

# The Certification as a Tool for Environmental Management of Social Events

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*Abstract:* - Application of environmental management principles can be ensured with the help of many tools. This paper deals with the certification process, which can be considered as a mean for sustainable development of social mass events such as concerts, sport events, festivals, business exhibitions, or religious meetings. Although valuable considering the achieved results, the certification process is still under-emphasized. Therefore, this paper introduces general indicators that can be monitored and analysed and compare particular international certification programs. The described case study proves that international standards can be successfully modified and applied to social events with a local status.

*Key-Words:* - Sustainable Development, Social Event, Negative Impact, Indicator, Certification, Environmental Management, Case study

## 1 Introduction

The world faces crucial changes during its development. Some of these changes may also cause negative impacts on the society. If economic welfare within health environment is ensured, the future generations should be considered with new trends implied by these changes. The rate of economic growth is currently used as the representative indicator of the individual welfare. However, we are fully aware of the fact that the economic growth itself cannot reflect their needs and wishes properly. In this context, the following negative effects of economic activity are mentioned: health hazards ensued by transport pollution and the ozone layer depletion, the decrease in biodiversity due to the decline of natural sites and new forms of inequality connected with technological changes and changes of production patterns. These negative impacts resulted in the basics of *sustainable development* concept. In 1987, this term was defined in *Brundtland report* [2]. Nevertheless, the notion itself was introduced to wider public during the Earth Summit (the United Nations Conference on Environment and Development) in Rio de Janeiro in 1992. The commonly accepted definition follows: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." [17]. Nowadays, one of examined areas is the arrangement of social events (conferences, concerts, sport events, festivals, business exhibitions and trade shows, religious meetings, etc.). The organization of such events is usually connected with high energy, material and technological demands and the amount of emissions as well as solid waste depends on the number

of participants. The paper deals with the particular aspect of environmental management, which is the process of social events certification. This process is still under-emphasized, however valuable, tool that should be further developed and widely adopted. The aim of this paper is to stress the need of social event certification based on selected sustainability indicators necessary for the introduction of various options of the sustainability achievement during the public socio-cultural, sport and other events in tourism. The method is the analysis of international certification standards with clearly defined methodologies focused on the minimization or elimination of the environmental and socio-cultural risks. The case study addressing the current approaches to negative effect reduction during the Czech festival events is included and shows that international standards can be successfully applied at both national and local level.

## 2 Social Events and their Environmental Impacts

The massive social events lead to the production of vast amounts of waste, transport pollution and related negative externalities (land occupation, emissions, inconsiderate infrastructure building, etc.) [14]. There are initiatives which tend to eliminate these negative impacts. The International Olympic Committee with its effort to "ecologize" sport during the host city selection can serve as an example. The organizing committees of candidate cities must elaborate the environmental policies for the Olympic Games organization. Firstly, the presentation of the environmental plans was required

obligatorily from all candidates for the Winter Olympic Games in 2002. The first Olympic Games when the organizing committee intentionally considered the environmental issues were the Olympics in Lillehammer in 1994. During these games, the Environmental Management System was introduced. The organizing committee defined the ecological aspects of the realization of the Olympics and consequently, the tools for environmental planning of vast projects were launched. The concept of ecological administration (the Green Office) was established together with the Green Purchasing. These concepts were afterwards accepted within the whole Norway and other countries [5].

The proclamations related to the sustainability or “greenness” of the mega-events which require constructing new accommodation and transport routes

are often associated with skepticism. The strategies employed during the event arrangements should not be evaluated only on the basis of the financial efficiency, maximum number of events or amount of event visitors [8]. The sustainability of social events can be monitored also through the employment of wide range of indicators from different areas. The following can be for example examined: utilized materials, public transport for visitors as well as for official guests, energy consumption, water management, waste management (the amount of waste and its disposal), the amount of packaging material and the possibility of its recycling or further utilization of temporary facilities. Within the realm of sustainable tourism, a set of particular indicators characterizing the extent of negative environmental impact is available (see Table 1).

<b>Site Protection</b>	The category of the site's protection after the index of the International Union for the Preservation of Nature (IUCN).
<b>Pressure</b>	The number of tourists who visit the site (year / month with maximum influx).
<b>Intensity of Use</b>	The intensity of use during peak periods (the number of people and per hectare).
<b>Social Impact</b>	The report tourists / residents (during the peak period, but also during the rest of the period).
<b>Development Control</b>	The existence of a method of study of the environment or specific controls on the planning method of the area and the density of use.
<b>Waste Management</b>	% Of treated wastewater of the site (additional indicators may lead to structural limitations).
<b>Planning Process</b>	The existence of a methodical plan for the tourist destination in question (with a component “tourism”).
<b>Fragile Ecosystems</b>	The number of rare species or endangered ones.
<b>Customer Satisfaction</b>	Visitor satisfaction (using a questionnaire).
<b>Satisfaction of the Local Population</b>	Satisfaction of the local population (using a questionnaire).
<b>Contribution of Tourism to Local Economy</b>	How much tourism represents (%) in all the economic activity.
<b>Carrying Capacity</b>	Aggregate means of measuring that warns in advance of the key factors influencing the carrying capacity of the site related to the various levels of tourism development.
<b>Site Disturbance</b>	Aggregate means of measuring the levels of impact on the site (to know the natural and cultural features under the constraints cumulative effect of tourism and other sectors).
<b>Interest</b>	Means of measuring the quality of the features of the site that make it attractive for tourists and can change over time.

Table 1: Specific Measuring Instruments Indicators (adopted from [16])

### 3 The Analysis of Selected Certification Programs

At the general level, various combinations of aforementioned indicators are monitored particular scheme that are aiming to provide more complex solution of the discussed issues. As an example, environmental management [13], quality management [1] and certification programs can be mentioned. Various

forms of certification and awards focus on mentioned impact reduction to different extent. Nevertheless, the crucial emphasis is on the area of the environment. Lesser obvious (but still noticeable) is the effort to diminish the social and cultural impact on the local community. Some labels and systems are state-owned, others are private. The benefits of the service are evaluated to significantly lesser extent from the point of view of three main pillars (economical, socio-cultural

and environmental). As an example of international systems, the following are mentioned [12], [15], [1]:

- *ISO 14001* - The system of the organizational environmental management assessment according to the international norm ISO 14001, which is primarily focused on the environmental aspects of business.
- *BS 8901 Sustainability Management Systems for Events* – The standard developed merely for the events industry. Its purpose is to help organizations to operate in a more sustainable manner. The standard is based on the requirements for a sustainability event management system. These should ensure a balanced approach to economic activity, environmental responsibility and social progress relating to events.
- *The European Ecolabel (EU Flower)* - The European Ecolabel represents the program of ecological labeling of the European Union. This system is intended for accommodation services and is not as widespread and known within Europe in comparison with other certification systems. Nevertheless, the program is guaranteed by civil service.
- *ECEAT (European Centre for Ecological and Agricultural Tourism) Quality Label* - Since its establishment in 1993 this private label is focused on the accommodation services and pursues all aspects of sustainability. It is also suitable for small accommodation providers. Its advantage is excellent marketing of labeled enterprise.
- *The Green Key* - The Green Key® was created to raise the awareness of owners and managers of tourism and leisure establishments on the necessity and possibilities of running a responsible business. The Green Key program rests on 5 pillars:
  - Education for sustainable development and environmental awareness of the owners, staffs and clients of leisure establishments;
  - Environmental preservation by the reduction of the impacts of the establishment on the environment;
  - Economical management as a reduction of the consumption induces a reduction of the costs;
  - Marketing strategy with the promotion of the label and the establishments awarded;
  - Strengthening of the tourism and leisure branch by taking responsibility broader than then just their own establishments [10].

- *Green Globe* - Green Globe Certification provides certification, training & education, and marketing services in 83 countries worldwide. Based in Los Angeles, California and with partners in Mexico, South America, South Africa, Middle East, the Caribbean and Europe, Green Globe Certification provides certification for the sustainable operations and management of travel and tourism companies and their related supplier businesses. Green Globe Certification also maintains a global network of independent auditors who provide third party inspection and validation [9].

### 3.1. The ReSport Certification

In 1998 Council for Responsible Sport (CRS) started a pilot program of massive event certification based on the credit system. The event certificated by the ReSport label must conform to five categories of standards: Waste, Climate, Equipment & Materials, Community & Outreach, and Health Promotion. One credit is granted for each standard which is met. Moreover, three extra credits can be awarded for innovative practices which are not defined within the standards. The events are categorized according to the total amount of reached credits. The classification includes four levels of sustainability: Evergreen for 36 credits and more, Gold from 31 to 35, Silver from 26 to 30, Certified from 21 to 25 credits [6].

Selected types of standards within each category are named below:

- **Waste** - Recycling of solid waste, one credit per each waste type, Food waste composted or possibly donated to local food charity, Less than 0.5-1 kg of landfill waste per participant, or 10 % reduction in landfill waste per participant in comparison with previous year.
- **Climate** – 50 % of consumed energy from renewable energy sources, Accessibility of race sites by public or mass transport or possibly supporting carpooling, Use of alternative-fuel vehicles, Use of certified products (BIO, Fair Trade, etc.) or products of local origin, Purchase of carbon dioxide offsets by all participants (carbon footprint compensation based on the purchase of credits of special projects enabling the emission reduction - new trees planting, landscape forestation, support of renewable sources, etc.), or Compact policy of water consumption reduction.
- **Equipment & Materials** - All materials printed on recycled paper using non-toxic ink, Major part of essential equipment rented or shared, New equipment made from recycled or surplus materials, Race apparels made from alternative fabrics and

printed using non-toxic ink and athletes can refuse them.

- **Community & Outreach** - Event enhances local public-use assets (community centre, bike trail, etc.), Representatives from local community are engaged in organizing committee, Creation of mechanism enabling public participation in sustainable practices, Time or money investment in local non-profit organizations, Increase of public awareness of local environmental issues, Alternative accommodation for overnight participants (dormitories, home stay).
- **Health Promotion** - Participation of minor disabled, at-risk and female segments of population, Direct involvement of youth, Support of beginners, Education of public in event's health benefits, Creation of mechanism enabling the participant feedback on sustainability efforts.
- **Innovation** - Documented and measurable feature of program enhancing the event sustainability.

Among basic prerequisites for the certification, the following can be mentioned: presentation of the event plan including the solution of issues linked with environmental impacts and social sustainability, the way of providing public with information about the event certification process and intended amount of credits, waste recycling on-site of at least one material from the following list: cardboard, paper, metal, plastic or glass. The first step is the on-line assessment of the documentation of sustainability initiatives. Afterwards, on-site verification of the real conditions during the event is evaluated. The certification and re-certification fee depends on the event duration. The basic certification cost \$360 and the re-certification is for \$260. Other extra charges are the same, from short event for \$180 (sprint triathlon, etc.) to full day event for \$900 (iron-distance triathlon, etc.). The certification is valid for two years. Nevertheless, the event can choose to re-certify to a higher sustainability level after one year. In June 2010, 13 sport events were certified [6].

### 3.2. The EcoLogo Certification

This certification mark was founded in 1988 by the Canadian Government. It covers wide range of categories and is defined as a Type I eco-label which meets the ISO 14024 standard [7]. The EcoLogo is part of the Global EcoLabeling Network (GEN) which ensures the labeling of certified products and unites particular national and international programs. The basic principle of this certification is the participation of various stakeholders during the standard improvements and the whole assessment process. The program EcoLogo promotes the active participation of ecological

organizations, non-profit organizations, scientists, producers, local self-governments, etc. The standard development and review process is transparent. Nevertheless, the anonymity of stakeholders who express their viewpoint is maintained.

The key steps of the development and review process are:

1. *Defining the product/service category and its environmental and market profile.* This phase covers the identification of key stakeholders, documenting the life-cycle based environmental impacts for the product/service, etc.
2. *Presentation of proposed drafts.* In reference to initial phase, the criteria for the assessment of the environmental leadership for the product/service in particular areas are proposed. Afterwards their quantification, verification and definition follows together with the choice of test methods - all in line with the international norms and considering the viewpoint of the stakeholders.
3. *Stakeholder consultation.* The aim is to ensure criteria assessment and control from various perspectives. The stakeholder reviews are realized through a series of meetings and teleconferences.
4. *Repetitive consultation and revision of drafts.* The draft based on previous phases is made available to the public for comments through the website of the program.
5. *Final standard version determining the criteria and their updating.* The proposed criteria are reassessed and updated every three years or according to current needs stemming from technology changes, market development, regulatory shifts, etc.

The product called "Events and Tours" is intended for the certification of events. The evaluation criteria are sustainability and environmental impact reduction. The monitored areas include the amount of produced waste, used materials, energy consumption, carbon production and traffic. The assessment principle is similar to the ReSport certification. The event must reach the minimum amount of points in particular categories through fulfillment of variously evaluated criteria. The event can get from one to four points per each demand. For example, within the category "Waste" (characterized by the achievement of minimum five points), for the drinkable water supply for participants three points are assigned. Identical evaluation has the arrangement of containers for recycling of glass, plastic, metal, paper and cardboard and their transport to the licensed company [7].

Before the event beginning, the organizers must deposit the caution money dependable on the number of participants (\$500 - \$5.000). This money is refunded after the achievement of the required number of points in

all categories. If an event reaches 1 or 2 points less than minimum, the caution money is donated to ecological organization without relation to the event organizers. In case of loss of more points, the event is labeled as unsuitable for the certification for three following years. The sanctions are cumulated till the announcement of the event and its organizers in the list of unauthorized users of the label EcoLogo. The costs connected with the label establishment depend on the product type and number of products. In 2010 the applicant had to pay \$1.500 – \$5.000 for initial audit and certificate. The price for additional products was \$250 – \$2.100. Nevertheless, annual license fees are 0,5% of product sales, minimum fee of \$2.000 [7].

### 3.3. The Pledge of Sustainability

At the beginning of 2008 the project FitPlanet was launched to provide cost-effective consulting services during the organization and promotion of the environment-responsible sport events. The program is specialized in running, cycling, swimming, walking and multi-sport events. The Pledge of Sustainability is considered as the pre-stage of the ReSport certification and represents the compliance of ten ecological practices. Five are obligatory and the rest is optional. The compulsory practices include usage of electronic versions of materials instead of printed ones, recycling of main types of waste, transport pollution elimination and the purchase of the carbon offsets produced during the athletes' traveling. The utilization of recycled paper, biodegradable plastic, BIO or recycled fabrics, local products, ecological education during the event, etc. are optional. The FitPlanet consulting services are focused for example on the initiatives resulting in green supply chain or improving the event site after the event [6].

Firstly, the event promises to implement ten eco-practices. This step enables the event to use the Pledge of Sustainability logo and be listed in FitPlanet Green Events database. Moreover, it ensures the access to the list of ecological products and services, handbook how to produce green events, one-hour web seminar, online Eco-forum and 5% discount on consulting services. The pledge is proven 14 days after the event on the basis of the sent documentation (photos, description, emails, etc.). The event can after the verification use the Pledge of Sustainability logo. The price for the verification of the first event is \$100. Any additional event cost \$25. A discount for the pledge verification is granted if the applicant decides to "re-pledge" in the next year or if the event increases the number of implemented eco-practices. The database of Green Events includes only the events which fulfill the Pledge of Sustainability criteria for one- or more-day events, or possibly own the ReSport certificate. The environmental pledge can be

accepted by all event participants through the public pledge, questionnaire filling or through providing the feedback to the organization FitPlanet. The athletes can support such events through displaying the logo on their websites [6].

## 4 Case Study: The Example of Certification Program in the Czech Republic

### 4.1. The Certification "Clean Festival"

This certificate is awarded by a packaging company EKO-KOM since 2007. In 2007 it was granted to twenty Czech festivals. EKO-KOM gives the event organizers free garbage bags for sorted waste and helps with the communication with local company providing the rubbish collection about the availability of colored trash containers for garbage separation. The aim of this free certification is reuse of plastic and paper separated on-site during the event [3].

The certification begins with the contract arrangement about the cooperation between the festival and the packaging company EKO-KOM. The organizers must ensure the visitors as well as the stand owners the possibility to sort the garbage, at least to the yellow containers/bags for plastic and to blue containers/bags for paper. The waste must be afterwards transported to the assorting line, not to the municipal waste dump. Another certification condition is the enablement of visitor rewards for the waste collection. The reward (a glass of beer or coke, festival gifts, etc.) can be received at the stand "Green Point" either for five plastic cups or fifty sheets of paper. The visitors can there also acquire the detailed information about the waste sorting. Moreover, they can participate in the competition for the gifts - in 2010 the prize was the iPod. The certificate is awarded during the last day of the festival and advocated next year. The condition is again the complex arrangement of the waste sorting and transport of assorted plastic and paper to reuse facilities [3].

### 4.2. The Festival Award for the Effort to Reach the Sustainability

Other activities, which aim to reduce negative impacts of social events, are various awards established in relation to the festivals. The organizations which grant such awards are for example: A Greener Festival or the European Festival Association Yourope.

#### 4.2.1 GREEN'N'CLEAN Award

The European Festival Association Yourope unites the largest festivals with live music production without any political or religious overtones. Its members are dedicated to the effort to improve the working conditions. Moreover, these are engaged in health and safety issues, environmental awareness and the cross-border exchange of talents. In 2006/7 the association introduced the printed handbook with environmental guidelines for music festivals called "Green'n'Clean". The award "Green'n'Clean" is granted to festivals since 2009 on the basis of the achievement of a defined number of environmental criteria [18].

#### 4.2.2 A GREENER FESTIVAL Award

A non-profit organization A Greener Festival is focused on the support of festivals in proper adoption of environment-friendly practices, especially through providing them the information, education sources and idea swapping. The application for the "A Greener Festival Award 2010" begins with the submission of the self-assessment form which includes 53 questions divided into eight sections. These are event management and administration, carbon dioxide emissions, travel and traffic, Fair Trade and environmental campaigns, waste management, recycling and reuse, water management, local environment, animal and land protection, and noise pollution. Festival must also send two tickets for the environmental auditors and cover the administrative costs which are £200/€300 [11]. In 2010 the Open Air Festival in Trutnov was the first Czech participant who entered the competition. This festival uses bio-plastic dishes or cutlery from Czech company BioPlaneta, tries to reduce the carbon footprint, etc.

### 5 Findings and Discussion

Sustainable development influences different fields of human activities. Apparently, it occurs not only within politics, economics, subsidy programs of particular states or at various levels of civil service, but also in connection with management of certain types of social events. One of the essential principles how to achieve the sustainable development is the acceptance of holistic and integrated approach, long-term planning, appropriate pace and rhythm of the development, involvement of all participating parties, best utilization of available knowledge, risk minimization and management, cost consideration in negative impacts, setting and respecting the limits of tourism development, and the continuous monitoring of impacts [4]. All these principles can be fully or partially supported by environmental management or quality management, which aim to reduce negative impacts of human activities and contribute to the sustainable development. In the

environmental management framework the certification of social events serves as a tool, which struggle to ensure ecological way of living. The well-known international systems are for instance ISO 14001, ECEAT Quality Label, GreenKey, or Green Globe. However, the compatibility of particular systems, awards or labels is quite low. They differ more or less in many aspects including evaluation procedures or followed criteria. The further unification of particular approaches would be therefore meaningful and could be based on wider focus on available indicators (depicted in the Table 1). Nevertheless, they already have the overall requirement in common – there should be the acceptance of legal norms or standards in the area of work safety. Generally, the certification process includes set of meetings, during which several issues such as waste management or social sustainability are discussed. Very important issue is related to the publishing of information about current certified events or certification rules. Considering the information and knowledge spreading about the discussed issues, the website A Greener Festival seems to be the most extensive and comprehensive. Certification costs in amount of hundreds or thousands USD depend on the product type or its volume. The case study discussed in the previous section revealed that local certifications, although focused on particulars aspects of the issue, can follow the international standards.

### 6 Conclusion

The concept of sustainable development represents a potentially successful solution of global problems. The concept has undergone its own historical development from entirely environmental to more complex perception of discussed issues. On this basis, the essential principals were established enhancing the concept application in praxis. The impact of ongoing negative changes requires the transformation of human activities while employing the basic principles of sustainable development. The concept of sustainable development can be promoted only under the condition of gaining its acceptance among sufficiently large segment of the society. One available tool for environmental management of social events is the certification of their sustainability, which can become an important part of current trend characteristic by the effort of environment-friendly way of living. Moreover, the assessed activities within particular certifications can serve as a template for sustainable management of local events. The local community participation enhancement and increase of awareness of as well as experience with the course of events originate a promise of the sustainable attitude not only of the event managers, but also of the participants and visitors.

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