A3.7 Field - testing and evaluation

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Description of the tool and its importance for SMEs and PAs:

The CASTWATER project has made available an online tool, exclusively addressed to tourism sector SMEs in Mediterranean, that allows them to understand, compare (with other SMEs), assess and rate their performance on water efficiency & water management. Tourism SMEs (i.e. end users) are invited to provide business related information regarding their investments, measures and actions to promote water efficiency in their establishments, as well as their perceptions on the effectiveness and adequacy of the existing policy framework for water resources in their region.

The data gathered by tourism SMEs' replies are further utilised by public authorities to monitor tourism sector's overall performance in their region and measure the effectiveness of territorial policies on water management.

The online tool has been designed to serve two key functions:

1. To enable tourism SMEs to self-evaluate their performance in sustainable water management, and learn what they can further do to promote water efficiency in their establishment.

2. To measure the degree of good governance and the effectiveness of water-tourism policies to improve sustainable water management, especially at regional and local level.

Results of the tool:

Tourism SMEs: When the users complete the survey through the online tool about their water management performance and their water-tourism policies, they are presented by a rating and a comparison against the other users who completed the tool. Finally they are presented with suggestions to improve water management based on the weaknesses identified by the tool during the survey, For example:

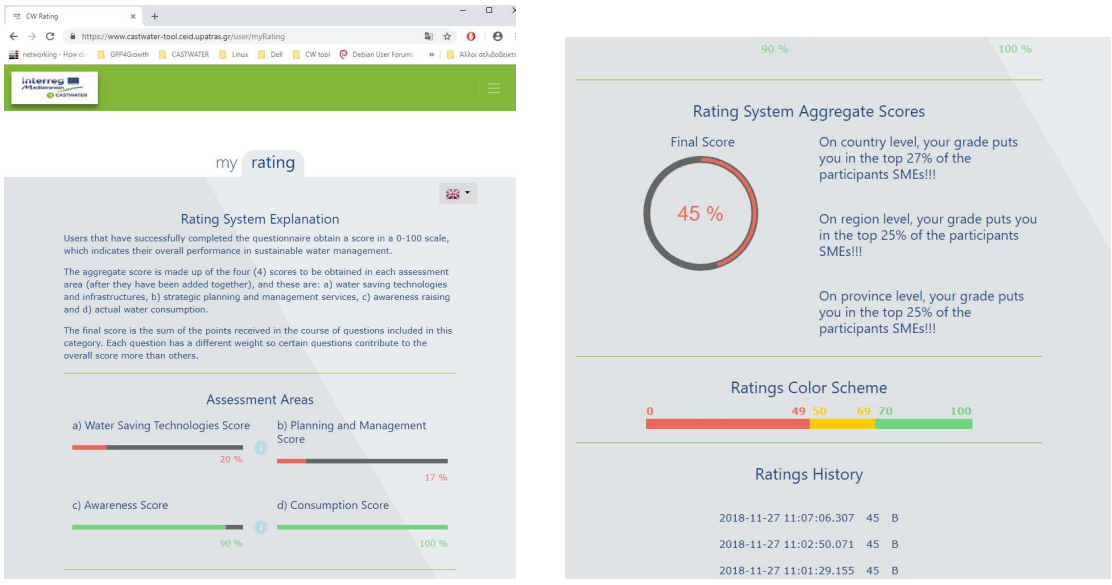

Figure 1. Examples of the rating on the user's water management based on the survey's answers

Public authorities: When multiple SMEs have completed the tool, users from public authorities can generate automatically aggregated statistics on the SMEs water management and their view on policies. They can also filter the results by country, region and province. For example:

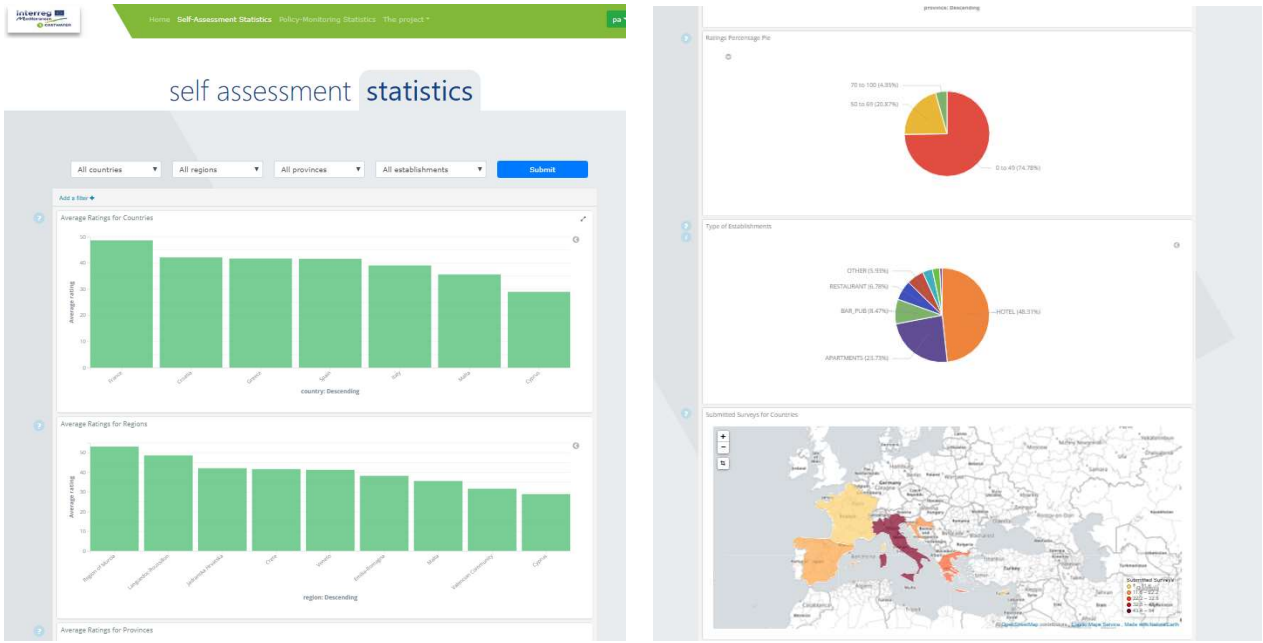

Figure 2. Examples of aggregated statistics on the tourism SMEs on a water management

Questions of the tool:

Below we mention the survey that must be conducted by end users through the online tool.

Water saving technologies & Strategic planning:

Q1. What percentage of your annual budget do you invest in water saving technologies and infrastructures? Budget ratio:

1. None
2. Up to 1%
3. 1-2%
4. 3-5%
5. More than 5%

Q2. Which of the following water saving devices and fixtures does your business use to reduce water consumption? Select all that apply

1. Low-flow or dual flush toilets
2. Flow/pressure regulators or aerators on showerheads or taps
3. Sensors or timers to control faucets
4. Water saving washing machines
5. Water saving cooking appliances
6. None of the above

Q3. Which of the following water recycling technologies has your business adopted to promote water reuse? Select all that apply

1. Greywater reuse system
2. Rainwater harvesting system
3. Sewage treatment plant
4. None of the above

Q4. Which of the following water efficient irrigation technologies/devices has your business adopted to promote water conservation in green areas? Select all that apply

1. Soil moisture sensors
2. Rain sensors
3. Micro-irrigation or drip systems
4. None of the above
5. Not applicable to my establishment

Q5. Has your establishment adopted an environmental management system (e.g. ISO 14001, EMAS)? If yes, please indicate the name of the system.

Q6. Which of the following actions have you performed to improve your water management planning? Select all that apply

1. Measure water consumption
2. Compare business water consumption with tourism industry benchmarks
3. Establish water reduction targets
4. Create a shortlist with potential water management measures
5. Conduct cost-benefit analysis to make informed decisions for measures
6. None of the above

Q7. Which of the following actions does your business perform to improve water management?

1. Carry out regular inspections to detect leaks
2. Carry out routine maintenance to prevent malfunctions
3. Use washing machines on full load
4. Avoid to use high polluting detergents
5. Use pool covers to minimise evaporation
6. Schedule gardening to prevent water loss (e.g. gardening either early in the morning or late in the evening to prevent water loss due to evaporation.)

Q8. How does your business monitor water consumption? Select all that apply

1. Monitoring based on water bills
2. Water audit (process that enables to inventory all water uses in your facility and identify ways to increase water use efficiency)
3. Smart metering
4. Real time monitoring (software used to measure water consumption in real time)

Awareness raising & Water consumption:

Q9. Do you implement any training programs for your staff? What do these programs include?

1. Communicate company's commitment to promote water conservation
2. Communicate water reduction targets
3. Train staff on how to make prudent use of water and use water saving technologies
4. Encourage staff to suggest new ways to decrease water consumption
5. Establish a reward system for employees with environmental awareness
6. No training programs

Q10. How do you manage to engage customers/guests on water sustainability? Select all that apply

1. Inform customers about the measures adopted by the enterprise
2. Invite customers to reuse towels and linens
3. Display water saving notices
4. Rewards for low water consumption (e.g. discounts, spa special offers)
5. None of the above

Q11. Please indicate the average water consumption per visitor day per touristic season.

1. Peak season (mid-June through August)
2. Shoulder season (April through mid-June, September & October)
3. Off-season (November through March)

Q12. Please indicate your establishment's water consumption percentage per usage/category. The sum must be 100%.

1. Accommodation
2. Laundry
3. Kitchen
4. Swimming pool
5. Irrigation
6. Toilet
7. Outdoor activities
8. Other

Q13. Please complete the following fields to calculate the relative amount of wastewater receiving treatment

Yearly water consumption (m3):
Amount of waste water receiving treatment (m3):
Relative amount of wastewater receiving treatment

Policy framework:

Q14. How would you rate the effectiveness of your territory's policies on the following areas related to sustainable water management? (On a scale from 1-5, with 1 being «poor» and 5 being «very high»)

1. Clear assignment of roles and responsibilities for water policy and implementation
2. Local authorities' participation in the water management system
3. Coherent management of water-tourism policies
4. Local authorities' available funding (i.e. budget) for implementing water policies
5. Policies for promoting integrity and transparency in water management
6. Public consultation and participation of stakeholders in water policies
7. Conflict resolution mechanisms (e.g. addressing conflicts arising between different sectors such as agriculture and manufacturing)
8. Educational programs for tourism SMEs to foster sustainable water management
9. Awareness raising campaigns (for the public) on water scarcity issues
10. Provision of financial incentives to tourism SMES to adopt water efficiency technologies

Q15. How often do public authorities carry out chemical controls on the quality of water provided by tourism enterprises in your region?

Q16. How would you rate the extent of positive impact that the following political factors have on affecting sustainable tourism water management in your territory? (On a scale from 1-5, with 1 being «none» and 5 being «high»)

1. Territorial policies on sustainable water management
2. Tourism development policies
3. Water governance

Q17. How would you rate the extent of positive impact that the following economic factors have on affecting sustainable tourism water management in your territory? (On a scale from 1-5, with 1 being «none» and 5 being «high»)

1. Flexible water pricing policies
2. Cost of water saving measures
3. Funding programmes for water sustainability

Q18. How would you rate the extent of positive impact that the following socio-cultural factors have on affecting sustainable tourism water management in your territory? (On a scale from 1-5, with 1 being «none» and 5 being «high»)

1. Public awareness on water scarcity issues
2. Cultural issues related to water management
3. Conflicts of economic and environmental interests

Q19. How would you rate the extent of positive impact that the following technological factors have on affecting sustainable tourism water management in your territory? (On a scale from 1-5, with 1 being «none» and 5 being «high»)

1. Water infrastructures
2. Technologies' availability in the local market
3. Tourism SMEs' compatibility to new technologies

Q20. How would you rate the extent of positive impact that the following environmental factors have on affecting sustainable tourism water management in your territory? (On a scale from 1-5, with 1 being «none» and 5 being «high»)

1. Fresh water availability
2. Climate change pressures
3. Vulnerability to extreme events

Q21. How would you rate the extent of positive impact that the following legal factors have on affecting sustainable tourism water management in your territory? (On a scale from 1-5, with 1 being «none» and 5 being «high»)

1. Regulation on the uses of recycled water
2. Regulation on water use during droughts

Q22. Is your establishment connected to sewage and waste water treatment facilities?

Yes, my establishment is connected to the central sewage system
Yes, we have our own wastewater facilities
Not yet, we pump our wastewater into local ditches, septic tanks or the sea
Do not know

Q23. Does your establishment provide tourism services that are environmentally and culturally responsible while appreciating nature and promoting conservation (e.g. ecotourism services)?

Q24. What water supply sources are used in your establishment? Select all that apply

1. Public water utility
2. Private water utility
3. In-house groundwater abstraction
4. In-house rainwater harvesting
5. In-house greywater recycling
6. Other (please specify)

Q25. How would you rate the quality of water provided by your establishment for the different uses? (On a scale from 1-5, with 1 being «poor» and 5 being «excellent»)

1. Drinking
2. Bathing
3. Swimming pool
4. Spa and wellness
5. Recreational activities

Q26. Have ever water borne diseases been reported at your establishment?

Q27. How many complaints about your establishment's water quality have you received during the last year?