Three steps to sustainable transport in Venice

Stronger action needed to save the “The Floating City” from drowning

➢ More needs to be done to limit the negative impacts of unsustainable transport in Venice.
➢ Three policy approaches are essential to meeting this goal:
  - We must reduce overall city transport activity; we must improve the existing fleet’s energy and emissions efficiency; and we must decrease the reliance on cruise ships as a source of tourism revenue.

What is the issue?
The city of Venice, once a major cultural, financial, and maritime power, is at present facing a multitude of existential challenges. These include a declining native population, a series of high-profile bankruptcies, and environmental destruction caused by erosion, pollution, and subsidence. At the root of many of these problems is an outdated and unsustainable transport system.

With 30 million annual visitors, 3000 daily boat trips, and 500 cruise ship visits per year, the existing transportation system – composed primarily of diesel-powered water vehicles – is unable to meet the city’s transport demands in a sustainable manner. Tourism-related congestion slows down average travel speeds by 20% [1]; waterbus engines emit 27,000 tonnes of CO₂ and spill up to 30 tonnes of diesel each year [2], [3]; and oversized cruise ships accelerate the erosion of the ancient city’s foundations, exposing the city to major flood risks. However, the biggest concern of all is the lack of action taken by policy makers in response to these issues.

Why is this important?
Despite the urgency of the challenge, policies in Venice continue to favour unsustainable forms of mobility and excessive transport activity. Unless local authorities take concerted action, the city will therefore continue to crumble under the pressures of human transport demands.

Firstly, poor standards of living due to over-tourism and ineffective mobility options are causing dissatisfaction amongst residents leading to a 2% native population decline each year [4]. This has grave consequences to the city’s non-tourism-related economy in sectors such as shipbuilding, industrial exports, and glass production [5]. In addition, even tourists – whose holiday budgets are essential to Venice’s economy – suffer under the current transport system. The combination of overcrowded boat trips and sour diesel fumes are leaving many visitors disappointed with their trip. Travel blogs titled: “Venice stinks like a thru-hiker with dysentery coming off the Appalachian Trail” hurt the city’s economy more than they help. Lastly, the monetary cost of environmental damage due to unsustainable transport in the Historic Centre is significant. Annual damage costs of pollution, congestion, and infrastructure repairs due to public transport are estimated to be €793 million, or 10% of the city’s annual GDP [2].

What should policy makers do?
There is no single solution to Venice’s transport problems. However, a sustainable transport solution can be realised if policy makers act quickly in three main policy areas: reduce overall transport activity; improve the fleet’s energy and emissions efficiency; transition away from cruise ships as a source of tourism revenue.

Reduce overall transport activity: This can be accomplished by a combination of (i) reducing the number of travellers and (ii) reducing the average distance per traveller. To achieve the former, one option is to charge an ‘overnight tax’ to dissuade tourists from visiting without compromising revenues from touristic activity [2]. Similarly, the average distance travelled can be decreased by better informing tourists about potential transport routes. A ‘Citymapper’-like travel application and updated (English) street signs would help travellers cover distances more effectively.

Improve the fleet’s energy and emissions efficiency: Pollution and emissions profiles for vehicle engines must be improved. Strictly enforcing vehicles, especially public transit vehicles, to meet emission standards such as [6] will incentivise the shift to an electrified, cleaner, and more energy-efficient transport fleet.

Transition away from cruise ships as a source of tourism revenue: In addition to accelerating erosion, cruise ships bring many ‘eat-and-flee’ tourists who contribute little to the Venetian economy [1]. Policies aimed at reducing cruise ship activity in the lagoon should be considered. These include rerouting oversized ships, building a new ship terminal outside the lagoon, or banning cruise ships entirely.
References


