

# Overtourism and post Covid

## Why calculating carrying capacity is still crucial

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GOOD MANAGEMENT PRACTICES FOR THE DEVELOPMENT OF SUSTAINABLE AND RESPONSIBLE TOURISM IN MEDITERRANEAN DESTINATIONS

3 JULY 2020

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# FROM OVERTOURISM TO ZERO TOURISM?

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# Overcrowding. Is it over?

## Folla a Venezia, code per Palazzo Ducale

Esauriti posti auto, si parcheggia solo a Mestre

Redazione ANSA

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# Carrying Capacity



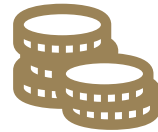
## Natural carrying capacity

- ✓ Density
- ✓ Facility unit
- ✓ Pollution
- ✓ Natural ecosystem



## Social carrying capacity

- ✓ Tourists
- ✓ Host population
- ✓ Stakeholders



## Economic carrying capacity

- ✓ Tourism monoculture
- ✓ Income from tourism

### POSSIBLE SOLUTIONS:

- Improve infrastructures and facilities
- Create experiences and attractions that benefit residents as well as visitors
- Ensure local communities benefit from tourism
- Communicate with and engage local communities
- Communicate with and engage visitors
- Promote tourism to other type of visitors
- Promote dispersal visitors all year long
- Set a System to measure and monitor tourism
- Promote the dispersal of visitors within the city and beyond
- Limit the number of tourism establishments  $\frac{n}{k}$
- Limit the number of visitors  $\frac{n}{k}$
- Stop tourism promotion



# Carrying capacity model

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Calculating the carrying capacity of a tourism destination using a linear programming method is a process that follows these operative steps:

1. identify the tourism sub-systems of a destination, especially regarding tourism facilities and services;
2. classify the type of users who often utilize those sub-systems;
3. determine the level of usage of these sub-systems by user profile;
4. proceed with the quantitative analysis with the fine scope to maximize the revenue of the destination.

# Tourism sub systems

1. Accommodation sector
  - Hotel
  - Extra-hotel + Airbnb
2. Food and beverage category
3. Mobility and transportation facilities
  - Capacity of public transportation
  - Number of parking place
4. Environmental issues and waste management
5. Culture sector
6. OTHER TOURISM SUBSYSTEMS

## TOURISM SUB-SYSTEMS AND UTILIZATION RATE

Set the limits and the utilization rate of every sub-system.

?	<b>Accommodation sector - Hotel</b>			
	1 Hotel tourists +	0 B&B, Airbnb tourists +	0 Day visitors <	18,400
?	<b>Accommodation sector - B&amp;B, Airbnb and similar</b>			
	0 Hotel tourists +	1 B&B, Airbnb tourists +	0 Day visitors <	25,500
?	<b>Food and Beverage facilities - Restaurants</b>			
	0.75 Hotel tourists +	0.65 B&B, Airbnb tourists +	0.2 Day visitors <	240,000
?	<b>Mobility - Parking facilities</b>			
	0.33 Hotel tourists +	0.33 B&B, Airbnb tourists +	0.75 Day visitors <	20,000
?	<b>Mobility - Public transportation</b>			
	1 Hotel tourists +	1 B&B, Airbnb tourists +	2 Day visitors <	46,000

# USERS AND UTILIZATION RATE

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Taking in account the possible users of these sub-systems concerning the tourism carrying capacity it is possible to identify different profile as:

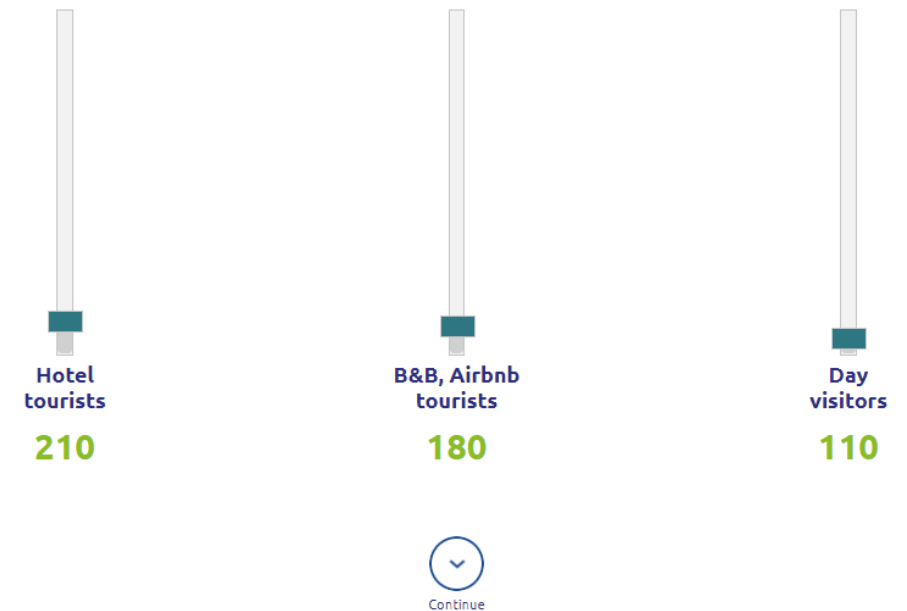
1. Italian and foreign tourists that decide to stay in the destination for a minimum of one night in a hotel (TH);
2. Italian and foreign tourists that had decide to sleep in an extra-hotel accommodation as B&B or Airbnb (NTH);
3. excursionist that come to visit the city for different purposes (leisure or business) but decided to come back home or not to sleep in Venice historical centre (E).
4. Last but not least **RESIDENTS AND CITY USERS!!** (only for some sub-systems)

# USERS, UTILIZATION RATE AND EXPENDITURE

1. TOURIST (HOTEL) = sleep in a hotel, eat in a restaurants (more than once), use public transport, visit a cultural site, doesn't park the car, spend 220€ a day
2. TOURIST (B&B/AIRBNB) = sleep in a B&B, eat in a restaurant, .....spend 200€ a day
3. DAY VISITORS = don't sleep in a hotel/B&B, eat only one time or less, ect.... Spend 50€ a day
4. RESIDENTS AND CITY USERS= use public transportation, eat in a restaurant, ....

## DAILY EXPENDITURE PER TYPE OF USERS

Fill with the daily average expenditure per tourists and day visitors





# Connecting with the altereco measures

WE DECIDED TO COMPARE THE TCC MODEL RESULTS AND THE REALITY OF TOURISM FLOW IN THE DESTINATION.

## REAL TOURISM FLOW

To compare the optime number of users in a destination with the reality, please fill the three circle with the corresponding number of tourists and day visitor per day.



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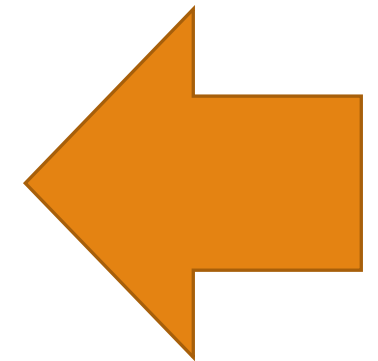
## RESULTS

Press *compute* and see the optimal level of tourist flows in your destination.

COMPUTE

Category	Calculated	Real	Real/Calculated	Result
Hotel tourists	18,400	14,000	0.76	●
B&B, Airbnb tourists	25,500	7,612	0.30	●
Day visitors	1,050	58,000	55.24	●
<b>Total</b>	<b>44,950</b>	<b>79,612</b>		●

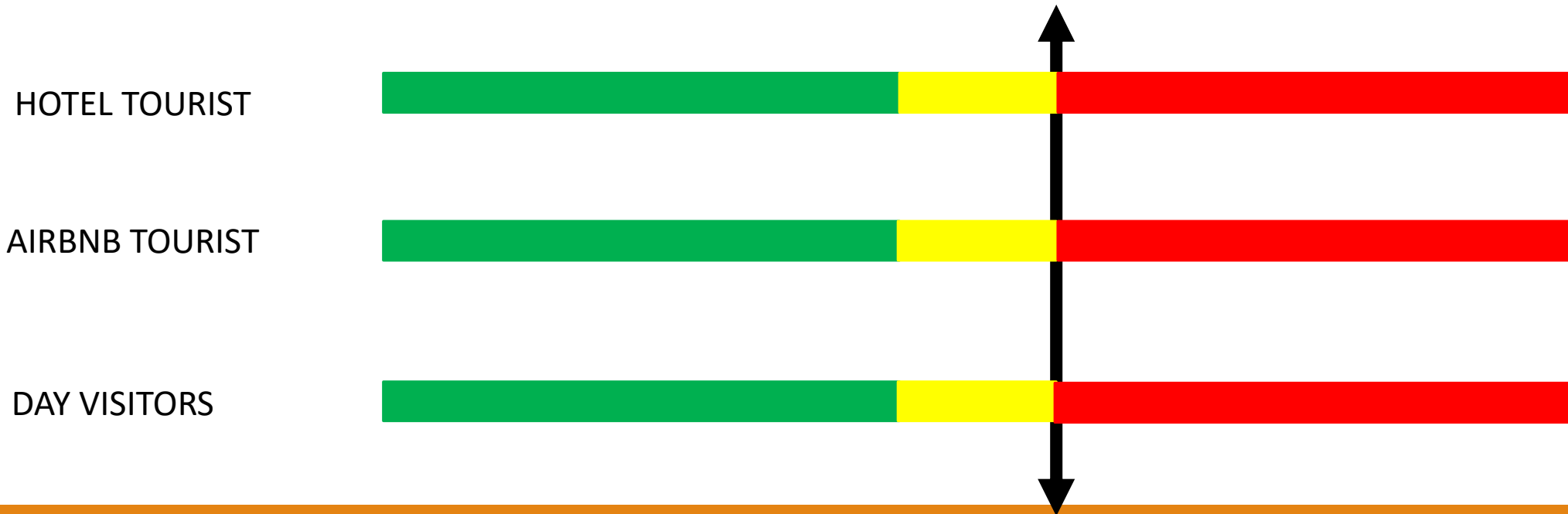
CRITICAL LEVELS



Total revenue = 8,517,000

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## MEASURES

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1. Experiences and Guided tours ("Nervi, tra arte e natura" and "Nervi, il profumo dell'arte", "Tasting the sea", "The sea on the hill", "Water Sports", "The taste of Hospitality")
2. Smart-Educ-Tourists – tourism education
3. ALTER ECO APP – tourism hotspots
4. Development of a System of Sustainable Tourism Indicators and an Online Platform
5. Tourism strategy 2020
6. Tourism carrying capacity, here the limit!
7. Destination Florence
8. Respect the city - 2 - Time management of cruise passengers
9. DISCOVER MALAGA
10. ALTER ECO APP – control visitor flows
11. Electronic Access Control & Counting Equipment for visitors
12. City in balance
13. Comfort improvement of tourist accommodation

# TOOL

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<https://alter-eco.interreg-med.eu/>