Coastal areas sustainable tourism water management in the Mediterranean
VLC Sustainable tourism strategy

Our plan:

Sustainable Tourism ecosystem.

Working group Audit on sustainability of the destination:

Implementation of national & international projects

Roadmap for city Tourism sustainability

VLC Sustainable Tourism Observatory

Digital transformation of water management supply to improve hydraulic efficiency in Valencia
87 %

Real hydric efficiency, measured by the biggest remote sensing network in Europe.

Only European city >750,000 inhabitants totally covered by remote sensors.
International recognition

Center for an Urban Future

Idea 13
Smart Water Management

Innovation in a Nutshell
A major city is using smart metering technology to repair leaks, track fraud, and influence residents to reduce their water consumption.

Program Elements
- Smart water meters send daily or hourly information on water usage to the utility
- The utility uses this granular data to identify water leaks and fraud, as well as providing information to water users about their consumption.
- Utility employees no longer need to visit houses to read the water meter and are therefore reassigned to more valuable tasks.

Benefits
- Excessive water usage, they are exploring the potential that better data can change behavior. One city in particular has developed a technology-based strategy that may point the way for its peers in metropolitan areas.
- Valencia is Spain’s third largest metropolitan area, with a population of more than two million people. Given Valencia’s hot, arid, and climate, management of scarce water resources is a high priority. Beginning in 2006, the regional water utility, Grupo Aguas de Valencia (Aguas), began encouraging municipal authorities to install smart water meters, which can communicate water usage to a daily or even hourly basis to the utility. By the end of 2015, more than half of all meters in Valencia were smart meters. Aguas has contracted with multiple smart-metering vendors to avoid getting locked in to one approach.

Digital Water Prize 2017
A realtime network regulation model that based on Machine Learning - IA

- Work force planning
- Mathematic models
- Water quality
- Drinking and waste water networks
- Optimal routes
- GIS integration
- ....
DASHBOARDS

TIRESIAS

TECNOLOGÍA/FABRICANTE
TODO EL GRUPO
JERARQUÍA

1.192.814
CONTADORES TOTALES

692.594
CONTADORES CON TELELECTURA

551.646
CONTADORES EN RED FIJA

526.568
LEÍDOS EN RED FIJA

95.45%
RENDIMIENTO EN RED FIJA

EVOLUCIÓN
IMPLANTACIÓN TELELECTURA

Zoom: 3m 1y 3y All

Filtro

Buscar...

RENIDIMIENTO
TECNOLOGÍA (NO IOT)

Zoom: 3d All

Leyenda

Cobertura telelectura (%)

1 > 90%

2 50 - 90%

3 < 50%

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TURISMO VALÈNCIA is a non-profit Foundation with the participation of the València City Council, the Chamber of Commerce, Feria València and the València Business Confederation.

Virtually all local businesses in the tourism sector are associated with it.

Since its creation in 1991, the Foundation has contributed to the evolution of tourism in the city, favoring employment, tourism development and increase in its economic impact; factors which have directly influenced the wellbeing of Valencian society.
Strategic plan 2017-2020

Strategy I: Adding value for visitors.

Strategy II: market segmentation & technology

Strategy III: Smart, sustainable destination.

Strategy IV: Tourism Governance: transparency, efficiency & collaboration.
OUR PROJECTS

Discover all our Projects

8
STUDY PROJECT

12
PILOT PROJECT

4
CAPITALISATION PROJECT

2
INTEGRATED TERRITORIAL PROJECT
OUR COMMUNITY

Tourism sector is amongst the highest income generators in the Mediterranean. Leisure related activities make tourism a leading economic sector in terms of gross value added and employment. Tourism contributes directly to regional economies with sectoral synergies and strong multiplying effects.

Our aim is to study, test and capitalise innovative instruments and actions towards the enhancement of tourism sustainability in the Mediterranean.

With this common objective, 17 Modular Projects (MPs) are implemented under the Interreg Med Sustainable Tourism Community.

LET'S ENJOY THE MEDITERRANEAN RESPONSIBLY!
Why Castwater?

The project's overall objective is to support tourism towards sustainable water management across MED coastal areas by improving the monitoring and assessment of water use across the tourism sector.

1. Identify gaps
   studying thoroughly relevant needs and potential impact

2. Develop common tools and joint actions to
   monitor and assess sustainable tourism water management in the area

3. Pilot-test
   the developed tools to ensure their integration into the territorial policy context

CASTWATER is the first Interreg MED project to support sustainable tourism policies & practices on water efficiency in coastal areas. The transnational challenge is to reduce the impact of tourism activities on environmental heritage and to improve management of water resources.
Partners.

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Objectives.

• Enhancing the monitoring and evaluation procedures, benchmarking methods, tools, and experiences in water sustainability performance within the tourism sector.

• Improved knowledge, data shortage and comparability of coastal Tourism statistics and information.

• These results will directly support the monitoring and measuring of activities regarding sustainability in MED coastal areas.
## Key Castwater project deliverables.

### Research & Knowledge

- **Policy Analysis Report on Sustainable Tourism Water Management in the Partnership Countries.**
- **Learning and Knowledge Resources on Sustainable Tourism Water Management for Public Authorities.**
- **Evaluation methodology on the public authorities capacity to support tourism water sustainability.**
- **Sustainable Tourism Water Management Needs Assessment in the Partnership Touristic Area.**
- **Policy Guidelines for Optimising Water Management in Tourism Policies.**

### DELIVERABLE DATABASE

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<th>Project</th>
<th>Target Audience</th>
<th>Type</th>
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<tr>
<td>LEARNING AND KNOWLEDGE RESOURCES ON SUSTAINABLE...</td>
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<td>EVALUATION METHODOLOGY ON THE PUBLIC AUTHORITIES...</td>
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<td>FIELD-TESTING AND EVALUATION METHODOLOGY REPORT</td>
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<td>3RD PROJECT MEETING PRESS RELEASE</td>
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<td>D.3.2 SUSTAINABLE TOURISM WATER MANAGEMENT NEEDS...</td>
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Key Castwater project deliverables.

Policy Analysis Report on Sustainable Tourism Water Management in the Partnership Countries

This report presents the findings of the study conducted, and analyses the input collected from public authorities to evaluate the policy framework regarding sustainable tourism water management solutions in the partnership countries.

Learning and Knowledge Resources on Sustainable Tourism Water Management for Public Authorities

Guidance to specify knowledge and information for public authorities to build capacity and support policy transfer on sustainable tourism water management.

Evaluation methodology on the public authorities capacity to support tourism water sustainability

Guidance and tools to evaluate the public authorities’ capacity to support sustainable tourism water management, corresponding to the developed learning and knowledge resources.

Sustainable Tourism Water Management Needs Assessment in the Partnership Touristic Area

The report compiles and analyses the data gathered to pinpoint the needs faced by the tourism sector as concerns water demand management, and awareness raising to support sustainable tourism water management in the partnership territories.

Policy Guidelines for Optimising Water Management in Tourism Policies

The report outlines a high level policy objective for water management in the tourism sector and presents a number of measures outlined through the CASTWATER assessments which can be adopted by public authorities and operators in the sector to optimise water management in the sector.
THE CASTWATER TOOL IS ONLINE!

05/05/2019

A tool to help companies to assess their use of water and gives public authorities suggestions for their policies on water management:
www.castwater-tool.ceid.upatras.gr

Self-assessment for SMEs

This tool can help SMEs identify ways to assess and improve water management issues in your enterprise. The tool will ask a series of questions to evaluate the current status and identify areas of improvement and will provide recommendations. Any stored data are anonymous and will be used solely for statistical analysis.

Companies may also provide feedback on water management policies in their area.

Monitoring for Public authorities

This tool may provide public authorities with statistics on the current status of water management sustainability on tourism SMEs in your area. Statistics can be presented per NUTS 1,2 and 3 areas.

It will also provide the results from the survey on policies evaluation by touristic SMEs

The CASTWATER monitoring tool: https://www.castwater-tool.ceid.upatras.gr/
Online tool: monitoring for public authorities.

- This tool may provide public authorities with statistics on the current status of water management sustainability on tourism SMEs in your area. Statistics can be presented per NUTS 1, 2 and 3 areas.
- It will also provide the results from the survey on policies evaluation by touristic SMEs.

**how this works**

This tool will help you monitor the level of sustainable water management in the tourism sector in your region and provide an insight for the sector’s views on the current policy framework. Specifically it provides:

**Self-assessment water management statistics**

You can watch aggregated statistics on water management solutions adopted by tourism enterprises and categorize them per region, country and type of establishment.

**Policy survey**

You can obtain a picture of the level of trust in the current policy framework by the SMES.
Online tool: self-assessment for SMEs.

- This tool can help SMEs identify ways to assess and improve water management issues in your enterprise.
- The tool will make you a series of questions to evaluate your current status and identify areas of improvement and will provide recommendations.
- You may also provide feedback on water management policies in your area.

**how this works**

This tool will help you assess and improve the water management in your establishment. It is consisted of 3 steps:

**Survey**
Answer the questions for 5 sections. Your answers will help us evaluate the current status.

**Rating**
Based on your answers we will evaluate your water management. You will be able to see how your establishment compares with others in your region.

**Recommendations**
Based on your answers, we will identify weak points that you can improve and we will provide recommendations on how you can conserve water and therefore reduce your water bill.

Interreg Mediterranean
castwater project

VLC Turismo València
Castwater online tool: survey.

4 sections:

A. Water saving technologies & Strategic planning.
B. Awareness raising & Water consumption.
C. Policy framework.
D. Water availability, quality & environmental health.

You have successfully completed the survey!

You can alter your response here

You can see your rating here

You can see your recommendations here
• Users that have successfully completed the questionnaire obtain a score in a 0-100 scale, which indicates their overall performance in sustainable water management.

• The aggregate score is made up of the four (4) scores to be obtained in each assessment area (after they have been added together)

• The final score is the sum of the points received in the course of questions included in this category. Each question has a different weight so certain questions contribute to the overall score more than others.
Based on your survey results and your business' rating, you could follow these recommendations:

- You should invest a bigger percentage of your annual budget in water saving technologies and infrastructures.
- You should use water saving devices and fixtures to reduce water consumption. [+]
- You should adopt water recycling technologies to promote water reuse. [+]
- You should adopt water efficient irrigation technologies/devices to promote water conservation in green areas. [+]
- You should adopt an environmental management system.
- You should perform more actions to improve your water management planning. [+]
- You should use washing machines on full load to improve water management.
- You should monitor water consumption more intensively. [+]
- You should implement training programs for your staff. [+]
- You should try harder to engage customers/guests on water sustainability. [+]
- You should try to increase the amount of wastewater receiving treatment in your establishment.
See you in Valencia