

Article

## **Sustainable Tourism in Practice: Promoting or Perverting the Quest for a Sustainable Development?**

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**Abstract:** Sustainable tourism has achieved the status of being the superior goal in Norwegian government tourism policy, and is attaining much attention in the international scientific and political discourse on tourism. However, have policies on sustainable tourism and related concepts actually managed to make tourism more sustainable? This article seeks to address this question by first presenting the history of sustainable tourism and related concepts, and specifically analyzing how the triple bottom line approach has influenced the prevailing understanding of the concept of sustainable tourism. The article concludes by claiming that prevailing EU as well as Norwegian national policies aiming to make tourism more sustainable most likely will result in “sustaining tourism” more than actually making tourism more sustainable. The article uses Norway—the “home of the Brundtland report”—as an illustrative case for the discussion.

**Keywords:** sustainable tourism; triple bottom line approach; transformation

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### **1. Introduction**

In an article summing up 20 years of research and debate on sustainable development and relating this to tourism, Andrew Holden concludes [1] (p. 372): “Thus, twenty years after the publication of the Brundtland Report...the subsequent advocating of sustainable tourism by international agencies including the United Nations World Tourism Organization (UNWTO), United Nations Environment Program (UNEP), United Nations Educational, Scientific and Cultural Organization (UNESCO), the European Union (EU), and the World Development Bank, the extent to which tourism’s relationship with the natural environment has ‘improved’, however we choose to conceptualize and measure it, is debatable and contentious”. Michael Hall makes a similar observation in 2010 [2] (p. 131): “The field

of Tourism Studies has given substantial attention to the issue of sustainability since the late 1980s. However, despite the plethora of publications, conferences, plans and strategies that deal with sustainability, tourism is arguably less sustainable than it has even been.” In the article “Sustainable Tourism—or Sustainable Mobility?”, the late professor Karl Georg Høyer [3] noted that tourism practices presenting themselves as environmental friendly, using headings like “eco-tourism”, “green tourism”, “sustainable tourism” and alike, have a tendency to imply longer travel distances to more remote places and more frequent use of air and private car transportation than the “standard” forms of tourism. Thus, he points out that the number one acquirement for making tourism more in line with the goal of a sustainable development is to reduce tourism mobility. At the same time, Høyer notes that striving for better economic profitability—being an obvious first priority goal for any business company—does not in itself contribute to improving sustainability in tourism; even if this is done under a heading like “economic sustainability”.

The Director of the International Centre for Ecotourism Research at Griffith University in Australia Ralf Buckley has presented an impressive comprehensive review of more than 200 scientific articles on sustainable tourism up to 2012. As a starting point for this review, referring to figures attained from International Center for Research and Study on Tourism in Paris [4], he notes that [5] (p. 529): “The literature of tourism is large, >150,000 items in total, with 5000 relevant to sustainable tourism”. Buckley identifies several shifts of attention in tourism research on sustainable tourism related issues during the last four decades; noting that research using the specific term sustainable tourism commenced barely two decades ago. In his conclusion, he notes in a rather pessimistic way [5] (p. 537): “Interest in sustainability amongst tourism researchers seems to be as limited as it is amongst tourism industry advocates, enterprises and tourists. Large-scale social and environmental changes are altering the world in which tourism operates, but few researchers are attempting to grapple with these changes.”

This article proceeds by presenting a critical perspective on the discourse of sustainable tourism. The article first provides a brief historical introduction to the relationship between tourism and the environment. This is followed by a review of the diverse number of concepts used to characterize the different environmental directions within the tourism industry. Part three of the article examines the potential for the tourism industry to reduce its environmental impact, before ending with a discussion on the tripartite sustainability challenge facing the tourism industry in Norway.

## **2. The Historical Backdrop**

Sustainable development—thus also sustainable tourism—is basically about the relationship between man and the environment [6]. The relationship between tourism and the environment has been greatly discussed, with the roots of this discourse reaching back to the very start of the tourism industry itself [3]. To cover this in detail goes beyond the remit of this article. Instead, I will focus on the historical development of the tourism industry within Norway, and use this context to highlight important elements in the evolving relationship between tourism and the concept of sustainable development.

Pedersen [7] identified three “green waves” in the history of the Norwegian tourism industry and its connection to the environment. The first of these took place during the transition between 1700 and

1800 and was inspired by Romanticism and the French philosopher Rousseau. Pedersen [7] characterized this period as a return to nature. Previously, a classical view of nature had prevailed, where the cultural landscape of fields and meadows had been deemed the most aesthetic scenery to be enjoyed [8]. Tourism, as it is known today, was not particularly widespread at the time, and consisted largely of nature-based and cultural walks and tours taken by the nobility and newly formed middle classes [7].

The second wave came in the late 1800s. During this period the Norwegian mountains were adopted also as an arena for recreation [7]. Up until then, the mountains had been the domain of wayfarers; commercial travelers and students heading home from the capital of Norway (named Christiania at that time) in the summer. With this new interest, there emerged a need for more places to overnight on the mountain passes [8]. In response, The Norwegian Trekking Association (DNT)—the first tourism organization in Norway—was established in 1868.

There were a number of significant events in the latter half of the 1800s that contributed to this second green wave, most notably the development of steamships and railways [9]. Steam engines revolutionized the shipping industry and the first cruise tourists arrived on the west coast of Norway in the late 1800s. The fjord lands became popular destinations for cruise tourists seeking to experience Norway's wild and dramatic nature at close range. Several regional steamship companies were set up along the coast and the Coastal Steamer, with fixed routes all the way to Hammerfest in the north, opened in 1893. To begin with, many of these new routes were for shipping goods and servicing local transport needs, but eventually they became one of the greatest tourist attractions in Norway [10]. As Norway's popularity as a summer destination became established, winter tourism activities came to be better known. As a result, regions such as Nordmarka, just north of the capital of Norway, became important winter recreation areas. In response to the growing demand for accommodation all year round, DNT chose to keep its main mountain cabins in southern Norway open from the winter of 1907 onwards [8].

The third green wave Pedersen [7] dates to the decades after the 1970s. Prior to that, from the beginning of the 1900s until the 1970s, tourism had flourished in Norway. A significant turning point came about during the inter-war period when holiday leave became a statutory right. As a result, new sectors of the population looked to the Norwegian countryside for recreation, and this trend continued in the post-war period [8]. In addition, technological development and greater prosperity in the post-war period fueled an expanding mass tourism market in which international air travel came to play a major role [9]. The third green wave came in reaction to these developments and embodied an awareness and critical reflection that stands in contrast to the previous cycles of development [11].

It was Krippendorf in 1975 [12] that put the field of tourism and its environmental impacts onto the international political agenda. His initial observations were of the Alps and the capacity of large tourist complexes to “eat scenery” (German: “Landschaft fressen”) both in a direct and an indirect sense. Tourism destinations were being depleted environmentally, culturally and economically. The environmentally adverse developments Krippendorf pointed to in the Alps eventually proved apparent in the Mediterranean. In the early 1980s, Mallorca experienced a significant stagnation in the number of visitors coming to the island. It became clear to the local authorities, and eventually to the tourism industry itself, that they had experienced a massive growth in tourism for some time, but that this expansion was now the cause for the sharp downturn in tourist numbers [13]. Beaches, dunes, wetlands

and cliffs had given way to the construction of new hotels with as much as 80 percent of the island's sandy, coastal areas having been developed. In addition to the loss of habitats and landscapes, the island also had to contend with contaminated groundwater and growing amounts of garbage [14]. Below we will discuss in detail the different approaches that emerged within the third green wave, from the early 1970s to present date.

### 3. What's in a Name?

One may differentiate between two opposite approaches to “the environment” and three different levels of environmental awareness when exploring the relationship between the environment and tourism. Environment-*sensitive* tourism is about reducing the environmental impacts of tourism, whereas environment-*dependent* tourism is about utilizing the environment as a resource base for tourism. First, there is the *narrow* interpretation covered by traditional environmental policy. An environment-sensitive approach here takes into consideration pollution, conservation of nature and the protection of the built environment, while an environment-dependent approach will include the “green sector” of the tourism industry that provides experience of nature. Next, there is the *broad* interpretation which includes, among other things, conditions related to local culture and improving economic profitability in the tourism industry. Between the narrow and the broad interpretation we can situate a *deep* understanding. This includes more fundamental environmental challenges in relation to economic growth, including ever-increasing consumption in the wealthier parts of the world. Attention is paid to overall energy consumption beyond renewable energy production and the long term goal of reducing greenhouse gas (GHG) emissions in wealthy countries by up to 100 percent. These three forms of environmental awareness emerge in both environment-dependent and environment-sensitive tourism. Table 1 presents the different concepts that define the relationship between the environment and tourism. Some of these concepts include both environment-dependent and environment-sensitive tourism and are therefore marked with a large box, while other concepts comprise of just one of these and are therefore marked by a small box. The concepts shown in the table derived from the sustainable development definition and have specific similarities and differences between themselves. Further on, we will outline the historical development of these concepts and their current context in Norway, though not in the order they are listed in the table below.

**Table 1.** A typology of concepts applied to the relationship between the environment and tourism.

Level of environmental awareness	Environment- <i>sensitive</i> tourism (reducing environmental impacts of tourism)	Environment- <i>dependent</i> tourism (utilizing the environment as a resource basis for tourism)
Narrow	Green tourism	
	Environmentally friendly tourism	Nature based tourism
Deep	Eco-tourism	
	Sustainable tourism	Slow tourism
Broad	Geo-tourism	
	Alternative tourism	Rural tourism

### 3.1. *Alternative Tourism*

One of the first concepts to connect tourism and the environment was “alternative tourism”. Developed in the late 1980s, it sought to address the impacts of mass tourism in the 1960s and 1970s, in which mass tourism and sustainable tourism were conceived as polar opposites [15]. Its development was largely inspired by the work of Krippendorf [12], who envisaged a new, alternative form of tourist in the future—one with greater awareness of environmental conditions, local culture, and the need for lower material consumption.

From alternative tourism stems a number of concepts that work in parallel to, and serve to reinforce, the need for environmental initiatives. Firstly, there is the concept of “local, community-based tourism” linking the desire for more balanced tourism development and greater emphasis on ecological considerations with existing business goals [16]. This concept has been applied to tourism where the local communities develop initiatives and manage the travel itinerary. This is done out of a desire to reduce conflicts with their own culture and the local environment, and to ensure continued residence in local settlements [17].

An adjoining concept to this is that of “soft tourism”. This was a popular concept in common use in German-speaking countries in the early 1980s and served as a contrast to “hard” mass tourism. The concept of soft tourism promoted not only environmentally friendly activities, but also social responsibility towards the community, local population and the tourism industry through developing a shared vision and action plan of measures [18].

### 3.2. *Environmentally Friendly Tourism*

The Lillehammer Olympics of 1994 is probably the most significant tourist event in Norway to pursue an environmental tourism agenda. The marketing of an environmentally friendly Winter Olympics led to increased interest in environment-sensitive tourism in Norway. The idea of Norwegian mountains, fjords and untouched wilderness, central to the marketing of Norway as a nature-based destination, was reinforced in the promotion of the Lillehammer Olympics. However, the winter games also promoted greater awareness of environment-sensitive tourism in Norway, as stated in the national plan for marketing Norwegian tourism [19] (p. 2): “...we have significant challenges ahead of us to strike a balance between the desire for profitable growth and the need to protect our environment.” In comparison with environment-sensitive initiatives in Central and Southern Europe, the need for similar approaches in Norway was less obvious. The reason for this perhaps is a question of scale; the number of tourists and the extent of the environmental burden elsewhere in Europe being of a scale simply not found in Norway.

### 3.3. *Nature-Based Tourism*

Experiencing Norwegian nature first hand has been, and still is, the main selling point of the Norwegian tourism industry. A number of customer surveys have shown that both Norwegian and foreign tourists mainly look for nature based experiences when they choose Norway as holiday destination. This is reflected in the official brand building of Norway as a holiday destination by Innovation Norway [20], which can be summarized as follows: “Norway’s vision is to be the Nordic

country that offers the strongest and most attractive experiences in beautiful and pure nature”. In recent years, nature-based tourism has increasingly taken place within and in connection to protected areas, under terms like National Park Tourism. The USA, Australia and several developing countries have a long experience with this type of tourism, but it can also be found in parts of Europe [21]. Tourism in and around national parks in Norway has taken place since the inception of the first national park in Norway in 1962. Thought it is worth noting that prior to that, the extensive network of DNT huts had already enjoyed small-scale commercial success in many of these areas since the early 1900s. Some of the national parks were designated to protect the environment from tourism and outdoor recreation, while others have chosen, for their own purposes, to promote tourism.

### 3.4. *Eco-Tourism*

Eco-tourism differs from nature-based tourism by systematically including the task of reducing its environmental impacts. The term eco-tourism has been used internationally since the late 1970s [22]. This form of tourism is often defined as a travel program for those who have a genuine interest in environmental protection and nature-based experiences, and where the operators also respect the local community and strengthen local value creation [16]. In 1990, the non-profit organization The International Eco-tourism Society (TIES) was established. They defined eco-tourism as responsible travel to natural areas that preserves the environment and improves the well-being of local people [23]. On the basis of the proposals of the United Nations Economic and Social Council (ECOSOC), 2002 was earmarked as the year of eco-tourism. Over 50 countries developed national policies and strategies for eco-tourism. The results were so impressive, it was concluded that the principles of eco-tourism and sustainable tourism should be applied to all forms of tourism development supported and promoted by the United Nations [24]. Inspired by the United Nations year of eco-tourism, a three-year project to develop eco-tourism in Norway was set up in 2005. In 2007, the project formed the basis for a new certification scheme for eco-tourism enterprises in Norway. By February 2014, still only 20 Norwegian enterprises (mostly small scale adventure companies) had chosen to certify as an eco-tourism company [25].

### 3.5. *Slow Tourism*

The principle idea behind slow tourism is to take time to savor experiences. The idea is then to reduce the “volume” of experiences on a vacation, and instead focus on the “quality” of the experiences. It is about slowing the pace of a holiday down so you have the opportunity to interact with the people and places you experience, instead of just trying to see and do as much as possible in the amount of time available. The concept of slow tourism was originally inspired by the Slow Food movement. In recent years, the concept of slow tourism has developed further in the direction of low carbon travel, namely holidays aiming at the lowest possible GHG emissions from journeys to and from the destination [26].

### 3.6. Rural Tourism

Rural tourism in Norway has a long history, the roots of which are based in the country's nature-based attractions. In many cases, it was the farmers who first set up local tourism services including transportation, accommodation on the steamship docks and guided tours to major scenic attractions. However, these kinds of tourism enterprise initiatives soon developed into specialized and larger tourism companies with gradually weaker economic bonds to the initial farms. The modern form of rural tourism directly linked up economically with existing farms, emerged in Norway during the 1990s. In 1997, the Norwegian Rural Tourism Association was set up to organize this particular type of tourism in Norway. An adjoining international phenomenon is the "local food movement". In 1998, the Norwegian Local Food Association was founded. Six years later it merged with the Norwegian Rural Tourism Association to form the organization "Hanen" (Norwegian for "Rooster" [27]) and presently has a total of more than 500 members, mostly (but not solely) farms.

### 3.7. Geo-Tourism

In 2005, former Minister of Trade and Industry Børge Brende introduced geo-tourism as a governing principle for the future development of Norwegian tourism [28]. The concept had been launched by the National Geographic Society in 2004, or perhaps it would be more accurate to say that they hijacked an already established concept, that of geological and geomorphological-focused tourism [29]. The new meaning of geo-tourism promoted by the National Geographic Society was based on the concept of sustainable tourism, but included an additional principle to secure and promote "integrity of place", thus making geo-tourism a close cousin to the concepts "alternative tourism" and "community-based tourism". Efforts to follow up the ambitious pledge to make geo-tourism the overarching principle for Norwegian tourism development proved increasingly problematic owing to difficulties in specifying the content of the concept. Consequently, rather than enhancing action, it impaired it. In Norway, the idea behind geo-tourism is to some extent maintained through Innovation Norway's 10 principles for sustainable tourism (see Table 2 below), these however include the active concepts of sustainable tourism, eco-tourism and green tourism—but the Norwegian government in 2012 officially replaced geo-tourism with sustainable tourism as their main governing principle for tourism development [30].

**Table 2.** Innovation Norway's 10 principles for sustainable tourism [20].

<b>Conserving Nature, the Environment and Culture</b>	<b>Strengthening of Social Values</b>	<b>Economic Sustainability</b>
Cultural wealth; The physical and cultural integrity of the landscape; Biological diversity; Clean environment and resource efficiency	Local quality of life and social values; Local control and commitment; Job quality for tourism employees; Guest satisfaction and security; Quality of experience	Economic sustainability and competitive tourism destinations; Economic sustainability and competitive tourism businesses

### 3.8. Sustainable Tourism

When discussing the history of the concept of sustainable tourism, it is worth noting that the environmental challenges relating to the tourism industry were not at all discussed in the United Nations (UN) World Commission's report of 1987. The UN plan of action for sustainable development Agenda 21 adopted at the Rio Conference in 1992 covered a total of 40 different topics and 115 programs. However, despite the thematic breadth and ambition to include all groups in society, the tourism industry only featured in a few, brief references to eco-tourism as a tool to promote sustainable development [31]. Despite the scant attention paid to it, tourism was the first sector to follow the recommendations of Agenda 21 that all commercial sectors should develop their sector specific version of Agenda 21 at an international level. In 1996, a separate Agenda 21 for tourism was published [32]. The plan was developed in partnership with the World Travel & Tourism Council (WTTC), the United Nations World Tourism Organization (WTO) and the Earth Council (EC)—which is formed of an international collective of NGOs established to follow up the Rio Conference recommendations. The overall goal of the tourism Agenda 21 plan was threefold: (1) To establish a system and procedures at an international level that rendered sustainable development a core consideration in all decisions within the tourism industry; (2) to identify measures necessary for making tourism sustainable; and (3) to argue that self-regulation is the most effective strategy to implement the sustainable development goal within tourism [14].

In 1999, WTTC channeled the experience gained from the execution of this plan in a report to UN's Commission for Sustainable Development (CSD) [33]. After five years of trying to promote the idea of sustainable tourism, the WTTC concluded that the industry's international umbrella-organisations have carried out a systematic attempt to build up a program for sustainable tourism, but that they cannot do so unaided. In the report, it was underlined that the industry is very fragmented and diverse, and consequently experiences difficulty executing coordinated and comprehensive actions. The industry also claims that there is a negative trend in consumers' willingness to pay extra for environmental measures. According to the industry, the authorities should now integrate Agenda 21 principles in all travel and tourism policies, both nationally and internationally, and promote the same principles in regional and local tourism strategies. Thus, as noted by the industry itself, self-regulation is difficult to pursue in a vacuum of non-regulation.

In 1999, the UN Commission on Sustainable Development (CSD) sought to rectify the World Commission's Report and Agenda 21's near total omission of tourism, by putting the industry on the agenda of the annual follow-up conference for Agenda 21. The conference went on to call for the further liberalization of international tourism regulations since this, according to the final document from the conference, would lead to increased tourist traffic to and between developing countries and by that would strengthen economic development in poorer parts of the world [34]. The possibility that this development could lead to increased GHG emissions, and thus could weaken sustainability globally, was not discussed [14].

Even though the WTO had presented their perspectives on sustainable tourism already in 1993 [35], it was not until 2005 that the presentation of the concept managed to gain the position as authoritative definition—something that took place in the publication of the report “Making Tourism More Sustainable—A Guide for Policy Makers” presented by the UN Environment Programme (UNEP) and



WTO. In this publication, sustainable tourism was defined as [36] (p. 12) “[t]ourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities”. This definition was followed up by a clarification that the principles of sustainable tourism are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. Furthermore, the report states that [37] (p. 11): “Sustainability principles refer to the environmental, economic and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability”.

### 3.9. Sustainable Tourism in Norway

In Norway, public investment in sustainable tourism is quite a recent phenomenon. Only since 2007 has sustainable tourism become a goal of Norway’s tourism development, by means of being mentioned in the two succeeding government strategies on tourism development [29,31]. The first of these two strategies defined sustainable tourism as follows [29] (p. 28): “The Brundtland Commission’s definition of sustainable development and also the UN definition of, and objectives for, a sustainable destination, form the basis for sustainable tourism in Norway”.

The strategy contains a long list of measures to be implemented in order to make Norway a sustainable tourism destination. The most extensive part of this work has been on Innovation Norway’s behalf [37], which was assigned the task to carry out three extensive projects during 2008–2013. The first of these was that Innovation Norway, in cooperation with the Norwegian Hospitality Association, developed 10 principles for sustainable tourism (*cf.* Table 2). The second project involved a set of six industry groups broadly representing the tourism sector. All six groups have, since 2009, met four times a year for four years. In addition to that of being an arena for discussing challenges relating to sustainable tourism, the goal of the process was “to conduct a state-of-the-art analysis and develop specific visions, goals and measures on sustainable tourism for all segments of the tourism industry” [29] (p. 30). The third project involved four designated pilot-destinations. These were meant to serve as learning arenas for the implementation of Innovation Norway’s 10 principles of sustainable tourism. Through these three projects, the program wanted to engage a broad spectrum of public and private tourism actors. Gössling *et al.* [38] points out that this breadth of commitment is unique for Norway, and that this can have positive consequences for raising awareness and desire for change within the industry sector.

## 4. Sustainable or Sustained Tourism?

The idea of sustainable development has survived more than two decades of rhetorical excess and academic criticism. From the Brundtland report in 1987 to Agenda 21 adopted in Rio de Janeiro in 1992, and further on through Rio+5 (1997 in New York) and Rio+10 (2002 in Johannesburg), it has remained the central goal and guiding norm of environment-and-development politics. According to Professor William M. Lafferty, this is possible due to the concept’s dual ethical foundation [39]. By giving expression to both “realist” (natural-law) and “consensualist” (democratic) norms, it can claim support with respect to a broad spectrum of moral imperatives. Although many and contesting definitions of what sustainable development “is” have been presented in the discourse to follow the

Brundtland report (even the Brundtland report itself presents different understandings of sustainable development that are not necessarily complementary), strong arguments can be presented for the idea that it is possible to develop a generic core understanding of sustainable development. In doing this, Professor Karl G. Høyer uses concepts from thermodynamics—extra prima, prima and sekunda—to develop a “ladder” of all the different elements that together constitute the full meaning of the concept of sustainable development, in which the two on “top” of this ladder—the extra prima characteristics—are the following: (1) Satisfying the essential needs, and (2) securing ecologic sustainability [40]. Lafferty and Langhelle [6] arrive at the same two-folded definition, stating that sustainable development contains within it the following two key concepts: (1) The concept of “needs”, in particular the essential needs of the world’s poor, to which overriding priority should be given; and (2) the idea of limitations imposed by the state of technology and social organisation on the environment’s ability to meet present and future needs. Thus, we can talk of a two-dimensional understanding of sustainable development (2-SD).

This particular discourse on sustainable tourism represents, according to Sharpley [41] and Høyer [42], a rather problematic turn in the overarching discourse on sustainable development; namely that of expanding the limits of what should be included in the “development part” of the concept of sustainable development. Most of these policy works on sustainable tourism—including that of the above mentioned report from WTCC/UNWTO/EC 1995-report [33]—refer to the term “Triple Bottom Line” (TBL). The term dates back to the mid-1990s when management think-tank AccountAbility coined and began using the term in its work [43]. The term gained public interest through the publication of the book “Cannibals with Forks—The Triple Bottom Line of 21st Century Business” by John Elkington [44], admittedly to make the sustainable development concept more attractive to actors in the business world by introducing sustainable development as an additional (third) so-called “bottom line” into the existing logic of the business world. The first bottom line—economic bottom line dealing with economic solidity—has always been around in business, whereas the second bottom—the social bottom line—rested on a discourse that had been introduced during the 1960s and 1970s on the moral obligation for business to become more responsible to problems relating to issues like low wages and child labor [45]. The third bottom line—the ecological bottom line—was meant to introduce (and thus frame) the sustainable development discourse into the business world. However, the naming of the TBL concept gradually changed from three “bottom lines” to three “sustainability dimensions”—namely that of economic, social and ecological sustainability; and this understanding eventually was “exported” from the business back to the policy discourse thus resulting in an expansion from the original two-dimensional (2-SD) into a three-dimensional conceptualization of sustainable development (3-SD) also within the policy discourse. Out of this process TBL—eventually transformed to 3-SD—became a new argument for business-as-usual in business as well as in politics much more than being an impetus for transforming business and society [44]. As Høyer [43] points out, the two prevailing understandings of the concepts of sustainable development—the TBL/3-SD and the original Brundtland Commission DDS-version [46]—are incompatible, and not supplementary: On the one hand, the TBL/3-SD-concept with three quite separate spheres of sustainability, and where keeping a balance between the three is the major task. On the other hand, the original Brundtland 2-SD-concept where the integrative aspects of the three is highlighted, however, under the condition that the task first of all is to secure long term ecological sustainability and support basic needs of the

poor today (global justice) and in the future (generational justice). The Brundtland Commission's report underlines the fact that a living standard beyond the necessary minimum to satisfy the basic needs is only sustainable if all consumption standards, both present and future, are established in terms of what is sustainable in the long term [6]. The majority of people in the rich world lives far beyond the limit of ecological sustainability. Thus, a reduction in consumption levels in the rich part of the world is most likely needed if sustainable development is ever to be achieved [47].

Internationally there are numerous examples of more or less quantifiable indicator-and-alike systems trying to operationalize what sustainable development "really" is all about in specific contexts and for specific sectors [48]. To develop such systems has also been a longstanding concern for the case of tourism [49,50]. The most difficult component has according to Buckley [5] (p. 537) been to establish environmental accounting measures and indicators; and still according to Buckley [5] this remains a priority for future tourism research. However, perhaps even more important is to critically analyze how sustainable tourism is interpreted at a principal level by existing indicator-and-alike systems.

At the heart of the sustainable tourism strategy of Norway is the 10 principles of sustainable tourism presented in Table 2. Comparing this system with the broader discourse on sustainable development and sustainability indicators [6,49], we can identify three potential problematic aspects relating to the question to what extent do the Innovation Norway's 10 principles for sustainable tourism fully represent the initial meaning of its mother-concept sustainable development:

- No mentioning of reduction of GHG emissions
- No prioritizing of which needs to be included
- The nonhierarchical structure of the system

The issue of GHG emissions—especially emissions deriving from tourism transportation—is perhaps the most controversial aspect of the sustainable tourism debate [3,51]. Thus, it is striking that the issue of GHG-emission reductions is not specifically mentioned in the Innovation Norway principles of sustainable tourism.

As pointed out above, sustainable development is originally a two-folded concept in which the first refers to the environment-discourse and the need to protect nature from human incursions, whereas the latter refers to the discourse on human needs—in which the UN World Commission Report and the succeeding Agenda 21 both underlines that priority must be given to the needs of the poor [5]. Thus, maintaining economic viability of tourism businesses in the rich part of the world will in most cases be irrelevant to that of promoting a sustainable development—but of course be highly relevant to any business development goals, *cf.* the notion of the "first" economic bottom line.

Sustainable development is basically about how to balance the protection of nature from human incursions and the use of natural resources to support human needs. Embedded in this is the importance of prioritizing which elements in nature to protect, and to what extent; and which needs to be supported, and at what level of satisfaction. In order to operationalize this quest into practical policymaking, it is necessary to imply some kind of hierarchical structure of concerns and goals. All possible goals, representing all possible needs or all possible ways of protecting nature from human incursions, just cannot be of equal importance. One could rephrase a point formulated by Aaron Wildavsky [52] relating to planning—"if planning is everything, maybe it's nothing"—into "if sustainable development (or in the context of this article; sustainable tourism) is everything—maybe it

is nothing [53] (p. 48). Wildavsky [53] argued that the concept of planning was beset by too many mutually contradictory requirements, and therefore, had ended up including too many aspects, thus making it inoperable. The same could be said about much of what is presented in the sustainable tourism discourse, in which innovation Norway's 10 principles for sustainable tourism can serve as an illustrative example. Thus, the principles of sustainable development and sustainable tourism, while originates within a deep understanding of the environment, can also result in a dilution of the term [54].

### **5. Sustainable Tourism as a Strategy for Adjusting or Transforming Society?**

In a review of the sustainable development debate up to 2005, Hopwood *et al.* [55] concludes that sustainable development is first of all about transforming society. This insight has recently been put forward also within the climate discourse [56,57]. A briefing note issued from the Learning Hub on the concept of transformation at the UK Institute of Development Studies sums up the rationale for moving from what they describe as a traditional approach of incremental change to a new transformation approach [58] (p. 1): “There is growing debate on the need for transformational approaches to tackle the challenges facing development in the face of climate change. If current incremental approaches to preventing dangerous climate change and adapting to the change we are already locked into are insufficient, then more radical approaches may be required.” A similar view can be found in some of the recent works of the Intergovernmental Panel on Climate Change (IPCC). In the introduction to the Special Report “Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation” the following is stated [59] (p. 1): “Some strategies for effectively managing risks and adapting to climate change involve adjustments to current activities. Others require transformation or fundamental change”. The report goes on defining transformation as “[t]he altering of fundamental attributes of a system (including value systems; regulatory, legislative, or bureaucratic regimes; financial institutions; and technological or biological systems)” [60] (p. 4).

When discussing transformation as a strategy to achieve a specific goal—be it sustainable tourism—it is important to be aware of an important distinction between “transformation as a directed, desirable process and transformation associated with the effects of inadvertently crossing thresholds” [60] (p. 402). The former may be perceived as “a planned, deliberate process, whereas the latter is an uncontrolled process, which results from insufficient system resilience. One would expect that inadvertent transformation is more likely to lead to undesirable system states with low productivity and less human well-being” [61] (pp. 402–403). The past is ripe with examples of presumably inadvertent societal transformations and civilization demises, many of which have been linked to factors such as the overexploitation of local resources, rapid population growth or failure to adapt to relatively abrupt climatic changes [61,62]. Several authors have warned that unless societies deliberately transform in the face of climate change, climate change will, in combination with other pressures on society, impose transformations that are likely to imply large negative societal consequences [48,63].

In developing a planned and deliberate process of transforming tourism into sustainable tourism, it can be fruitful to differ between three different modes of relationship between tourism and sustainable development: (1) Tourism as victims of an unsustainable development, (2) tourism as a cause of an unsustainable development, and (3) tourism as part of the solution to that of creating a sustainable

development. Below we will outline some aspects of these three modes, using tourism in Norway as illustrative examples.

### 5.1. Tourism as Victims

The first mode of relationship between tourism and sustainable development relates to what Nelson *et al.* [51] describe as transformation associated with the effects of inadvertently crossing thresholds. As the tourism industry in Norway largely is dependent on the natural environment as its resource base, it is vulnerable to and adversely affected by any environmental degradation relating to an unsustainable development that also manifests itself locally. It is important then to differ between local environmental problems that fall outside the scope of sustainable development and the more severe global problems of an unsustainable development. Two prominent examples of the latter are loss of biodiversity due to changes in land-use and local effects of climate change.

The National Geographic Traveler has designated the fjords of Western Norway as one of the world's most beautiful destinations showcasing an ideal interaction between man and nature in these landscapes [64]. Two ongoing processes are threatening this resource base for tourism in Norway: The loss of pristine areas and overgrowth of the cultural landscapes; both of which could imply a reduced quality of this resource base for tourism.

Loss of pristine areas in Norway is currently driven by an odd combination of processes leading to an increase and decrease of GHG emissions. The first of these processes relates to a recent increase in the building of second-homes. There has been almost a doubling in the annual number of built second-homes the last decade compared with the previous [65]. The latter process relates to a large increase in the development of renewable energy production facilities in the form of small-scale hydropower, wind farms, new power lines and an accompanying road constructing. For instance, the annual number of applications for building small-scale hydropower plant has increased by 400 percent from 2000–2010 [66] (p. 63).

Overgrowth of the cultural landscape is a result of many simultaneous socio-economic and environmental changes. Increased mechanization and the decline of small-scale farming in Norway has been the most significant source of loss. From 1999–2009, one out of three farms went out of business [67]. The accompanying decline in the number of grazing animals and increase in the number of meadows left fallow has resulted in less open space. In addition reduced logging and also coppicing—used to supplement feed for dairy herds—has been very extensive. A continuous high level of NO<sub>x</sub> pollution (resulting in a fertilizing effect) combined with climate changes are also expected to contribute, the latter due to wetter and warmer conditions and an extended growing season optimizing forest regrowth [68].

As well as affecting biodiversity and rate of vegetation growth, climate change is the source of a range of impacts that may have direct and indirect consequences for the tourism industry. The most openly discussed one of these are loss in snow reliability and the implications this has for winter tourism. Many of the important winter tourism destinations in Norway are facing an expected reduction of days with snow cover in the range of 50–100 days by 2100 [69]. In addition, expected changes in precipitation and temperature may increase incidences of extreme weather events. This could affect tourism both directly (e.g., personal injuries from avalanche incidents) and indirectly (for example, destinations' negative association with extreme weather events; e.g., avalanches in skiing areas).

Strategies to avoid the problems for tourism outlined above could involve a combination of at least three different transformative processes: (1) Changing the overall socio-economic drivers leading up to the identified negative effects for tourism; (2) changing consumption patterns of tourists; and (3) changing the production of tourism products and services.

An important point to bear in mind regarding the two latter processes is the danger of rebound effects. The rebound effect has been presented as a possible explanation why major success is still lacking in trying to curve down the energy use and GHG emissions in rich industrialized countries. Basically, the rebound effect refers to behavioural or other systemic responses to the implementation of new technologies or other measures to save energy use or reduce GHG emissions [70]. According to Hertwich [71], the environmental benefits of any environmental policy measures can under certain conditions be less than anticipated (rebound effect) or even negative (backfire effect). Climate change adaptation in winter tourism has the potential to lead to such effects. At present, nearly all commercial ski resorts in Norway need artificial snow production at some point in the season [72]. Energy use in the production of artificial snow is considerable, particularly with respect to obtaining water. In Åre, Sweden, the largest skiing destination in Scandinavia, energy used for one season's artificial snow production is equivalent to the annual energy used for heating the towns 1300 inhabitants [73]. Alternatively to that of installing equipment for artificial snowmaking in "old" skiing arenas, several winter destinations have established completely new satellite facilities in more snow-reliable areas. The latter could lead to increased energy-use and GHG emissions from transportation, particularly if these new satellite facilities are located outside of existing public transportation infrastructure (like old winter destinations located close to the railroad). Thus, to be aware of possible rebound effects and thus develop policy measures to try to avoid such effects is an important part of any transformative process undertaken to mitigate tourism becoming a victim of an unsustainable development.

### *5.2. Tourism as Part of the Problem*

In 2005, the tourism industry was responsible for approximately 8 percent of total global GHG emissions, and unless new emission reduction measures are implemented, the industry's emissions of greenhouse gases will increase by 130 percent by 2035 [74]. No similar calculations for Norway are available, but by looking at the sectors growth and increases in travel to and from Norway, we get an indication of what the likely greenhouse emissions will be. From 1985–2005, the number of foreign tourists visiting Norway (including business travel) increased by 72 percent. For those who traveled by the most polluting means, airplanes and cruise ships, the increase was respectively 192 percent and 449 percent. The most environmentally friendly forms of transport (bus and train) have decreased by 14 and 41 percent, respectively (see Table 3). In 1985, car and coach travel were the dominant forms of tourism transportation, with flights coming third. By 2005, air-transport was clearly the largest. The trend for low-budget flights has since 2005 most likely reinforced this unfortunate environmental development.

**Table 3.** Foreign tourists on recreational and business trips (in 1000 passenger km) in Norway, and their mode of transport to and from Norway [75].

Mode of transport	1985	2005	Change 1985–2005
Airplane	548	1602	+192%
Private car	900	1399	+55%
Tour bus	650	560	−14%
Cruise ship	59	324	+449%
Ferry Passenger	109	232	+113%
Train and bus	184	108	−41%
Total	2450	4225	+71%

There are a number of efforts set up to reduce the environmental impact of tourism. However, by far the greatest effort has been on managing the environmental impact of the non-mobile tourism activities (like housing and eating). The mobile activities—that is the travel to, from and within the destination—is in most cases overlooked [3,52]. Furthermore, although there have been serious efforts to reduce the relative impacts of some aspects of tourism activities—including that of tourism transportation—the increased total volume of tourism consumption have outweighed these efforts. Behind this situation is the situation that the tourism industry is often exempt from current environmental policy regulations. Environmental efforts involving the tourism industry has largely been in the form of self-regulation and voluntary efforts and rarely specifically aimed public policy measures. Thus, any serious and transformative attempt of reducing the environmental impact of tourism substantially will in many cases have to imply a higher level of public regulation of tourism.

### 5.3. *Tourism as Part of the Solution*

The third way to look at the relationship between tourism and sustainable development sees tourism as having a potential role in promoting sustainable development that goes beyond reducing environmental impacts of tourism.

In the discourse on the relationship between attitudes to environmental considerations and leisure behavior, at least three, to some extent competing, theories have been proposed [76]. The first is perhaps not really a theory, but more like an idea, namely the idea that more leisure time almost by necessity will lead to less environmental problems [77], which again can be linked with the idea embedded in the concept of sustainable consumption that we will “live better by consuming less” [78]. This idea is strongly embedded in the Norwegian tradition of outdoor recreation, as well as policy support for it [79]. The theory, or idea, that more leisure time will lead to less environmental problems, is however strongly questioned by empirical evidence [80–82].

In contrast, a second theory holds that during leisure time, people tend to take time “off” from their environmental attitudes, and instead strive for more luxury [83,84]. However, there are studies that call for some modifications of this latter conclusion. Aall and colleagues [77] have characterized the large negative environmental impacts of leisure activities by the proverb “the road to Hell is paved with good intentions”. They point out that good intentions like “experiencing nature” and “spending time with your family” have unfortunate side effects in also acting as drivers for producing more negative environmental impacts when applied to leisure activities. Thus, applying these good intentions is not

necessarily accompanied by putting aside your environmental attitudes. It seems more to be a question of a negative side-effect of environmental and other good (and not anti-environmental) attitudes governing leisure practice.

A third theory argues that leisure time is an arena in which people are particularly open to new impressions, and may thus easily adopt or learn new ways of living, including more environmentally friendly consumption habits which may later be transferred to everyday life and thus result in a double positive environmental effect [77]. This perspective is in line with the discourse on transformative tourism. Jamal [11] defines transformative tourism as the practice of organized tourism that leads to a positive change in attitudes and values among those who participate in the tourism experience. Higgins-Desbiolles [85] points out that tourism is a powerful social force that has the potential of achieving many important ends, but presents his view of an important prerequisite for this to happen [85] (p. 1192), namely that “its capacities are unfettered from the market fundamentalism of neoliberalism and instead are harnessed to meet human development imperatives and the wider public good”.

## 6. Conclusions

Andrew Holden holds that the absence of an effective environmental policy is the main reason for the limited effect so far in making tourism more sustainable [1]. Michael Hall offers a more diverse explanation which includes [2] (p. 131): “the relative weakness of sustainability research in tourism as an epistemic community; economic, institutional and political barriers; and the inherent problems of the concept in terms of its capacity to marry social, environmental and economic indicators, and particularly the addiction to economic growth”. Hall’s answer on how to solve this specific last challenge is to pursue what he denotes as a steady state tourism, which he defines as [86] (p. 46) “a tourism system that encourages qualitative development but not aggregate quantitative growth that unsustainably reduces natural capital”.

In its latest communication on tourism policies—the European Union (EU) “Implementation rolling plan of tourism framework” issued in May 2013 [87]—the word “sustainable” is mentioned 27 times in a 17-page list of policy goals, measures and deliverables, leaving an impression that sustainable development is important in EU tourism policies. The very important backdrop of this plan is the point made by the EU commission that “the tourist industry has become a key sector of the European economy, generating over 10 percent of EU GDP (directly or indirectly) and employing 9.7 million citizens in 1.8 million businesses” [88]. The EU commission goes on to stress that “[t]he competitiveness of the European tourism industry is closely linked to its sustainability” and further underlines “[t]he need to reconcile economic growth and sustainable development” [89]. So, if making tourism sustainable calls for transformation, the key-question in relation to EU policymaking on sustainable tourism is: What does “reconcile” mean in practice? Is it regrowth of tourism—in the wake of the financial crises—or is it degrowth of tourism in line with the alternative outlined by Hall [86]? Going back to the case of Norway, it seems to be both—in the sense that many seem to believe that we can continue the growth in the volume of tourism and at the same time achieve a regrowth in the environmental impacts of tourism. However, the belief that it is possible to combine a traditional growth strategy in tourism with regrowth in environmental impacts has very weak support in research.



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## Conflicts of Interest

The author declares no conflict of interest.

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