike

One of the suggestions from most of the attendees is that they want to experience an online platform instead of traditional papers and stickers. In the survey, there is over 50 per cent of participants would like to try a virtual platform for sticky notes and planning.

Table 23: result of the participants' vote about paper waste in game Kahoot

For brainstorming and planning, do you prefer using papers/ sticky notes or a virtual platform?		
▲	"REAL PAPER - I want much paper to write down my ideas."	
◆	"I want to use partly paper and partly online applications."	
●	"ONLINE PLATFORM - the era of technology. why not?"	
✓	✓	✓
4	16	28

In the section 3.3.4 On-site establishment, the author introduced the online platform named Deskle. The free version of this platform allows unlimited members to edit and contribute ideas at real-time in a project. If the organizer can use a platform like that to reduce the amount of paper waste, it would create an interesting experience for all attendees. This change could cause some difficulties for a group of people who are not good at the internet or using technological devices. However, many of the available online platforms are easy to access and utilize. It will be a push to change attendees' behaviours and encourage them to choose a more sustainable support tool in workplaces and classrooms.

#### 4.6 Communication and Marketing

Table 24: Targets and results of communication and marketing

Targets	Results	Rate
Awareness of sustainable messages	Not many people knew the existence of the infographic	Fail
Use an online app to communicate	All teams used Slack	Success

The event used Slack as the primary channel to communicate and share documentation between staff and participants. The positive point is that most of the training presentations

were digitalized versions and sent to teams through the online app, Slack. This action helped to reduce the amount of unnecessary printed handouts at the event.

Infographics and sustainable information were displayed on the TV screens for the first three days of the event. After that, teams use TV screens for their presentations and planning ideas. Furthermore, recycling guideline and sustainable tips were printed and posted on the wall around the event area. Based on the interview, attendees did not pay attention to that info because they were more focus on their work and presentations on the stage.

“I quickly see something on the screen, but I do not remember. I focus on my work mostly and do not pay attention to the surroundings.” – Paavo

“I see some info on the first day, but mainly I remember the menu.” – Sofia

As the author explained the failure of the hashtag on section 4.2 - the team photo activity, participants coming to the event would not spend much time to searching around for minor information if they are not officially mentioned at the event. The solution could be sending infographic and relevant, sustainable information to attendees by email and Slack app.

Thy from Telia team suggested:

“I think the official presentation will be more effective. It is just needed only five minutes to mention about sustainability at the event so that everyone can be aware of it. It is good if we do it on the very first day.”

Both Mirna and Hanne also agree to have more presentations and inspiring speeches about sustainability:

“I would expect there are some keynote speakers about recycling, sustainability.” – Hanne

“I think they should focus on teaching us as well. You do not know what exactly where to throw the thing.” – Mirna

The organizer should consider these important initiatives. An official presentation about the event sustainable policies and plans could be made on the first day of the event. Consequently, the participants can precisely get the ideas of sustainability at the event, the activities they are supposed to do according to the theme. Moreover, some speeches from environmental experts could well inspire and raise the awareness of all attendees about sustainable topics. This knowledge primarily supports in a broader perspective for the teams who have challenges relating to sustainable customers' behaviours and sustainable packaging.

#### 4.7 General evaluation

In general, applying sustainability at the event 10 Days 100 Challenges brought most of the positive experiences to the attendees. According to the survey, 28 out of 42 repliers feel that activities at 10D100C inspired them to be more sustainable in future. The rest still want the event to improve more in the planning process to express the theme better at the next event.

"I like the recycling part because it is something everybody can do.

With this course, I understand the true meaning of sustainability, sustainable lifestyle. It triggers my mind, so I want to know more about it. The way I can improve myself." – Mike

Table 25: result of the participants' vote about favourite activity in the game Kahoot

What is the sustainable activity you like the most at 10D100C?							
▲	"Have the theme of Sustainability in business challenges."	◆	"Reusing cups/bottles or bringing your own refilled bottles."	●	"This Kahoot game."	■	"7-day vegetarian food experience."
✓		✓		✓		✓	
13		6		8		19	

Besides the vegetarian diet, having a sustainable theme in businesses' challenges is one of the most favourite activity to people.

"I like the ideas that we have real problems, real business. Real companies come to us and want to hear our critical ideas, how students think." – Natalia

Below is the list of achievements that the event 10D100C got for applying the sustainable plan:

- Successfully encourage participant to reuse bottles
- Engage people in sustainable activities such as committing and use the vegetarian menu
- Raise the awareness of sustainability through the game Kahoot
- Well control waste management relating recycling instructions and food waste
- Contribute the recycling guideline for the event venue



Table 26: result of the participants' vote about improvement in the game Kahoot

What is the issue you want to improve at the event, regarding Sustainability?			
▲	"Using papers and sticky notes"	◆	"Vegetarian menu only"
●	"Information and inspiring presentations about Sustainability"	■	"All of them"
✓	✓	✓	✓
13	7	8	12

On the other hands, the event still got some failures during the implementation to create a sustainable environment and engage participants in the theme of the event. The problem in using papers for solving challenges is the biggest issue that most people at the event want to improve. There are existing challenges for the event organizer is low interaction with participants to promote the event and sustainable theme on social media. Additionally, most attendees want to have more inspiring speeches about the sustainability to learn more knowledge about this topic. The reason is that there are not many events like 10 Days 100 Challenges that the participants can have new experience about the environmental topic from practical daily tips to application into real business cases. Last but not lease, the resources management for paper and plastic use at the event need to be considered more carefully. If the organizer can determine to change the traditional method of planning and brainstorming process into innovative ways, with the support of technology, it will create a unique experience for all participants and highlight the sustainability at the event.

## 5 Conclusion

Nowadays, many campaigns and activities are trying to improve the awareness and behaviours of society towards environmental issues. However, sustainability and the way to implement it practically are still challenging for many people, organizations, especially for event organizers. With the interest of learning about sustainability, especially its challenges and opportunities in event planning, the author decided to explain the topic of applied sustainability through a real case event.

The main purpose of the thesis is to create a handbook for planning a sustainable event - the event 10 Days 100 Challenges 2019. In this handbook, the author will rely on the theoretical framework about sustainable development to point out potential environmental impacts that the event could create during the 10-day event. There are six main environmental impacts that the author presented through the form of the checklist so that the organizer can easily collate and recreate the planning process. Simultaneously, suggestions for each impact sections also are delineated to inspire the organizer to create effective plans at the event.

In the implementation process, this part aims to find out the opportunities and challenges that the organizer has to face to create a sustainable environment effectively for all participants. Furthermore, the author also mentioned the psychological behaviour of people in sustainability. Ignorance of the society is a great threat to the planet (Acciona, 2019). With the outcomes of this research, the organizer can design an efficient communication and marketing plan to engage attendees into the event theme. The author accompanied with the event organizer 10D100 during the 10-day event to support and observe the reactions and planning results to analyse and measure the effectiveness of the sustainable plan applied to the event. The tools that the author used are observations, interview, and survey questions, which were embedded into game activities.

In the last part of the thesis, the outcomes are practices from the event's activities. The author planned and applied sustainable activities at the event to engage and raise the awareness of the participants about sustainability, such as encouraging people to make sustainable commitments, creating recycling guideline, designing infographics, games with prizes. The author was also the main person who took into account with food management at the event. She used ResQ as a tool for solving food waste and succeeded with the plan. In the measurement and evaluation part, the author compared the data obtained at the actual event to be able to conclude the failures and successes after applying the sustainable plan.

In general, the event achieved many successes with the sustainability theme. These successful activities can be considered as references and good examples for the future sustainable events. However, some failures still exist that the organizers need to learn from and improve, such as using much paper and sticky notes and serving plastic cups in some coffee breaks. The organizer should notice that relaying sustainable requirements and negotiating with all stakeholders and service providers are crucial to create a sustainable event properly. These sustainable requirements could also inspire the suppliers to have creative initiatives in their service and become more sustainable in future. They are lessons and challenges that planners need to be more careful when planning for the future events.

To sum up, the object of the thesis is to provide an event-planning handbook, which consists of theoretical frameworks and detailed plans with practical activities to promote the sustainability at the event 10 Days 100 Challenges and engage participants into the event theme. In the handbook, the author collected and analysed real cases to show the opportunities and obstacles that happened during the sustainable event. By observations and feedback of attendees, many solutions and suggestions were given at the end of each relevant sections.

It is fortunate for the author to write about this thesis topic. Sustainability is an interesting topic that connect to the greatest concerns of many people in the world. However, it is never an easy topic for event organizers when they have to maintain the balance of the participants' needs and behaviours with sustainable requirements. During the event, the author had the chance to learn and practice many skills so that she could accumulate practical experiences and become a cleverer event organizer in future.

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## Appendices

### Appendix 1 Infographic content



**epic**

## Sustainable menu

**Monday 3.6**  
PROTEIN PAN  
(G,M)  
Vegetables, tofu and chickpeas

**Tuesday 4.6**  
POWER BALLS AND SUPERMUUSI  
(Ve, M)  
Pulled oat balls and cauliflower

**Wednesday 5.6**  
KIMCHI PULLED OAT BOWL  
(M, Ve)  
Sushi rice, kimchi and pulled oat with peanut sauce

**What makes us different?**  
**WE**  
make 100% hand-made and use ecological packing

**WE**  
use electric and bio-gas car for delivery

**WE**  
Cook With Our Heart

**10 DAYS 100 CHALLENGES**  
HERALD HERLIN LEARNING CENTRE  
<http://10days100challenges.fi/>

**EPIC**  
<https://epic.fi/>

Healthy can't be tasty LOL!  
- EPIC

# Sustainable menu for lunch

## Thursday 5.6

### KIMCHI PULLED OAT BOWL (M, L, K)

Sushi rice, kimchi and pulled oat seasoned with peanut sauce

#### Ingredients

pulled oats, peanut butter, peanut oil, soy, coconut milk, orange juice, ginger, chili, lime, peanut, sugar, sushi rice, rice vinegar, sugar, salt, Chinese cabbage, onion, garlic, ginger paste, sugar.

#### What makes us different?

##### WE

make 100% hand-made and use ecological packing

##### WE

use electric and bio-gas car for delivery

##### WE

Cook With Our Heart



**10 DAYS 100 CHALLENGES**  
HERALD HERLIN LEARNING CENTRE  
<http://10days100challenges.fi/>

**EPIC**  
<https://epic.fi/>

Healthy can't be tasty LOL!  
- EPIC

# How YOU become Sustainable at 10 Days 100 Challenges?

“ THE GREATEST THREAT TO OUR PLANET IS THE BELIEF THAT SOMEONE ELSE WILL SAVE IT ”

- ROBERT SWAN

## 1. Sustainable MOVE

INSTEAD USING CAR OR OTHER MOTORIZED VEHICLES, YOU CAN CHOOSE COME TO THE EVENT BY:



ON FOOT

FOR HEALTH



ON BIKE

FOR SIGHTSEEING



ON METRO

FOR SAVING TIME



ON TRAIN

FOR FAR DISTANCE



ON ELECTRIC VEHICLES

FOR FUN AND STYLE

## 2. Sustainable DRINK

- TAKE ALONG YOUR REFILLED BOTTLES OR CUPS
- CHOOSE REUSABLE CUP FOR COFFEE AND STAY TO MAKE FRIENDS. DON'T TAKEAWAY.



## 3. Sustainable EAT

- PREFER PLANT-BASED FOOD
- AVOID FOOD WASTE BY CHOOSING YOUR SUITABLE PORTION
- EAT AT TABLE AND MAKE FRIENDS. DON'T TAKEAWAY.



## 4. Sustainable WORK

- DIGITIZED ALL YOUR WORK - AVOID WASTING PAPER
- CHOOSE DOUBLED-SIDE PRINTING IF YOU HAVE TO PRINT
- SWITCH OFF OR SET SLEEP MODE FOR YOUR COMPUTER DURING THE BREAKS
- SORT YOUR WASTES CORRECTLY
- SHARE YOUR GREEN ACTIONS AND INSPIRE YOUR TEAM TO ACT TOO

#green10D100C



- YOU'RE ALL SET -

MAKE SURE YOU GET A SUSTAINABLE LIFESTYLE - AND ENJOY THE EVENT!

<https://www.facebook.com/10d100c/>

<http://10days100challenges.fi/>



# 10 Days 100 Challenges

Let's choose Sustainable options to go the event!



Not recommended!



## Metro

- Public transport
- Fast



## Tram

- Public transport
- Street view



## Bike/ City Bike

- Personal/ Shared
- Healthy
- Sightseeing (especially Sea view next to the venue)



## Electric vehicles

- Personal/ Shared
- Sightseeing
- Look cool

All stations of those transports are located less than 100 meters from the 10 Days 100 Challenges' venues.

<http://10days100challenges.fi/>

<https://reittiopas.hsl.fi/>

<https://kaupunkipyorat.hsl.fi/>

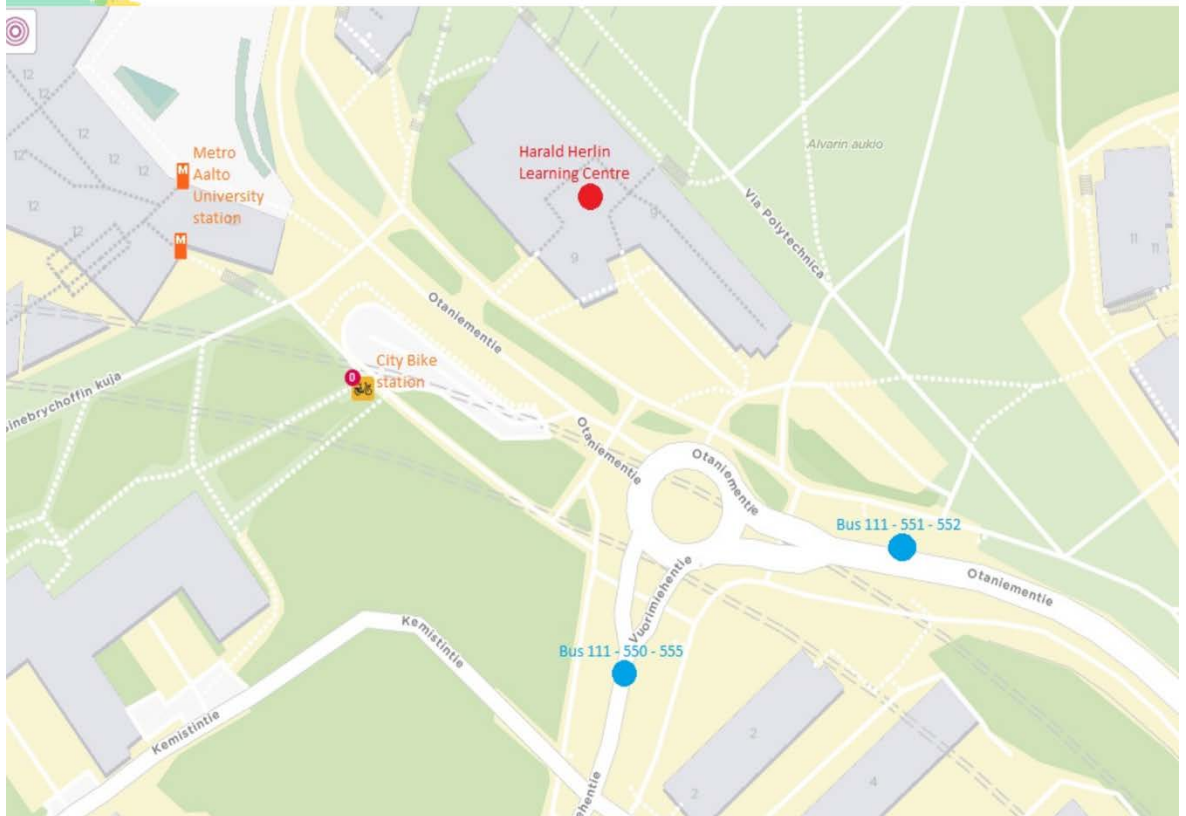
<https://www.tier.app/>

<https://www.voiscooters.com>

# 10 Days 100 Challenges

Let's choose Sustainable  
Move!

## Harald Herlin Learning Centre (3.6 - 11.6)



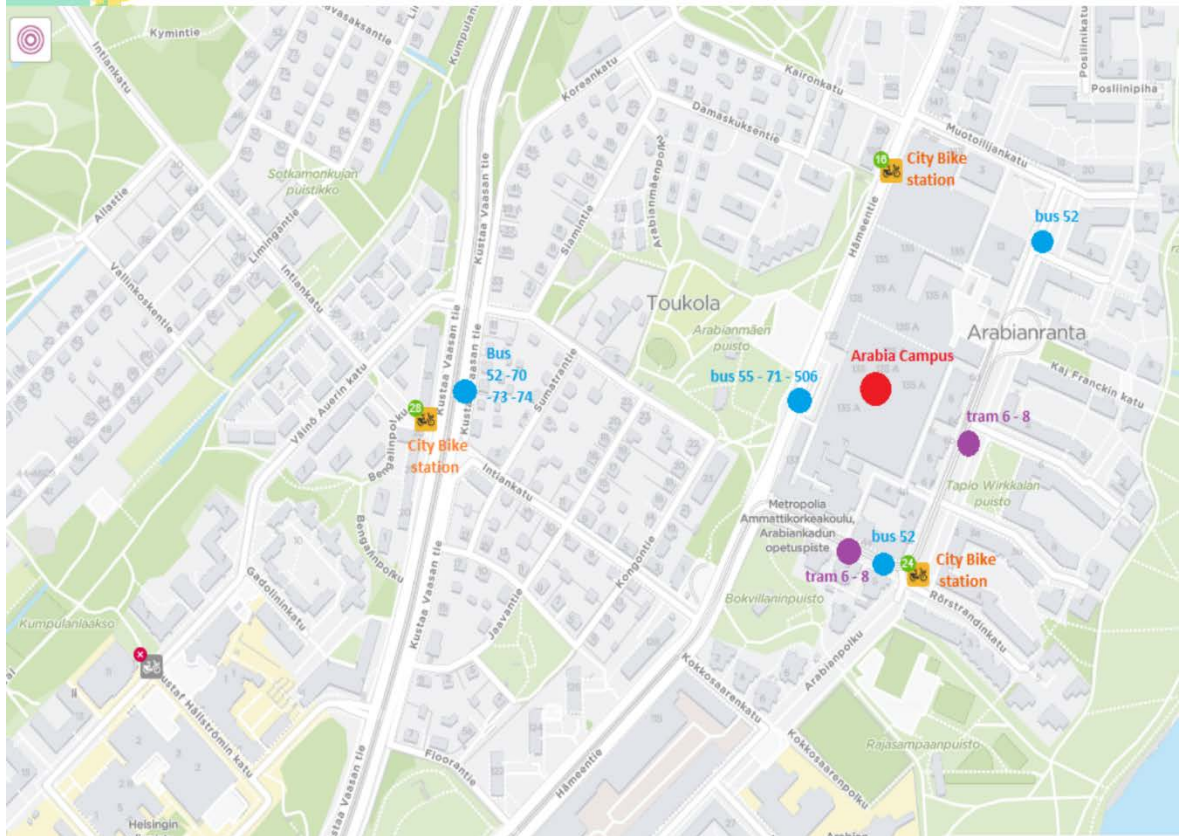
### AVAILABLE MOVES

- METRO** station Aalto University - M1 -M2
- BUS** station Aalto-yliopisto (M) - bus 111 -550 - 555
- BIKE** station Aalto - yliopisto (M), Korkeakouluaukio

# 10 Days 100 Challenges

Let's choose Sustainable Move!

## Arabia Campus (11.6 - 14.6)



### AVAILABLE MOVES

- TRAM** station Arabiankatu - tram 6 - 8
- BUS** station Arabia - bus 55 - 71 - 506  
station Arabiankatu - bus 52  
station Sumatrantie - bus 52 - 70 - 73 - 74
- BIKE** station Arabiankatu  
station Kaironkatu  
station Intiankatu



# YOU'RE 60% WATER



## SAVE 60% OF YOURSELF

Save Water

Turn off the tap when not in use



10 DAYS 100 CHALLENGES



PLEASEEEEE...  
FEED ME CORRECTLY!



### BIO WASTE

Yesssss

- fruit and vegetable peels
- food waste
- tea bags or leaves and coffee grounds, coffee filter paper
- soft paper, such as kitchen towels, paper napkins, tissues



Nooooo..

- liquids
- sanitary towels
- plastic bags
- cardboard
- drugs
- chewing gum, ash, cigarette stumps



### PAPER WASTE

Yesssss

- newspapers and magazines
- adverts, brochures, postcards, notepads
- envelopes (also those with windows)
- copy paper and printed paper
- white paper bags



Nooooo..

- wet or dirty paper
- cardboard or carton
- brown paper bags or papers
- aluminium or wax papers
- gift wrapping paper.



### MIXED WASTE

Yesssss

- plastic
- disposable products, sanitary towels
- porcelain and ceramic
- ash and cigarette stumps
- worn out textiles



Nooooo..

- Hazardous waste (drugs, batteries, etc.)
- Electric and electronic equipment
- Recyclable materials which have their own separate recycling



- REUSE -  
- REDUCE -  
- RECYCLE -

<http://10days100challenges.fi/>  
<https://www.hsy.fi>

## **Appendix 2 Interview questions**

The author interviewed 17 attendees at the event to get feedback about applying sustainability at the event 10D100C. She also collected suggestions from them to improve the event on the next time. Here is the interview questions:

1. What is your name, your occupation and the company challenge you are working for?
2. What is the reason you come here?
3. What is sustainability to you in a practical way?
4. What do you expect at an event, which is claimed as a sustainable event?
5. Do you know we build up sustainability at this event? If yes, do you know it before you come here or when you are here?
6. What do you Like and Dislike at this event, regard to sustainable factors?
7. Are you aware of sustainable messages at the event? (e.g recycling guideline, tips)
8. Do you make sustainable commitment on the very first day at the event? Does it inspire you about sustainable thinking? Do you still keep your commitment until now?
9. Do you have any suggestions to improve sustainability at this event?

## **Appendix 3 Kahoot quiz**

There are 15 questions to raise attendees' awareness about sustainability and practical tips in life (from 1 to 14 and the question 20). The question 15 to 19 are survey questions to collect participants' feedback.

1. Which uses less water, washing a full load of dishes by hand or in the dishwasher?
2. What type of supermarket bag is more eco-friendly?
3. How long does a glass bottle take to decompose in a landfill?
4. You are late for class. Do you take the time to turn off your lights and appliances or leave?
5. What is the most efficient energy bulb?
6. What is sustainability in the following?
7. For sustainable Development to be successful. Which key systems must work together?
8. Which of the following plant is not air purifying plant for the home?
9. What is the most environmentally friendly meat?
10. What percent of planet's water is fresh water?
11. Dropping 1 degree Celsius of the thermostat will save about how much on energy consumption.
12. Which day is Earth Hour in Finland?
13. Which is the sustainable label in Finland?
14. What is the meaning of a number inside a triangle on a plastic object?
15. Do you bring bottles or reuse bottles at the event 10D100C?
16. For brainstorming and planning, do you prefer using papers/ sticky notes or a virtual platform?
17. What is the sustainable activity you like the most at 10D100C?
18. Do you feel activities at 10D100C inspired you about sustainability?
19. What is the issue you want to improve at the event, regarding sustainability?
20. Which recycling bin your paper coffee cup should end up?