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THEMATIC2GREEN

ANALYSIS OF SURVEY OF ENERGY EFFICIENCY IN THE TERRITORY OF THE CITY MUNICIPALITY OF MEDIJANA

IPA-ADRION00228: THEMATIC2GREEN



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- Activity 1.1 – Identification of the target area
- Activity 1.2 – Analysis of resources and constraints, potential stakeholders, private and public enterprises
- Activity 1.3 – Identification of key needs and potential benefits from the use of renewable energy sources
- Activity 1.4 – Participation in the preparation of the survey, selection of private and social organizations to be surveyed
- Activity 1.5 – Implementation of the survey and participation in consolidating results with all project partners

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Executive summary

This report provides a comprehensive analysis of survey in the City Municipality of Medijana, as part of the IPA-ADRION00228 THEMATIC2GREEN project. The analysis focuses on energy efficiency increase in objects.

Within **Activity No. 1**, participation is planned in **Working Group 3 (WG3 – Work Group 3)** for the third work package (*Pilot actions and joint solutions for energy efficiency in coastal and rural areas*), which will be led by experts from the University of Basilicata (Italy) and the Hellenic Investment and Foreign Trade Company (Greece). This activity consists of:

- **Activity 1.1** – Identification of the target area
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Key Observations

Tourism facilities A large number of facilities already use renewable energy sources, primarily wood for heating, as well as solar collectors for hot water.

Many are interested in new sources, especially in installing solar panels.

Unfortunately, the lack of incentives and high investment costs are the main obstacles to the introduction of new renewable energy sources.

Users Users generally would not pay more to stay in facilities that use renewable energy sources.

Nevertheless, a large number would still prefer to stay in a facility that uses renewable energy rather than one that does not.

However, the quality of service is the decisive factor when choosing a facility.

Local communities There is no strong conviction that increased use of renewable energy sources will lead to higher employment.

Ecology, a clean environment, and increased investment in the local community are the main motivations for using renewable energy sources.

Institutions There are already numerous programs implemented by institutions to increase the use of renewable energy sources.

Most are based on bank loans aimed at improving energy efficiency, but there are also various government programs in the form of grants to enhance energy efficiency in the economy.

The permitting process is the biggest obstacle to the introduction of new technologies.

Energy companies

The majority of companies are interested in installing solar panels, collectors, and heat pumps to increase their market share.

Until now, companies have not offered consumers any special benefits, but they are considering premiums for clients who favor the use of renewable energy sources.

Recommendations

Based on the survey findings, here are some strategic recommendations for future activities to promote renewable energy usage in tourism:

1. Enhance Incentive Programs and Reduce Investment Barriers

- Develop and promote financial incentives such as subsidies, grants, or tax breaks specifically targeted at tourism facilities for installing renewable energy systems.
- Simplify the permitting and approval processes to address administrative hurdles and accelerate technology adoption.

2. Increase Awareness and Marketing of Renewable Energy Benefits

- Educate facility operators and tourists about the environmental benefits and potential long-term cost savings of renewable energy to foster positive perception.
- Highlight that while paying more isn't preferred, renewable energy use is a valued aspect, influencing customer choice.

3. Introduce Differentiated Value Proposition

- Encourage tourism facilities to market their renewable energy use as a quality and environmental commitment, which can appeal to eco-conscious travelers.
- Develop certification or labeling programs to help consumers recognize and choose eco-friendly facilities.

4. Support Pilot Projects and Demonstration Initiatives

- Launch pilot projects demonstrating the viable integration of solar panels, collectors, and heat pumps, showcasing their benefits and feasibility.
- Use successful case studies to build confidence and motivate broader adoption.

5. Strengthen Collaboration Between Stakeholders

- Facilitate partnerships among tourism facilities, energy companies, and local communities to leverage resources, expertise, and funding opportunities.
- Promote schemes where energy companies offer premium benefits or discounts for facilities and customers utilizing renewable systems.

6. Promote Local Community Engagement

- Align renewable energy projects with community development goals, emphasizing environmental benefits and local investment opportunities.
- Explore employment or training programs related to renewable energy installation and maintenance to build local capacity.

7. Leverage Institutional Support

- Expand and promote existing government programs and explore new grants or funding opportunities tailored to the tourism sector.
- Advocate for policy reforms to streamline the permitting process, making technology adoption less cumbersome.

8. Monitor and Evaluate Impact

- Establish metrics to track the impact of renewable energy projects on tourism experiences, environmental benefits, and local employment.
- Use data to refine strategies and demonstrate success to stakeholders, encouraging ongoing commitment.

Implementing these recommendations can foster a more sustainable, attractive, and economically viable tourism industry that aligns with environmental goals and consumer preferences.

Introduction

IPA-ADRION 00228: THEMATIC 2 GREEN refers to the second thematic area within the Interreg IPA ADRION programme, which focuses on supporting a greener and climate resilient Adriatic-Ionian region. The program aims to promote innovation capacity for green development based on cultural and natural resources, tackling emerging environmental and social challenges

Serbia, as a partner country in the INTERREG ADRION programme, has been recognized in this project as a significant area for the development of new products and services, such as those related to outdoor activities or adaptation through digitalization, valorization, and promotion of tangible and intangible cultural heritage to a broader audience (e.g., in Bosnia and Herzegovina, Serbia, Italy, Slovenia, etc.).

The expected outputs/results to be achieved in this project are:

Activity No. 1 – Preparation and implementation of the survey

Activity No. 2 – Territorial analysis and preparation of a joint strategy

Activity No. 3 – Preparation of a joint strategy for promoting energy communities

Activity No. 4 – Cooperation in the preparation and implementation of pilot projects

Within **Activity No. 1**, participation is planned in **Working Group 3 (WG3 – Work Group 3)** for the third work package (*Pilot actions and joint solutions for energy efficiency in coastal and rural areas*), which will be led by experts from the University of Basilicata (Italy) and the Hellenic Investment and Foreign Trade Company (Greece). This activity consists of:

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Within this activity, the results of previously implemented project actions were considered. Various tourism products and opportunities developed to promote domestic tourism were identified (e.g., vouchers in Slovenia). More attention was given to small group visits, creation of itineraries for the valorization of cultural heritage, or other products not belonging to mass tourism (e.g., in Croatia). Also recognized within the ADRION programme were: visits to open-air archaeological parks (e.g., in Greece), attendance at cultural events in rural areas via newly established trails, and public transport used primarily by visitors (e.g., free transport in Slovenia).

For the creation and implementation of new and innovative models of tourism development and cultural-tourism products, various stakeholders are involved, such as public administration (e.g., in Albania, Greece, Slovenia, Italy, etc.), public development agencies (e.g., in Albania, Serbia, Croatia, etc.), NGOs (e.g., in Bosnia and Herzegovina, Croatia), international organizations, private individuals and organizations, as well as research institutions (e.g., in Italy, Greece, Serbia, etc.).

In accordance with these achieved results, which are treated as the starting conditions for the realization of this project, all sub-activities foreseen for this phase of the project have been implemented.

Activity 1.1 Identification of the target area

Serbia, located in Southeast Europe, possesses diverse natural landscapes, rich cultural heritage, and historical landmarks, making it a promising destination for tourism development. The strategic development of regional tourism can contribute to the region's economic growth and stability.

Niš is a significant tourist destination in Serbia due to its historical and natural attractions. The city is located at a crossroads of major European and Balkan transport corridors. Niš is an important economic, administrative, educational, healthcare, cultural, and sports center.

Niš boasts a rich cultural heritage and diverse natural resources. Key cultural attractions include the Niš Fortress, Bujanj Memorial Park, and Skull Tower, reflecting the city's history as a Roman, Ottoman, and Serbian center. Natural attractions include the Sićevo and Jelašnica Gorges, offering opportunities for recreation and adventure. The city is also known for its spas and potential for extreme sports like paragliding.

Cultural Heritage:

- Niš Fortress: A well-preserved Ottoman-era fortress, built on Roman and medieval foundations, located in the city center.
- Skull Tower: A unique monument built after the Battle of Čegar, containing skulls of Serbian rebels.
- Bujanj Memorial Park: A memorial complex commemorating victims of World War II.
- Bali-Begova Mosque: An example of Ottoman architecture.
- Holy Trinity Cathedral: A significant religious building.
- Tinkers' Alley: A historical area with traditional crafts and workshops.
- Gallery Synagogue: A 1925 synagogue now used for cultural events.
- Numerous churches and monasteries along the Nišava River: Reflecting the city's religious history.

Natural Resources:

- Sićevo Gorge: A popular spot for outdoor activities and recreation.
- Jelašnica Gorge: Offers scenic views and opportunities for hiking.
- Bojanine Vode: A recreational area with mineral springs.
- Cerje Cave: A natural cave attraction.
- Spas in the vicinity of Niš: Providing opportunities for health and relaxation.
- Potential for extreme sports: Paragliding, shooting rally, and free climbing.
- Nišava River: Flows through the city and is an important geographical feature.
- The Nishava Valley: A natural path connecting Europe and Asia in the past.

Activity 1.2 Analysis of resources and constraints, potential stakeholders, private and public enterprises.

The transition to renewable energy sources offers numerous advantages across various sectors involved in tourism development. Embracing renewable energy not only enhances environmental sustainability but also brings economic, social, and strategic benefits. This report explores the key advantages for stakeholders such as tourism enterprises, local communities, governments, energy providers, non-governmental organizations, and investors.

1. Benefits for tourism enterprises and operators

Cost savings and operational efficiency:

Adopting renewable energy sources (solar, wind, biomass) significantly reduces energy costs over time, especially with decreasing technology prices and increasing efficiency. For example, hotels that install solar panels can reduce their reliance on grid electricity, leading to substantial savings on utility bills.

Enhanced sustainability and brand image:

Tourists are increasingly favoring eco-friendly accommodations and destinations. Implementing renewable energy demonstrates corporate social responsibility, strengthens brand reputation, and attracts environmentally conscious travelers. This differentiation can lead to higher occupancy rates and premium pricing.

Regulatory benefits and incentives:

Governments often provide subsidies, tax breaks, or grants for renewable energy projects, lowering financial barriers for tourism operators. Compliance with evolving sustainability regulations becomes easier, helping to avoid potential penalties.

Resilience and reliability:

Distributed renewable energy systems can enhance energy security by reducing dependence on external grids, which is especially beneficial for remote or rural tourism locations.

2. Benefits for local communities

Environmental improvements:

Renewable energy sources reduce dependence on fossil fuels, lowering greenhouse gas emissions, air pollution, and water consumption. This leads to a cleaner environment, healthier living conditions, and preserved biodiversity—vital for ecotourism.

Economic opportunities and job creation:

The development of renewable energy projects stimulates local employment in installation, maintenance, and manufacturing sectors. This boosts the local economy and supports the sustainable development of the community.

Energy access and cost reduction:

Renewable systems, especially solar and wind, provide decentralized energy solutions suitable for off-grid areas, improving access to electricity and reducing energy costs for households and local businesses.

Social development and resilience:

Empowering communities through renewable energy projects enhances self-sufficiency, social cohesion, and resilience to the impacts of climate change and energy price fluctuations.

3. Benefits for government institutions

Environmental and climate goals:

Investing in renewable energy aligns with national commitments to reduce carbon emissions and meet climate change mitigation targets under international agreements such as the Paris Agreement.

Economic growth and competitiveness:

Promoting the renewable energy sector can attract investments, drive innovation, and stimulate job creation within the country, strengthening the tourism industry as a sustainable destination.

Policy and regulatory leadership:

Developing clear policies, incentives, and frameworks encourages private sector participation, accelerates the adoption of renewable energy, and positions Serbia as a regional leader in sustainable tourism.

Reduced public health costs:

Lower air pollution and environmental degradation lead to decreased healthcare costs associated with respiratory and cardiovascular diseases, delivering broader social benefits.

4. Benefits for energy companies

All companies involved in electricity supply fall into this group. This includes suppliers, producers, aggregators, companies providing energy efficiency services, as well as energy equipment installers. The benefits for these companies include:

Market expansion:

The adoption of renewable energy expands the customer base, especially among environmentally conscious tourism enterprises and rural communities seeking off-grid solutions.

Revenue growth and diversification:

Providing renewable energy systems and services generates new revenue streams and enhances the company's competitiveness.

Grid stability and integration:

Distributed renewable energy sources can improve grid stability, especially when combined with smart grid technologies, meeting growing demand and integrating diverse energy sources.

Corporate social responsibility and branding:

Early adopters and innovative companies enhance their reputation through sustainability commitments, attracting investors and partners.

5. Additional benefits across all sectors

Environmental protection: Universal reduction of carbon footprint contributes to global efforts against climate change.

Resilience to energy price fluctuations: Renewable energy reduces exposure to volatile fossil fuel prices, ensuring price stability.

Innovation and technological development: The growth of renewable energy stimulates research, development, and technological advancement.

Sustainable Development Goals (SDGs): Promoting renewable energy supports SDGs such as affordable and clean energy.

Based on the previous analysis, the main potential beneficiaries of renewable energy sources in the tourism sector in Serbia can be defined as:

1. **Owners and operators of tourism facilities:** Hotels, resorts, and other accommodation facilities that can reduce energy costs and enhance their sustainability image by using renewable energy sources, such as solar panels or biomass heating.
2. **Tourists and visitors:** Travelers increasingly seeking eco-friendly and sustainable options, who will benefit from environmentally responsible accommodation and activities using renewable energy sources.
3. **Local communities:** They benefit from cleaner air and environment, potential job creation in renewable energy projects, and overall sustainable development that can improve their quality of life.
4. **Government and policymakers:** By promoting renewable energy in tourism, they can meet environmental protection goals, encourage ecotourism, and support sustainable economic development.
5. **Energy companies:** Companies offering renewable energy technologies and solutions gain business opportunities and expand their market.
6. **Environmental and non-governmental organizations (NGOs):** These organizations benefit from the promotion and implementation of sustainable development, contributing to environmental protection and climate change mitigation.
7. **Investors and financial institutions:** They have the opportunity for profitable investments in

green energy projects aligned with the development of sustainable tourism.

The application of renewable energy sources in tourism can bring economic, environmental, and social benefits to all these stakeholders in Serbia.

Activity 1.3 Identification of key needs and potential benefits from the use of renewable energy sources

From the perspective of renewable energy, the main needs of these stakeholders include:

1. Owners and operators of tourism facilities:

- Stable and affordable access to renewable energy technologies (solar, wind, biomass, etc.)
- Expert support and technical expertise for the installation and maintenance of renewable energy systems
- Financial incentives or subsidies to offset initial investment costs
- Reliable energy supply to ensure uninterrupted service

2. Tourists and visitors:

- Availability of eco-friendly accommodations using renewable energy sources
- Transparency regarding sustainable practices and energy source usage
- Education and awareness about the benefits of renewable energy in tourism

3. Local communities:

- Access to renewable energy projects that can create jobs and economic opportunities
- Environmental benefits such as cleaner air and reduced pollution
- Support and training for local involvement in renewable energy projects

4. Government and policymakers:

- Clear policies, regulations, and frameworks that support the use of renewable energy
- Incentive programs and subsidies for renewable energy projects in tourism
- Data and research to guide strategic planning and sustainable development
- Integration of renewable energy goals into national tourism and environmental protection strategies

5. Energy companies:

- Market demand and a stable environment for investing in renewable technologies
- Access to financing and incentives for technology expansion
- Partnerships and cooperation with stakeholders in the tourism sector

6. Environmental and non-governmental organizations:

- Support for policies and projects promoting the adoption of renewable energy
- Campaigns for raising awareness and promoting sustainable energy use
- Monitoring and assessment of the environmental impact of renewable energy projects

7. Investors and financial institutions:

- Sustainable projects with clear return on investment potential
- Support through financial instruments and guarantees
- Reliable information and analysis of risks and benefits

In short, all stakeholders seek availability, affordability, reliability, and support for implementing and maintaining renewable energy projects, while fostering the sustainable development of tourism and environmental protection.

The main obstacles to the use of renewable energy by these stakeholders include:

1. Owners and operators of tourism facilities:

- High initial investment costs for renewable energy technologies
- Lack of expertise and technical knowledge for installation and maintenance
- Uncertainty about return on investment and financial benefits
- Limited availability of necessary technologies or infrastructure

2. Tourists and visitors:

- Low awareness and knowledge of the benefits of renewable energy
- Limited availability of sustainable options in certain regions or facilities
- Need for transparency about the level of renewable energy usage

3. Local communities:

- Lack of financial resources and support for developing renewable energy projects
 - Limited capacity to manage and maintain energy systems
 - Need for technical knowledge and training
- 4. Government and policymakers:**
- Lack of clear and long-term policies or regulations supporting renewable energy
 - Limited financial resources or budget constraints
 - Administrative barriers and complex project approval processes
 - Insufficient coordination between different sectors and levels of government
- 5. Energy companies:**
- Lack of market demand and favorable conditions for developing renewable technologies
 - Issues with reliability and integration of renewables into the existing power grid
 - Financial and regulatory barriers
- 6. Environmental and non-governmental organizations:**
- Limited capacity to support and monitor projects
 - Insufficient visibility and support from authorities and the public
 - Facing political or economic pressure against sustainable solutions
- 7. Investors and financial institutions:**
- High risks and uncertainty of project success
 - Lack of clear financial mechanisms and guarantees for investment
 - Limited access to favorable loans or grants

These obstacles often require continuous cooperation, appropriate policies, financial support, and education to increase the use of renewable energy sources in the tourism sector in Serbia.

Activity 1.4 Participation in survey preparation, selection of private and social organizations to be surveyed.

This activity included participation in the preparation of the survey, selection of private and social organizations to be surveyed, conducting the survey, and participation in consolidating the results with all project partners. The survey is planned to be conducted by sending questionnaires via email and using the SurveyMonkey application. SurveyMonkey is a popular tool for online surveys known for its ease of use and comprehensive features. The implementation of the survey will include the following steps, aligned with the proposal of the lead partner.

A. Survey Preparation

- **Defining objectives:**
The objectives of the survey are to identify the needs, expected benefits, and opportunities for using renewable energy in Serbia's tourism sector.
- **Target group identification:**
The target group was defined in the previous chapter. All subgroups will be covered by the survey.
- **Survey design:**
Question types selected: multiple choice and open-ended questions.
- **Clarity of questions:** Clear and concise questions were chosen to ensure understanding.
- **Question order:** The questions are logically organized to maintain flow and engage respondents.

B. Pilot testing:

The survey was tested with a small group from the target population (2 energy companies and one tourism household).

Feedback was collected and necessary adjustments were made.

C. Distribution:

The survey will be distributed via email.

This ensures the survey effectively reaches the target group.

An example of the screen layout during the survey is shown in the following figure.

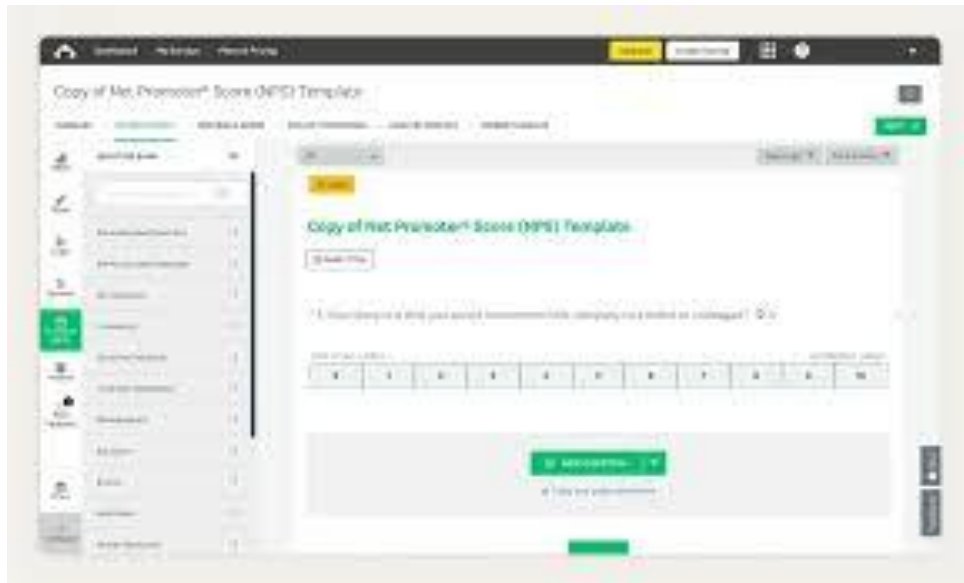


Figure 1 Layout of the online questionnaire

D. Monitoring the response rate.

Sending reminders if needed to increase participation.

Identification of key needs and potential benefits from the use of renewable energy will be based on the results of the conducted survey, the Energy Law, and the Law on the Use of Renewable Energy Sources ("Official Gazette of RS", No. 40/2021, 35/2023, and 94/2024 – other law).

For tourism enterprises and operators:

1. Does your facility currently use renewable energy sources (e.g. solar, wind)?
 - Yes
 - No
2. If yes, which types of renewable energy do you use?
 - Solar energy
 - Wind energy
 - Geothermal energy
 - Biomass
 - Other (please specify)
3. What are the main barriers to implementing renewable energy in your business?
 - High initial costs
 - Lack of knowledge or technical expertise
 - Limited access to appropriate infrastructure

- Regulatory challenges
 - Other (please specify)
4. Do you plan to adopt renewable energy in the future?
- Yes, within the next year
 - Yes, within the next 2–5 years
 - No current plans
 - Not sure
5. What would motivate you to increase the use of renewable energy?
- Cost savings
 - Environmental responsibility
 - Regulatory incentives
 - Improved reputation
 - Customer demand

For tourists and visitors:

1. How important is it to you that a tourism enterprise uses renewable energy?
- Very important
 - Somewhat important
 - Not very important
 - Not at all important
2. Would you choose to stay at a hotel or visit a destination that uses renewable energy?
- Yes
 - No
 - Maybe
3. Are you willing to pay a premium for eco-friendly tourism experiences based on renewable energy?
- Yes
 - No
 - Not sure
4. How much more would you be willing to pay for accommodation that uses renewable energy sources?
- 5–10% more
 - Up to 5–10% more
 - The same
 - I would not pay more

5. To what extent do you believe that the use of renewable energy sources in tourism facilities would contribute to environmental protection?
 - Very significantly
 - Moderately
 - Slightly
 - Not at all
6. What would be your concerns or barriers related to using a facility that relies on renewable energy?
 - Price
 - Reliability
 - Quality of service
 - No difference
 - Other

For local communities:

1. Do you believe that renewable energy projects improve local employment and infrastructure?
 - • Yes
 - • No
 - • Not sure
2. What kind of support would encourage local communities to participate in renewable energy initiatives?
 - • Job training programs
 - • Financial incentives
 - • Community engagement and awareness campaigns
 - • Access to affordable renewable energy technologies

For government authorities:

1. What policies or incentives are currently available to promote renewable energy in tourism?
 - • Tax credits
 - • Grants/subsidies
 - • Regulatory requirements
 - • Public awareness programs
2. What additional measures could encourage greater adoption of renewable energy in the tourism sector?
 - • Streamlining the permitting process

- • Increasing financial support
- • Promoting best practices and success stories
- • Other (please specify)

For energy companies:

1. Which renewable energy technologies are most in demand in the tourism sector?
 - • Solar panels
 - • Wind turbines
 - • Geothermal systems
 - • Biomass solutions
 - • Other (please specify)
2. What are the common challenges encountered when implementing renewable energy projects for tourism?
 - • Technical compatibility
 - • Costs and financing
 - • Site suitability
 - • Gaps in awareness and knowledge
3. Does your company offer special rates or support for the implementation of renewable energy in the tourism sector?
 - • Yes
 - • No
 - • Planning to
4. What is the current level of interest or demand from tourism facilities for using renewable energy sources?
 - • High
 - • Moderate
 - • Low
5. What benefits or incentives do you see for an energy company in supporting renewable energy projects in tourism facilities?
 1. • Market expansion
 2. • Environmental responsibility
 3. • Investments
 4. • Other

Activity 1.5 Conducting the survey and participation in consolidating results with all project partners.

1. Representation and general conclusions of the survey

A total of 120 entities participated in the survey, with tourists—the end users—being the most represented group. The distribution is shown in the following figure.

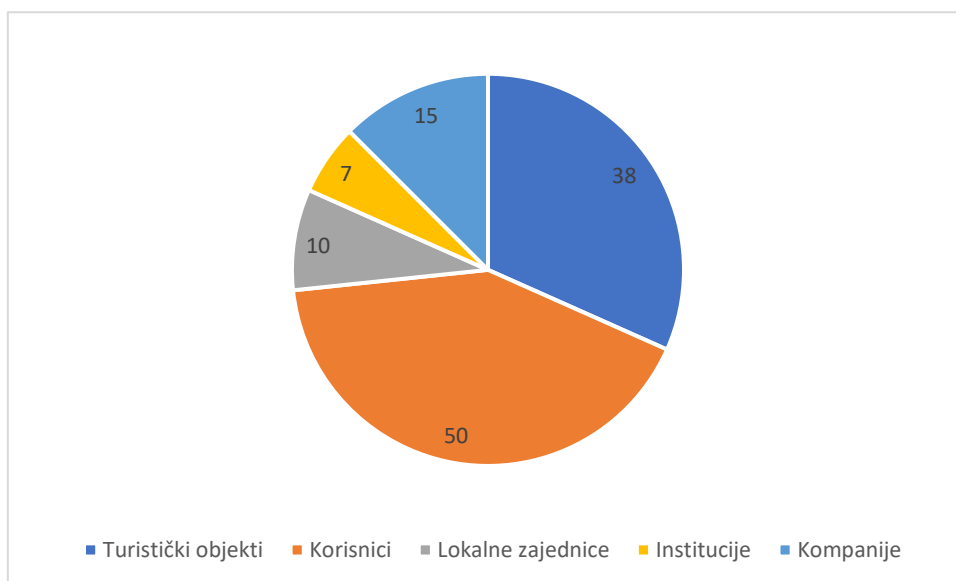


Figure 2 Participant representation in the survey

More detailed results are presented in the charts below.

2. Tourism facilities and organizations

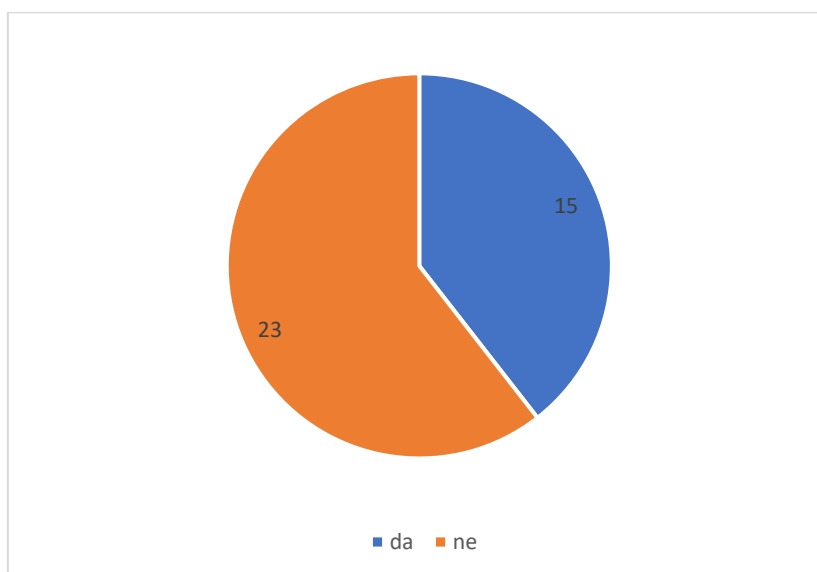


Figure 3 Usage of renewable energy sources

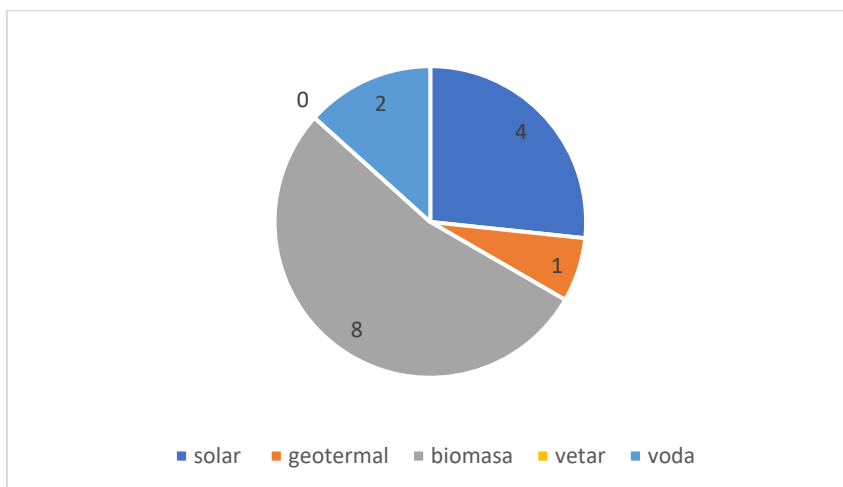


Figure 4 Type of renewable energy source

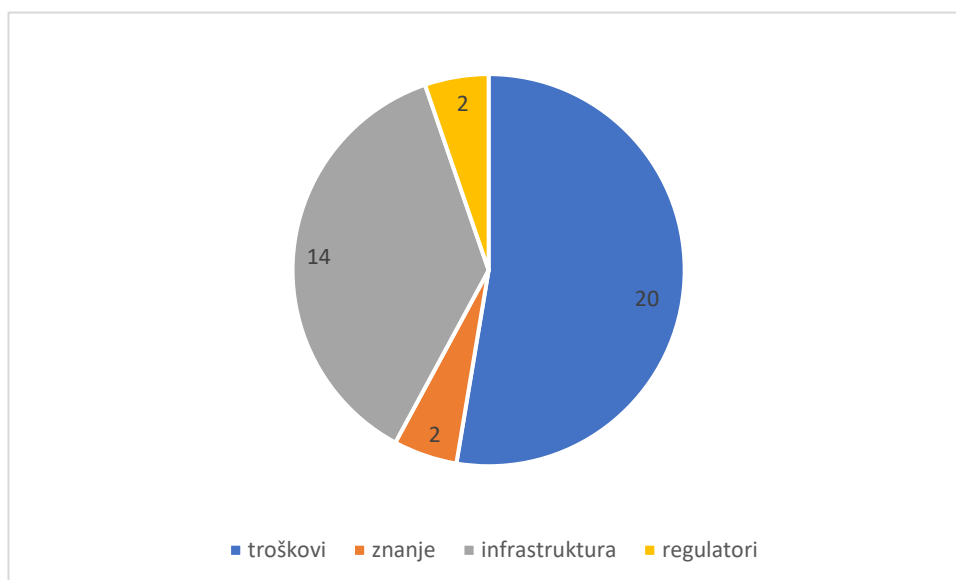


Figure 5 Obstacles

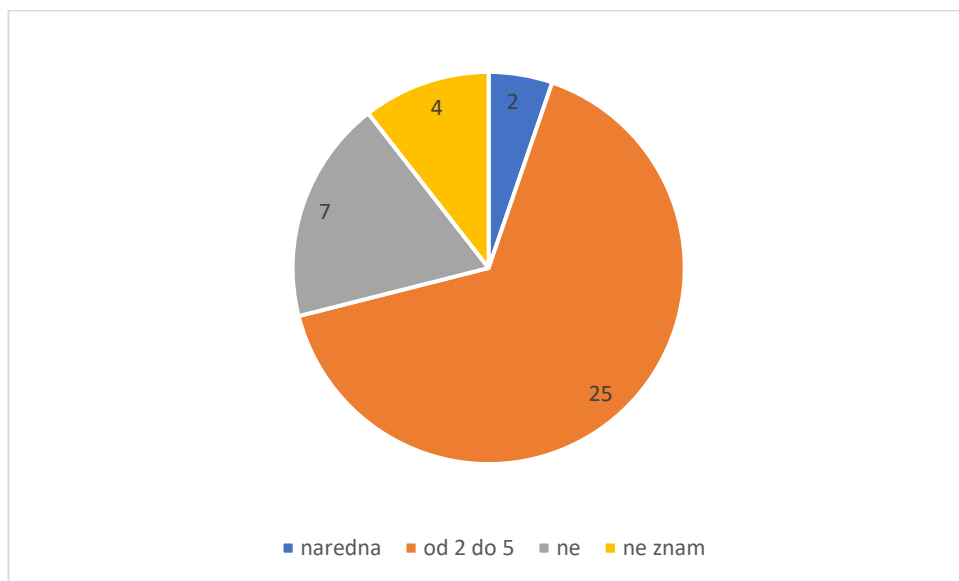


Figure 6 Future plans

3. Users

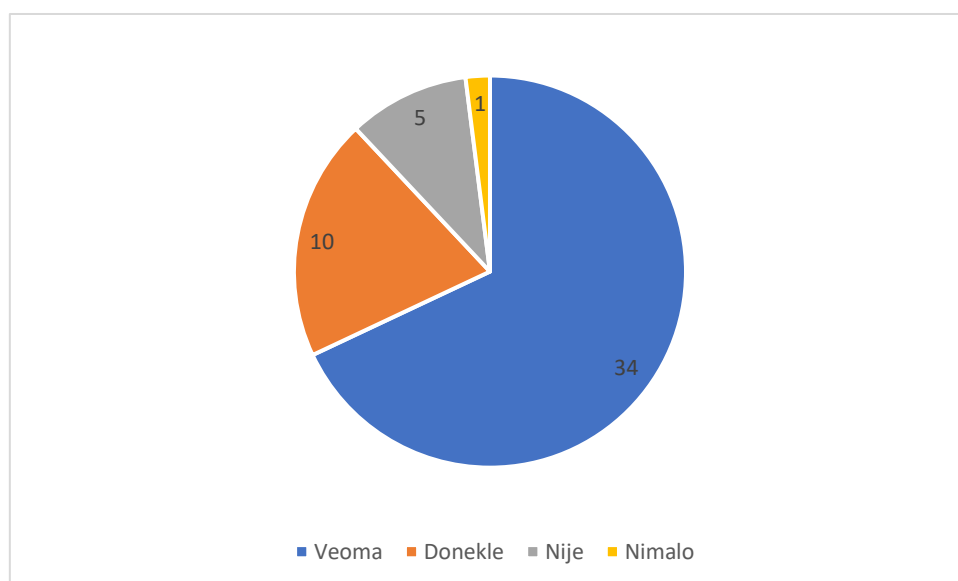


Figure 7 Importance of RES

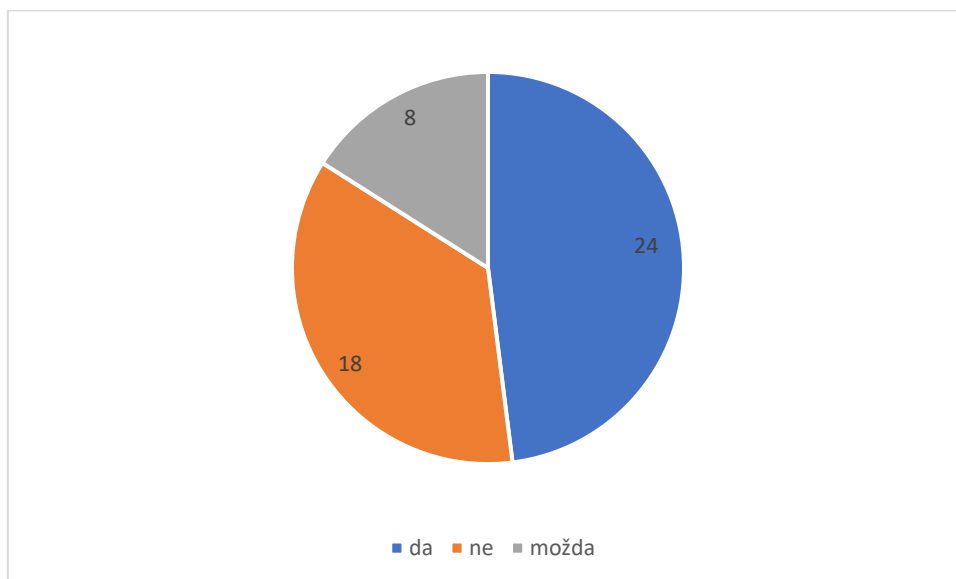


Figure 8 Preference of staying in the object with RES

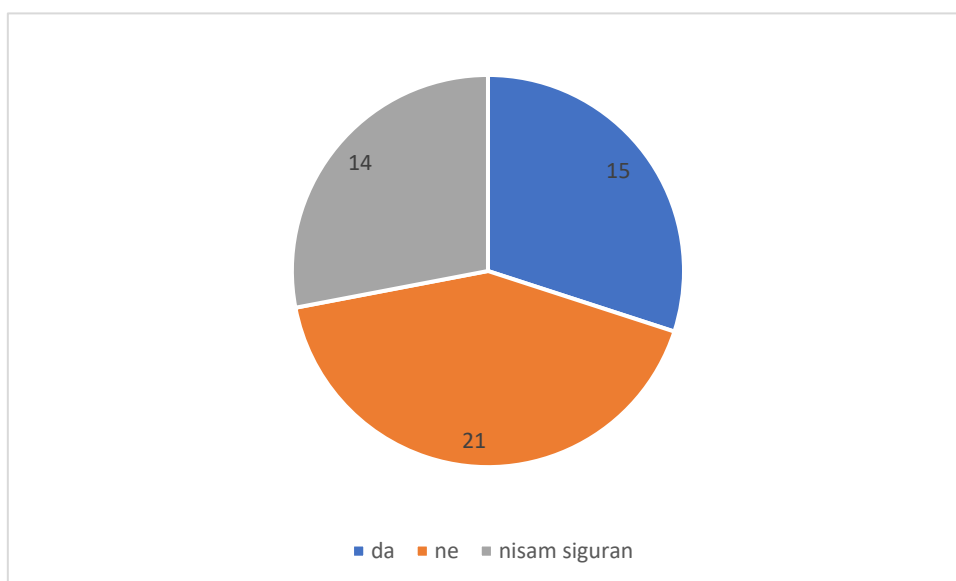


Figure 9 Acceptability of price increase

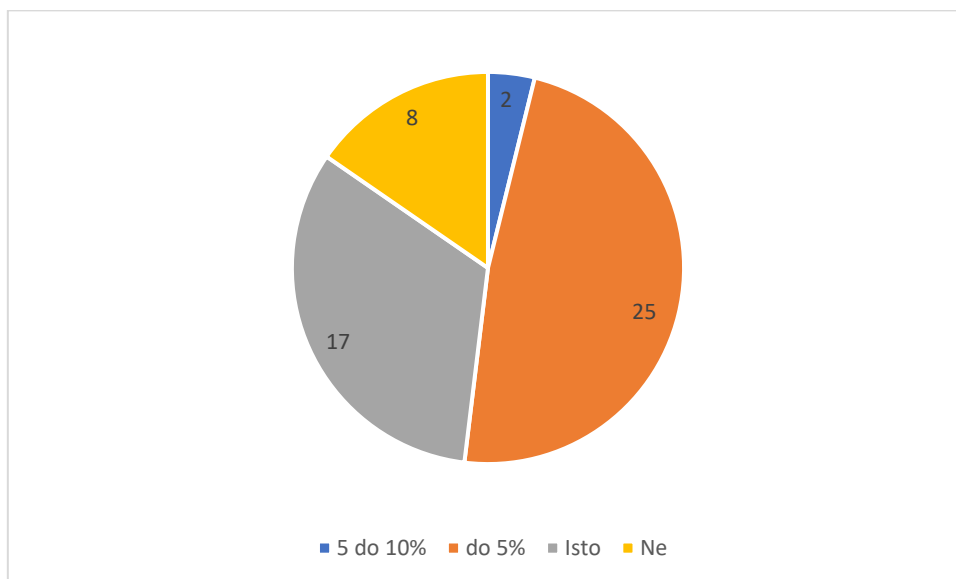


Figure 10 Acceptable price increase amount

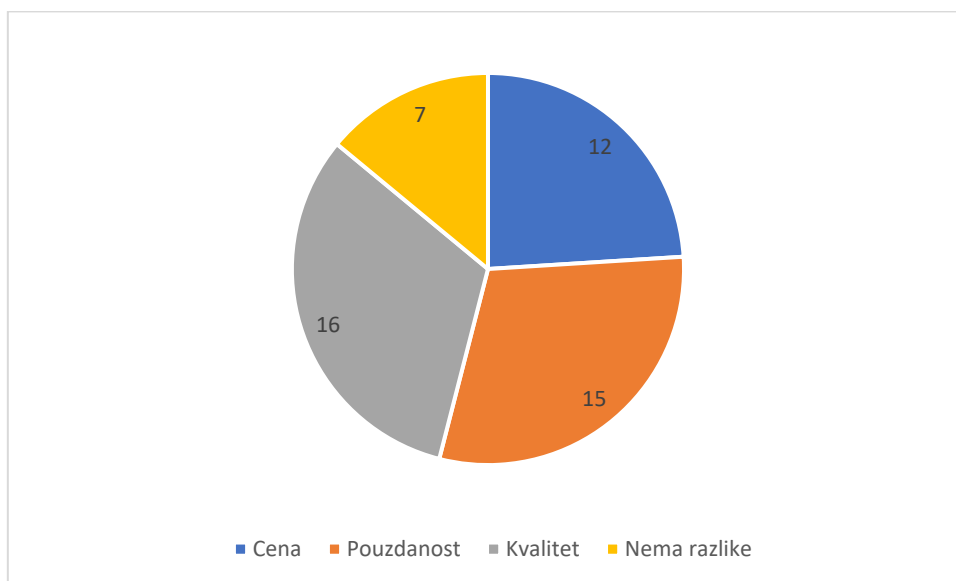


Figure 11 Obstacles

4. Local communities

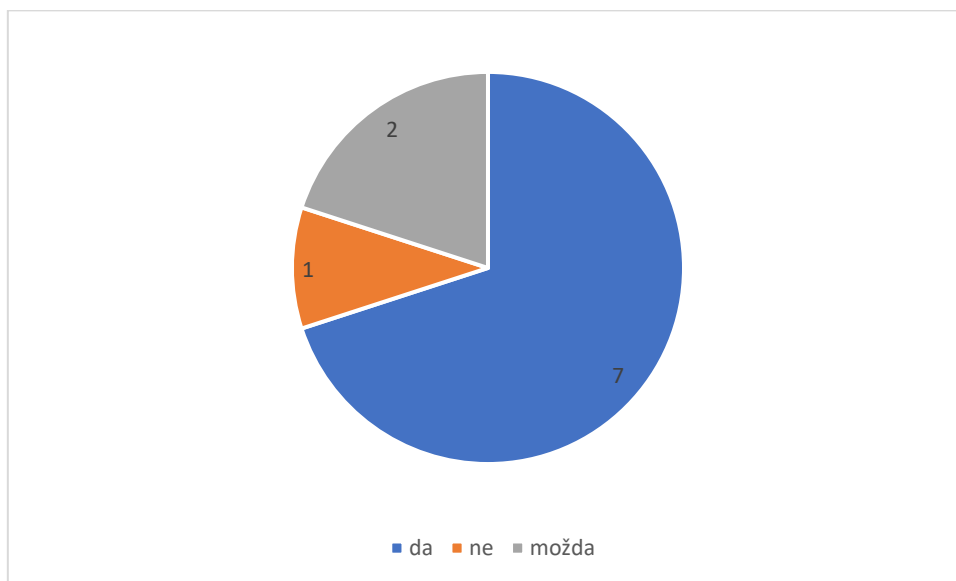


Figure 12 Employment rate increase

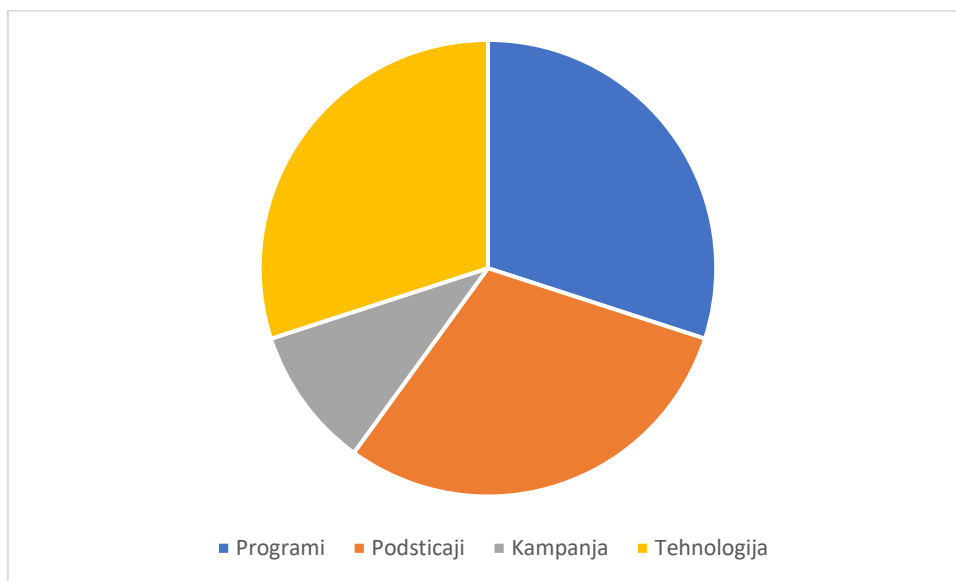


Figure 13 Motives for RES increase

5. Institutions

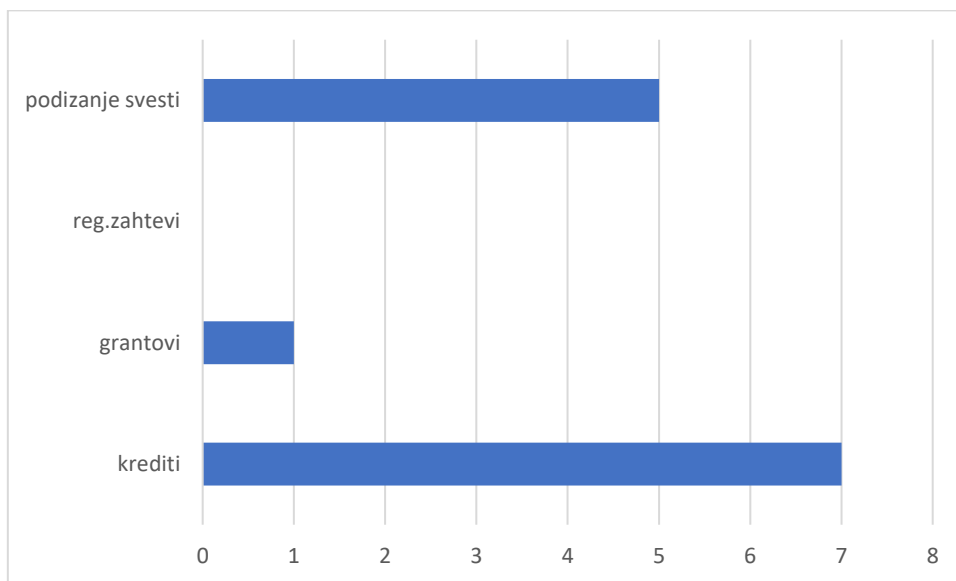


Figure 14 Existing programs

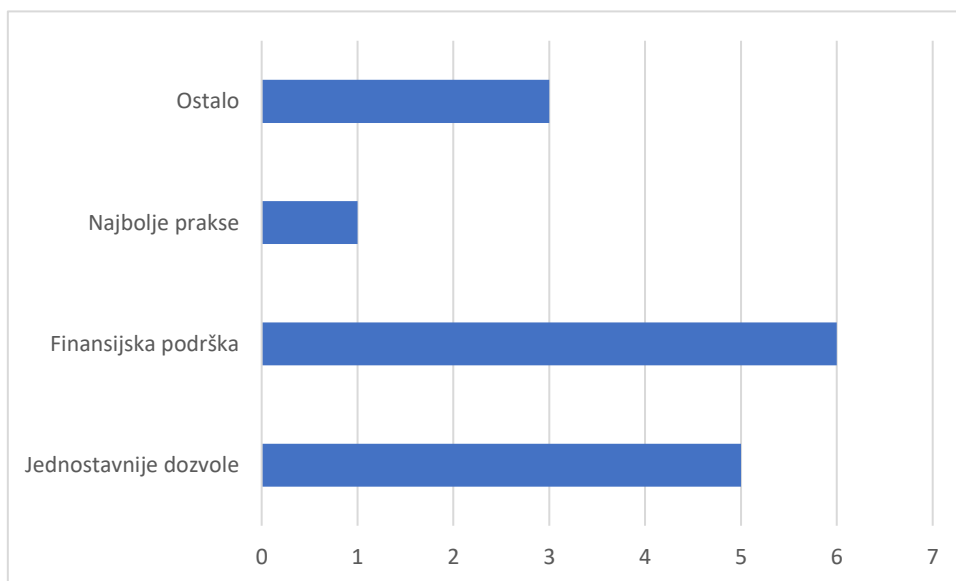


Figure 15 Additional measures

6. Energy companies

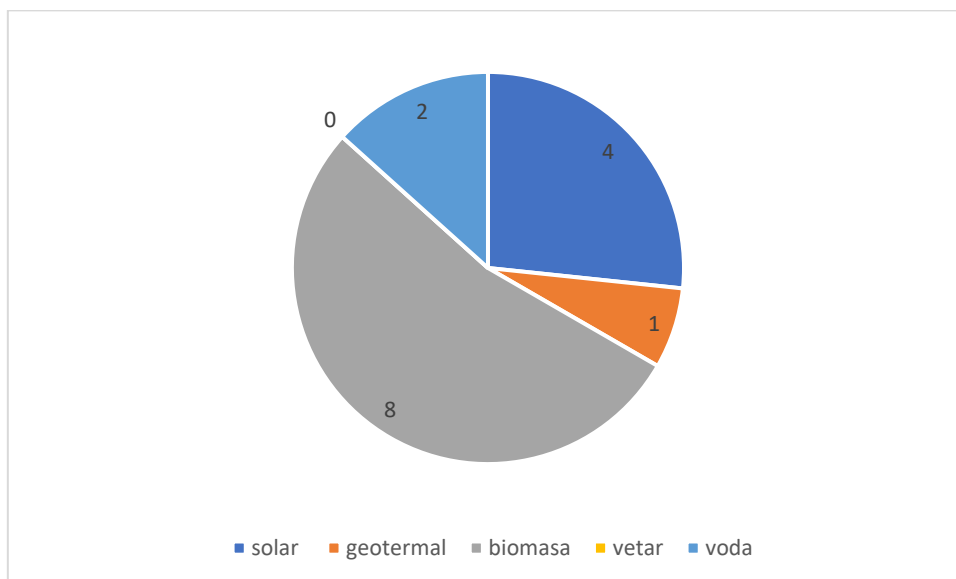


Figure 16 Type of RES

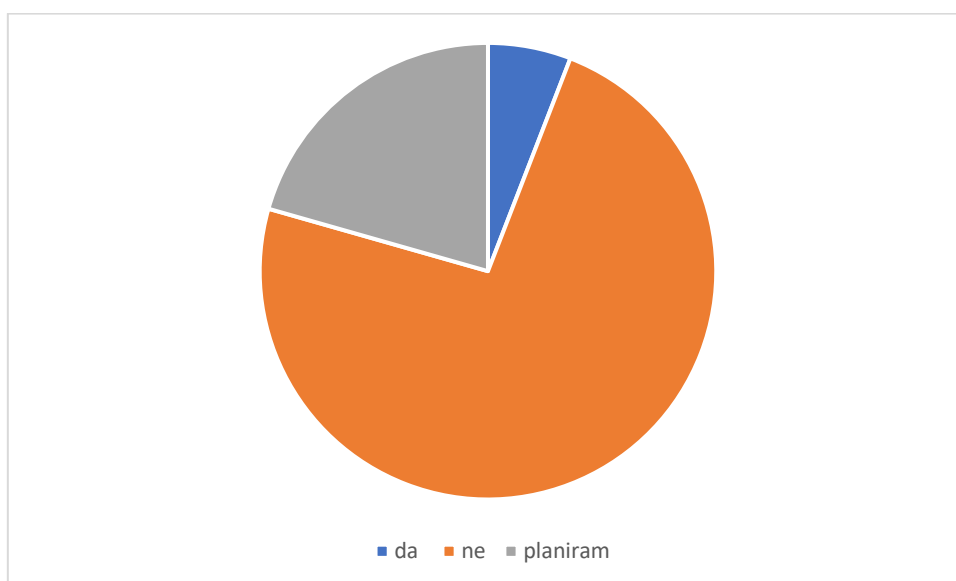


Figure 17 Existing subsidies for clients

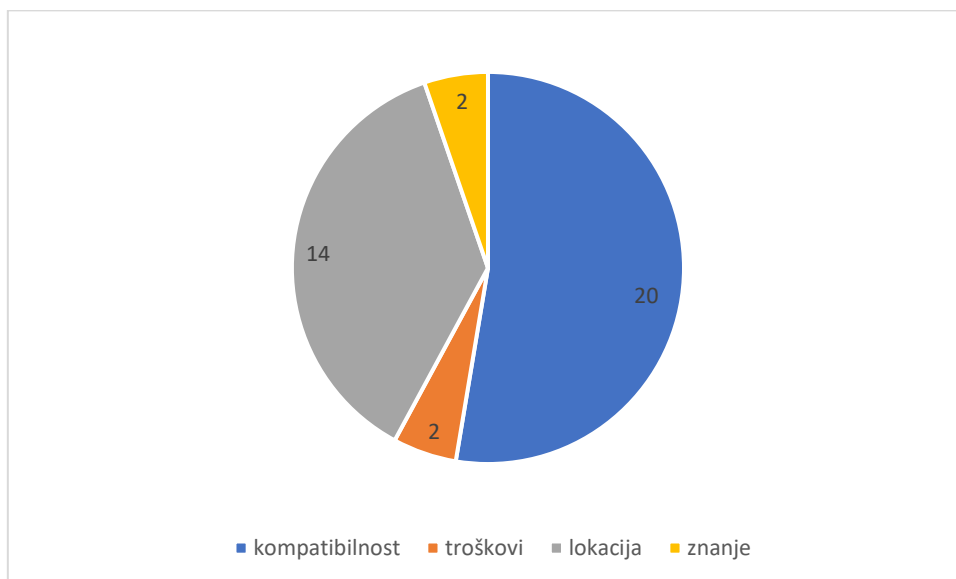


Figure 18 Obstacles

Conclusion

Based on the received responses, the following summary table can be created:

Table 1 Summary table

Category	Conclusions
Tourism facilities	A large number of facilities already use renewable energy sources, primarily wood for heating, as well as solar collectors for hot water. Many are interested in new sources, especially in installing solar panels. Unfortunately, the lack of incentives and high investment costs are the main obstacles to the introduction of new renewable energy sources.
Users	Users generally would not pay more to stay in facilities that use renewable energy sources. Nevertheless, a large number would still prefer to stay in a facility that uses renewable energy rather than one that does not. However, the quality of service is the decisive factor when choosing a facility.
Local communities	There is no strong conviction that increased use of renewable energy sources will lead to higher employment. Ecology, a clean environment, and increased investment in the local community are the main motivations for using renewable energy sources.
Institutions	There are already numerous programs implemented by institutions to increase the use of renewable energy sources. Most are based on bank loans aimed at improving energy efficiency, but there are also various government programs in the form of grants to enhance energy efficiency in the economy. The permitting process is the biggest obstacle to the introduction of new technologies.
Energy companies	The majority of companies are interested in installing solar panels, collectors, and heat pumps to increase their market share. Until now, companies have not offered consumers any special benefits, but they are considering premiums for clients who favor the use of renewable energy sources.

Based on the survey findings, here are some strategic recommendations for future activities to promote renewable energy usage in tourism:

1. Enhance Incentive Programs and Reduce Investment Barriers

- Develop and promote financial incentives such as subsidies, grants, or tax breaks specifically targeted at tourism facilities for installing renewable energy systems.

- Simplify the permitting and approval processes to address administrative hurdles and accelerate technology adoption.
- 2. Increase Awareness and Marketing of Renewable Energy Benefits**
 - Educate facility operators and tourists about the environmental benefits and potential long-term cost savings of renewable energy to foster positive perception.
 - Highlight that while paying more isn't preferred, renewable energy use is a valued aspect, influencing customer choice.
 - 3. Introduce Differentiated Value Proposition**
 - Encourage tourism facilities to market their renewable energy use as a quality and environmental commitment, which can appeal to eco-conscious travelers.
 - Develop certification or labeling programs to help consumers recognize and choose eco-friendly facilities.
 - 4. Support Pilot Projects and Demonstration Initiatives**
 - Launch pilot projects demonstrating the viable integration of solar panels, collectors, and heat pumps, showcasing their benefits and feasibility.
 - Use successful case studies to build confidence and motivate broader adoption.
 - 5. Strengthen Collaboration Between Stakeholders**
 - Facilitate partnerships among tourism facilities, energy companies, and local communities to leverage resources, expertise, and funding opportunities.
 - Promote schemes where energy companies offer premium benefits or discounts for facilities and customers utilizing renewable systems.
 - 6. Promote Local Community Engagement**
 - Align renewable energy projects with community development goals, emphasizing environmental benefits and local investment opportunities.
 - Explore employment or training programs related to renewable energy installation and maintenance to build local capacity.
 - 7. Leverage Institutional Support**
 - Expand and promote existing government programs and explore new grants or funding opportunities tailored to the tourism sector.
 - Advocate for policy reforms to streamline the permitting process, making technology adoption less cumbersome.
 - 8. Monitor and Evaluate Impact**
 - Establish metrics to track the impact of renewable energy projects on tourism experiences, environmental benefits, and local employment.

- Use data to refine strategies and demonstrate success to stakeholders, encouraging ongoing commitment.

Implementing these recommendations can foster a more sustainable, attractive, and economically viable tourism industry that aligns with environmental goals and consumer preferences.

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