Opportunities for development of the tourism sector in Bulgaria

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Abstract. The main research goal is to present the opportunities for the development of the tourism sector in Bulgaria in the conditions of a dynamically changing environment. Emphasis is placed on innovations in the context of the circular economy, considering its essence and the possibilities of its application in the tourism sector as well. It should be borne in mind that the reorientation from a linear to a circular economic model in the tourism sector is a gradual process that requires time. Scientific methods such as the method of analysis and synthesis, content analysis, situational analysis, deduction, induction, comparative method and others are used. The results give an idea of the possibilities for progress of the tourism sector in Bulgaria in the context of the circular economy. There are good practices, the number of which is constantly increasing. In this way, the role and importance of circular tourism is growing. The conclusions present the achieved results in a synthesis and outline the prospects for the development of the tourism sector in Bulgaria, some recommendations are also made.

1 Introduction

The concept of circular economy is developed as an opposition to the traditional linear model. In it, raw materials are used to produce products that are recovered and the leftovers are thrown away. In this context, it is necessary to mention that the linear model relies on significant amounts of cheap and accessible materials as well as energy sources. On the other hand, the circular economy is an economic model whose main goal is to extend the life cycle of products. In practice, this is realized through the following: sharing, borrowing, reusing, repairing and recycling existing materials and products as long as possible [1].

The tourism sector mainly produces intangible services. However, it relies on considerable amounts of exhaustible natural resources and largely reflects a linear production model [2]. In this regard, it is important to realize the need for the development of circular tourism. It follows the logic of the circular economy, whose business model is consistent with the principles of sustainable development. Circular tourism offers a model in which each participant in tourism (tourists, accommodation, dining and entertainment establishments, tour operators, etc.) adopts an ecological approach to action [3]. When analyzing the

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"tourism-natural environment" relationship, it can be seen that modern tourism must be developed in accordance with ecological requirements [4].

In the conditions of an economy transforming towards sustainability, by applying the principles of the circular economic model, innovation is the main driving force for achieving the desired results in the tourism sector. Innovations can be of a different nature, but the widespread application of eco-innovations in the tourism sector and related sectors is a fundamental foundation for sustainable socio-economic development. An example in this regard is the relationship between tourism and agriculture [5]. Green ideas directly correspond to the concept of sustainable development in tourism and the transition to a circular economy.

2 Possibilities for the development of the tourism sector in Bulgaria, by applying the principles of the circular economy

According to data from World Travel & Tourism Council, dynamics are observed in the contribution of the tourism sector to the GDP, as well as the creation and maintenance of jobs in Bulgaria. The indicators are the following [6]:

- After a decline of -59.5% in 2020 compared to 2019, the contribution of travel and tourism to GDP increases by +23.2% in 2021 compared to 2020;
- In 2020, -21.4% of jobs were lost compared to 2019. 2021 saw a recovery from the jobs lost in 2020, including growth of almost one percent.

In the above data, negative values are noticeable, which emphasize the dynamic environment in which the enterprises from the tourism sector in Bulgaria operate. The presented indicators are due in no small measure to the serious restrictions imposed on travel worldwide in 2020. The restrictions are a result of the COVID-19 pandemic. Nevertheless, a recovery of the tourism sector in Bulgaria is noticeable in 2021. It is expected that the tourism sector in general and in Bulgaria in particular will continue to develop at an even faster pace. In this regard and considering the connection with other sectors of the economy, the importance of the tourism sector for countries like Bulgaria, which have many natural and anthropogenic resources for tourism and/or tourism is among the main sources of income, respectively the increase as a result of the increase in tourist travel of the negative consequences on the environment, it is imperative to look for opportunities to incorporate the circular economy in all activities related to tourism.

Circular tourism marks development at the macro, micro and organizational level. The gradual introduction and application of the principles of the circular economy in the tourism sector probably needs to happen at a faster pace, but nevertheless there has been undeniable progress in recent years. The following table 1 presents existing solutions for the development of the tourism sector in the context of the circular economy. A large part of the decisions at the macro and micro level concern Bulgaria.

<table>
<thead>
<tr>
<th>Level</th>
<th>Solution</th>
<th>CE principles</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macro</td>
<td>Decree Law 3/2022 for circularity in tourism</td>
<td>Reduce / Reuse / Recycle</td>
<td>Balearic islands, Spain</td>
</tr>
<tr>
<td></td>
<td>CIRCULAR STEP, Stakeholders Engagement Platform</td>
<td>Refuse / Reduce / Reuse / Repair / Refurbish / Remanufacture / Repurpose / Recycle</td>
<td>UNECE region</td>
</tr>
</tbody>
</table>
After a decline of -59.5% in 2020 compared to 2019, the contribution of travel and regard is the relationship between tourism and agriculture. Widespread application of eco-innovations in the tourism sector and related sectors is a development of the tourism sector in the context of the circular economy. Innovations can be of a different nature, but the principles of the circular economic model, innovation is the main driving force for achieving sustainability. Emphasis is placed on reducing the negative impacts of tourism in general (reducing waste, using less water, reducing greenhouse gas emissions, etc.).

Among the latest global agreements in this direction is the Glasgow Declaration adopted in 2021. The set guidelines in which action is needed can be a starting point for Bulgaria. They are presented in table 2.

**Table 2. Guidelines for action under the Glasgow Declaration**

<table>
<thead>
<tr>
<th>Circular Economy Action Plan</th>
<th>Reduce / Reuse / Repurpose / Recycle</th>
<th>European Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Global Agreement of Plastic Pollution</td>
<td>Reduce by design / Reduce / Recycle</td>
<td>Global</td>
</tr>
<tr>
<td>Regional Action Plan on SCP in the Mediterranean</td>
<td>Reduce by design / Reduce / Reuse / Recycle</td>
<td>EU, Mediterranean</td>
</tr>
<tr>
<td>BS8001</td>
<td>Reduce by design / Reduce / Reuse / Recycle</td>
<td>Global</td>
</tr>
<tr>
<td>Global Tourism Plastics Initiative, One Planet Network</td>
<td>Reduce / Reuse / Recycle</td>
<td>Global</td>
</tr>
<tr>
<td>Glasgow Declaration - Climate Action in Tourism, One Planet Network</td>
<td>Reduce / Reuse / Recycle</td>
<td>Global</td>
</tr>
<tr>
<td>CEnTOUR Project</td>
<td>Refuse / Reduce by design / Reduce / Reuse / Repurpose / Recycle</td>
<td>Spain, Moldova, Greece, North Macedonia, Italy</td>
</tr>
<tr>
<td>Sustainable Tourism Interreg MED horizontal projects</td>
<td>Refuse / Reduce by design / Reduce / Reuse / Repurpose / Recycle</td>
<td>Europe (Mediterranean)</td>
</tr>
<tr>
<td>Urban Waste Europe</td>
<td>Reduce / Reuse / Recycle</td>
<td>EU cities</td>
</tr>
<tr>
<td>FACET Interreg 2 seas project</td>
<td>Refuse / Reduce by design / Reduce / Reuse / Remanufacture / Repurpose / Recycle</td>
<td>Coastal areas of various EU countries</td>
</tr>
<tr>
<td>4-star Crowne Plaza Copenhagen Hotel</td>
<td>Reduce / Reduce by design / Reuse / Repurpose / Recycling</td>
<td>Denmark</td>
</tr>
<tr>
<td>Belgian hotel chain Martin's Hotels</td>
<td>Reduce / Reuse / Recycling</td>
<td>Belgium</td>
</tr>
<tr>
<td>Green mobility at Val d'Hérens</td>
<td>Reuse</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Instock Restaurant</td>
<td>Reuse / Reduce / Repurpose / Recycle</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>Gust'eaux Restaurant</td>
<td>Reuse / Repurpose</td>
<td>Belgium</td>
</tr>
<tr>
<td>NH Hotels CORK2CORK initiative</td>
<td>Reuse / Repurpose</td>
<td>Spain, Italy</td>
</tr>
</tbody>
</table>


The possibilities for applying the principles of the circular economy in the tourism sector in Bulgaria are expressed in the understanding of compliance with the principles of sustainability. Emphasis is placed on reducing the negative impacts of tourism in general (reducing waste, using less water, reducing greenhouse gas emissions, etc.).
Measure and disclose all travel and tourism-related emissions. Ensure our methodologies and tools are aligned to UNFCCC-relevant guidelines on measurement, reporting and verification, and that they are transparent and accessible.

Set and deliver targets aligned with climate science that accelerate tourism's decarbonisation. This includes transport, infrastructure, accommodation, activities, food & drink, and waste management. While offsetting may have a subsidiary role, it must be complementary to real reductions.

Restore and protect ecosystems, supporting nature's ability that draw down carbon, as well as safeguarding biodiversity, food security, and water supply. As much of tourism is based in regions most immediately vulnerable that the impacts of climate change, ensure the sector can support affected and at-risk communities in resilience building, adaptation and disaster response. Help visitors and host communities experience better balance with nature.

Share evidence of risks and solutions with all stakeholders and our guests, and work together that ensure our plans are as effective and coordinated as possible. Strengthen governance and capacity for action at all levels, including national and sub-national authorities, civilian society, large companies and SMEs, vulnerable groups, local communities and visitors.

Ensure organizational resources and capacity are sufficient that meet objectives set out in climate plans, incl the financing of training, research and implementation of effective fiscal and policy tools where appropriate that accelerate transition.

Source: UNWTO, 2021 [8]

In the context of the above, different possibilities can be distinguished according to the solutions sought, which correspond to the circular economy. In the following figure 1, variants of the directions (synthesized and detailed) are presented, in which it is necessary to look for opportunities for innovations that will help to move from a linear to a circular economy in the tourism sector in Bulgaria.
Innovative activity in compliance with the principle of the circular economy to reduce the consumption of resources in the tourism sector can find solutions in the following directions:

- The use of renewable, recyclable resources and materials, which can significantly reduce the amount of traditionally needed resources. Examples in this regard are buildings with energy-efficient systems and the use of alternative energy sources that can reduce the energy required.
- Reducing the amount of water used.
- Waste reduction, etc.;

Examples of innovative solutions for recycling in the tourism sector can be:

- Refurbishment of existing equipment and furnishings that extend the time of use rather than discarding and purchasing new.
- Food waste from dining areas can be recycled, for example by incineration to extract energy or composting, etc.;

Reuse in tourism can be defined as a higher level of recycling. In practice, products are given other functions. Among the widely known examples in this regard are:

- in restaurants, stale bread can be used to make croutons and breadcrumbs;
- the fat used for cooking can be used directly or after processing as fuel in transport.

The redesign in the tourism business is of particular importance with a view to optimizing the activity, in relation to the principles of the circular economy. For example, redesign of: menus in food establishments with a view to reducing waste; hotels, through energy-efficient lighting and heating, etc.
Rethinking, whether on the part of tourists or tourism businesses, is expressed in awareness of the ways in which natural resources are used and the need to change to more sparing and environmentally sustainable methods.

Good practices in the tourism sector in applying the principles of the circular economy can serve as a model for responsible behavior towards the environment. They are also a good prerequisite for the wider adoption and application of ideas corresponding to a circular economy.

3 Good practices in the development of the tourism sector in Bulgaria in the application of the principles of the circular economy

Good practices in the tourism sector in applying the principles of the circular economy are increasing as a result of the wider acceptance of the ideas that underpin the circular economy. Among the examples of good practices implementing comprehensive innovation solutions in the context of the circular economy are:

- Marina Grand Beach Hotel
- Hotel Yastrebets
- The hotel chain Griffid hotels
- Albena resort complex

Among the examples of good practices in the context of the circular economy in the field of summer tourism is the Marina Grand Beach Hotel. The hotel is categorized with four stars and is located in the immediate vicinity of the beach in RC Golden Sands. Significant investments were made both with own funds and with the support of various European and national programs, which are expressed in the following [10]:

- commissioning of energy efficient water cooling units;
- renovation of the laundry farm;
- construction of a solar installation for hot water;
- use of energy-saving equipment throughout the hotel;
- use of biodegradable preparations;
- official transport is provided for all staff in order to reduce the number of vehicles used for official purposes;
- organic foods are predominantly used according to the season;
- staff training regarding the hotel's eco-policy;
- information signs have been placed in the bathrooms, the inscriptions of which are aimed at saving water and detergents, i.e. if the tourists need to change the towels, they leave them on the floor, and if they do not need them, they leave them in their seats;
- waste is collected and delivered separately;
- reduction of harmful gas emissions by using renewable energy sources;
- active participation in various branch organizations in connection with the development of tourism and environmental protection.

As of 2018, Marina Grand Beach implements a comprehensive policy, guaranteeing not only business competitiveness, but also environmentally friendly implementation of the activity.

Good practices, but in the field of winter tourism, are applied in the Hotel Yastrebets, located in the Borovets ski resort. The management team of the hotel makes targeted efforts to protect the environment and respect the principles of the circular economy. They are expressed in the introduced measures and their constant improvement. Among them are:

- energy-saving technologies;
The hotel chain Griffin hotels is an example of multiplying the effect of good practices related to the principles of the circular economy. All hotels united in the mentioned chain implement or are in the process of implementing various tools to minimize the negative impact on the environment. Respectively, here we could talk about an entire hotel chain that is oriented towards applying the circular economy in the tourism sector. Griffin hotels have limited the negative effects on nature to the maximum extent, by [11]:

- training of all employees in environmental protection policy;
- encouraging guests to protect the environment;
- energy-saving equipment;
- water saving equipment;
- use of completely degradable preparations;
- provided official transport to the workplace, with the aim of minimizing harmful emissions from cars;
- complete separate waste collection, i.e. paper, metal, plastic, glass, biodegradable waste, household waste;
- almost all consumables are delivered in large cuts in order to reduce packaging waste;
- reducing the use of potentially dangerous chemicals in daily operational activity;
- reducing harmful gas emissions by purchasing products from local companies, etc.

It is important to note that the hotel chain publishes an annual report on the implementation of the set goals, including those concerning the environment. Measures for improvement and new goals are identified. This proves that the eco-goals are constantly being worked on.

Albena resort complex produces over 50% of the consumed energy from its own renewable energy sources and over 60% of the consumed food products from its own farms. The application of the circular economy model in the complex is expressed in the following [12]:

- a biogas plant from organic waste that creates clean green energy and high quality fertilizers;
- solar plants with a total peak power of 1500 kW, distributed on the roofs of 12 hotels on the territory of the complex, with the generated energy being used entirely for own needs;
- solar energy for hot water, solar energy for clean electricity as well as biogas energy amount to about 12,000 MWh or about 50% of Albena's average annual consumption;
- investments in electromobility as part of the territory of the complex is completely prohibited for motor vehicles;
- own eco-production of more than 50% of fruits, vegetables, natural juice, wine, honey and meat, offered in the restaurants of RC Albena, etc.

In all the examples of good practices presented above, there is a set of mechanisms put into action, consistent with the circular economy. For their implementation, with a view to increasing the share of the circular economic model in the tourism sector, it is necessary to take actions from all interested parties. On the one hand, efforts are required from the tourist enterprises, and on the other from the state institutions. This is necessary because appropriate
regulations and an institutional environment are needed to stimulate the development of the Bulgarian tourism sector in the transition from a linear to a circular model.

4 Conclusion

The circular economy has a direct link with the tourism sector. The possibilities of applying its principles in the tourism sector are expressed in the understanding of compliance with the principles of sustainability. The main emphasis is related to reducing the negative impacts of tourism in general (reducing waste, using less water, reducing greenhouse gas emissions, etc.). In this context, it is necessary to observe the following principles: reduce, recycle, reuse, redesign, rethink. There are a number of opportunities for the development of the tourism sector in Bulgaria, through the application of innovations in the context of the circular economy.

Good practices in the tourism sector in Bulgaria in applying the principles of the circular economy can serve as a model for responsible behavior towards the environment. In practice, they are a good prerequisite for the wider adoption and application of ideas corresponding to a circular economy. In this way, the role and importance of circular tourism is growing.

In order to multiply the effects and more expeditiously implement the circular economic model in the Bulgarian tourism sector, actions by all interested parties are necessary. There are prospects for positive development, the realization of which implies compliance with some recommendations. The main ones are:

- creation of a new country national system (institutional and legal) or improvement of the existing ones in a direction that would stimulate the development of the circular economy in the tourism sector in Bulgaria;
- making tourism enterprises applying the principles of the circular economy more recognizable by creating a single national register that could be linked to different reservation systems in which intermediaries (tour operators and travel agents) and end users can find, for example, accommodation, meeting the criteria for a "green hotel";
- incentives from the government - e.g. lower taxes, fees or financial support against the obligation to maintain circular economy principles, etc.
- The more active development and application of the circular economic model in the tourism sector in Bulgaria will increase the recognition of our country as a tourist destination that has many natural and anthropogenic resources that it exploits in an environmentally friendly way. This will lead to the achievement of a number of positive effects (for example - reduction of the negative consequences of the economic activity of tourist enterprises on the environment), which would be difficult to achieve if the application of a linear economic model continues.

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