

Management of the Economic Value of Externalities in Tourism

Tourism PhD Seminar - Faculty of Economics, University of Algarve
February 17, 2023

Prof. Fernando Perna

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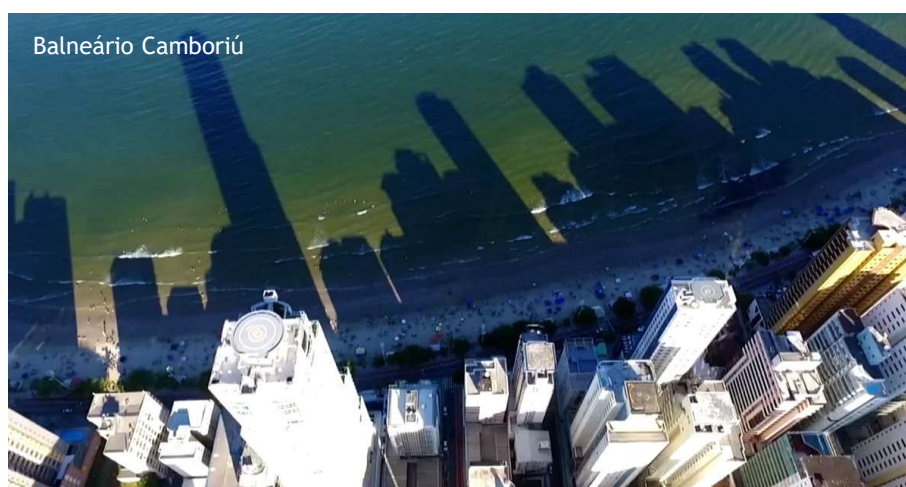


Fernando Perna

- Senior Lecturer at University of the Algarve, High School of Management, Tourism and Hospitality (Portugal).
- PhD in Applied Economics, University of Algarve-FE; Master in Environmental and Energy Policy and Economics (ISEG-UTL)
- Research interests: links between economics and tourism in their multiple facets related to regional development, sustainability, impact of events, coastal zone management and blue economy.
- Coordinates national fundamental and applied research projects, and international research and educational projects in Europe, Algeria, Cape Verde and China.
- Publications in peer reviewed journals in tourism, leisure and hospitality management domain and regularly reviews papers for several journals and scientific meetings
- Researcher and former national director 2020-2022 of CITUR - Centre for Tourism Research, Development and Innovation (Portugal).

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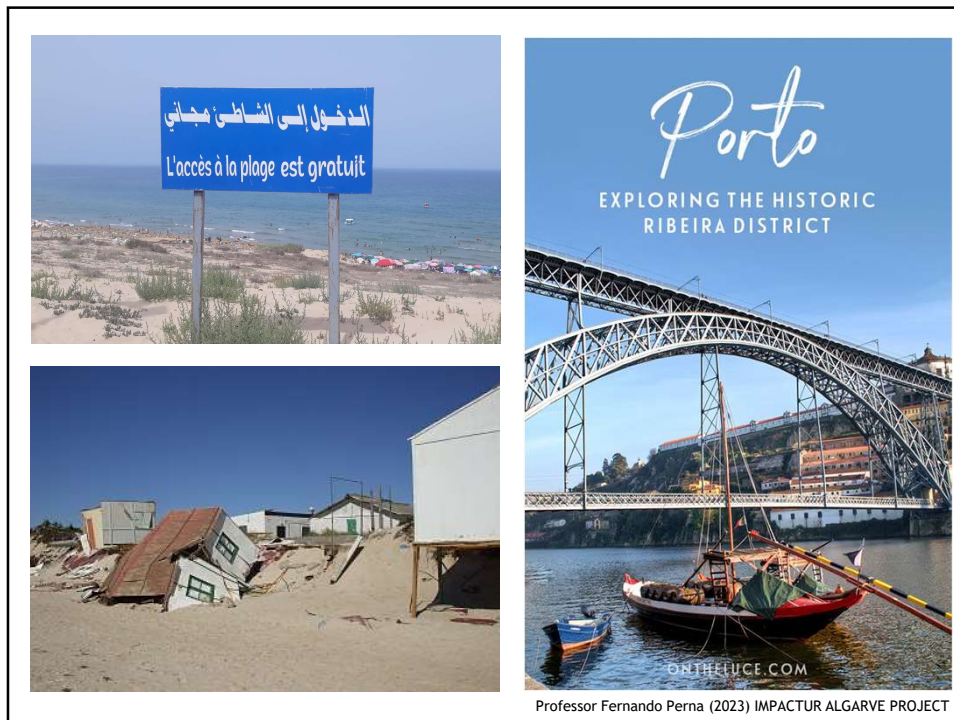
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Source: scoopnest.com

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What Is an Externality?

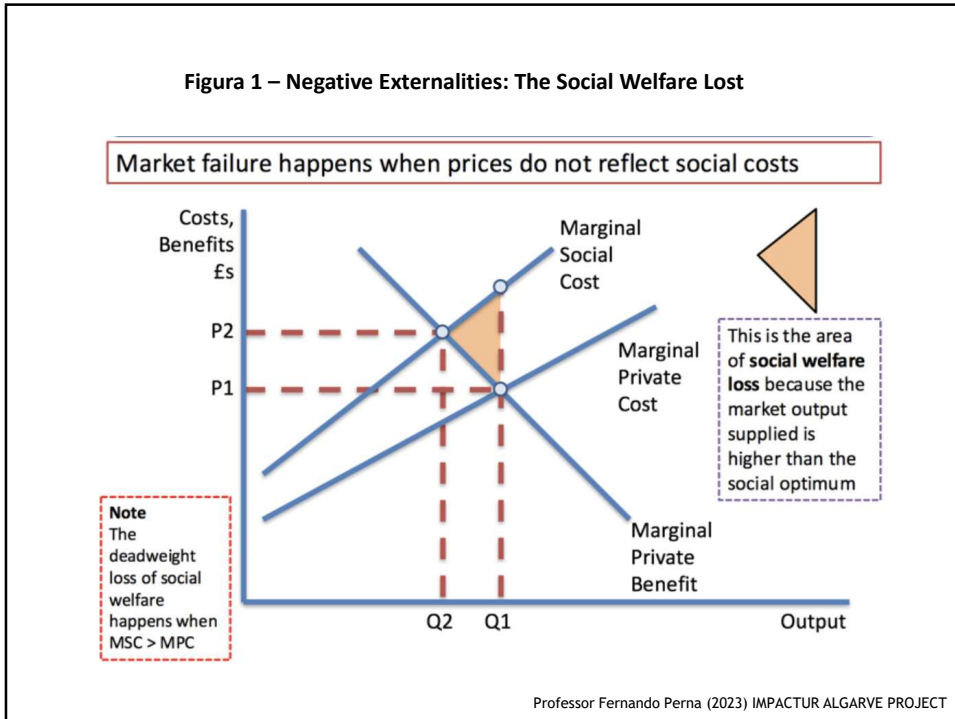
An externality is a cost or benefit caused by a producer that **is not financially incurred or received by that producer**. An externality can be both **positive** or **negative** and can stem from either the **production** or **consumption** of a good or service. The costs and benefits can be both **private**—to an individual or an organization—or **social**, meaning it can affect society as a whole.

What Is Pareto (1848-1923) Efficiency?

Pareto efficiency, or Pareto optimality, is an economic state where resources cannot be reallocated to make one individual better off without making at least one individual worse off. Pareto efficiency implies that resources are allocated in the most economically efficient manner, but does not imply equality or fairness. An economy is said to be in a Pareto optimum state when no economic changes can make one individual better off without making at least one other individual worse off.

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Externalities (-)

Pollution through Tourism

Tourism can cause the same forms of pollution as other industry.

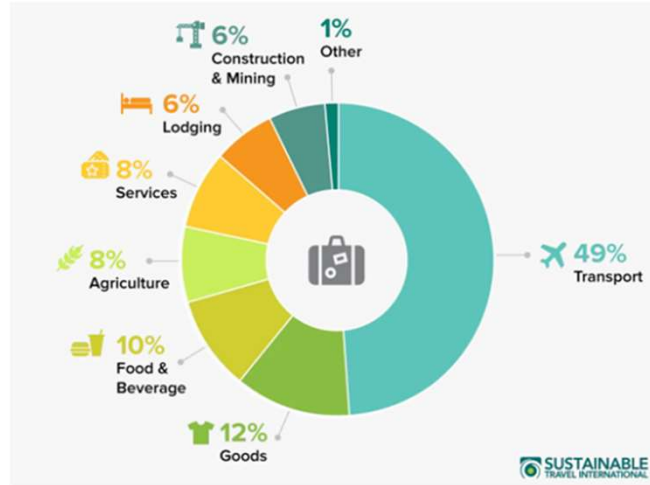
fppt.com

Source: Soni, Prashant (2016), Indian Institute of Tourism and Travel Management.

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Figura 2 – Tourism Carbon Footprint

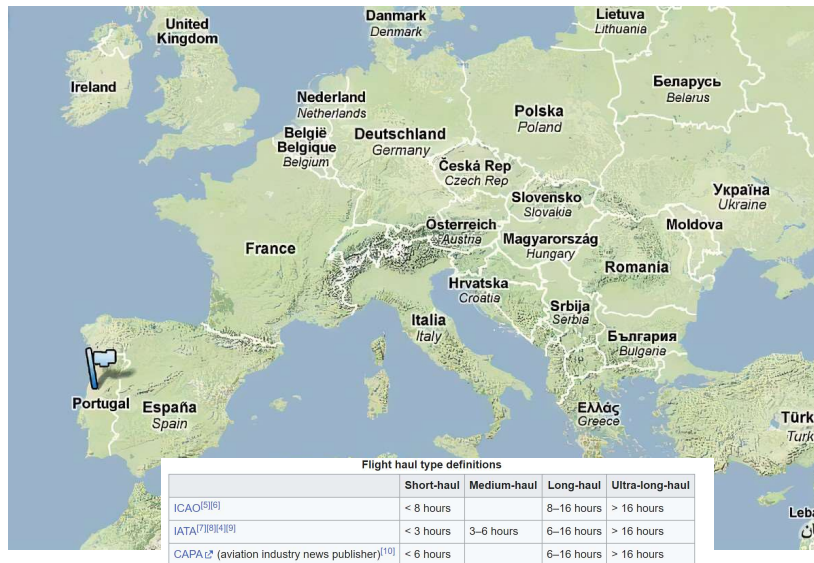


Fonte: Turismo de Portugal (2022). Tavel BI. Turismo de Portugal.

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Figure 3 – Algarve Flight Time Distance



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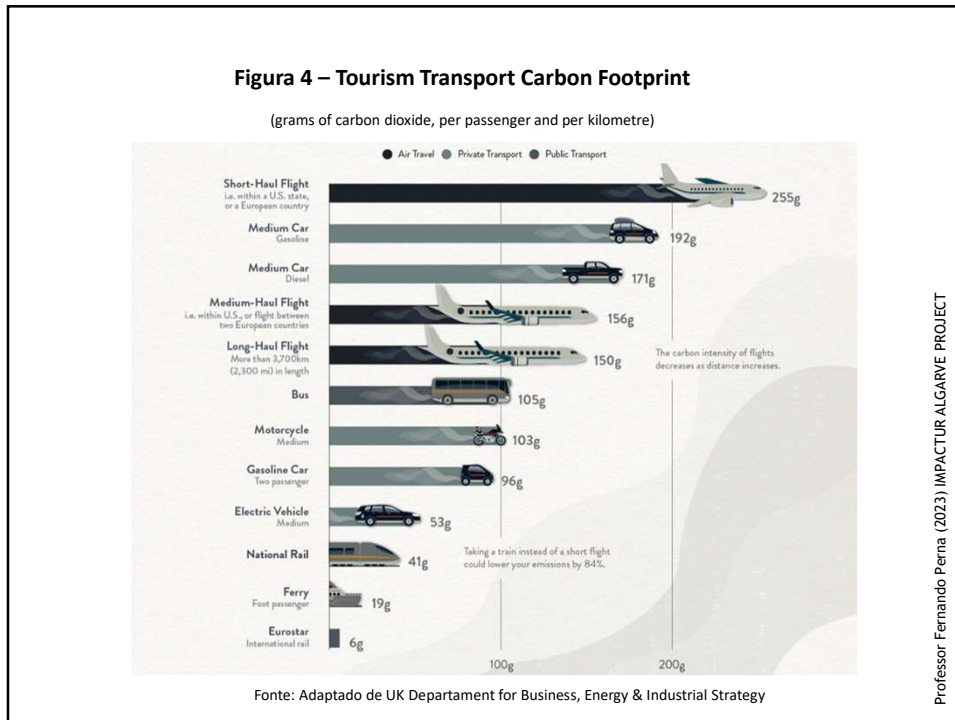
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Figure 4 – ICAO Carbon Emissions Calculator

ICAO / Environmental Protection / Carbon Emissions Calculator

ICAO Carbon Emissions Calculator

ICAO has developed a methodology to calculate the carbon dioxide emissions from air travel for use in offset programmes. The methodology applies the best publicly available industry data to account for various factors such as aircraft types, route-specific data, passenger load factors and cargo carried.

The ICAO Carbon Emissions Calculator allows passengers to estimate the emissions attributed to their air travel. It is simple to use and requires only a limited amount of information from the user. ICEC is the only internationally approved tool to estimate carbon emissions from air travel.

Please [contact us](#) or refer [FAQ](#) or see the [accompanying methodology](#) to the ICAO Carbon Emissions Calculator for additional information.

WHO CAN BENEFIT FROM THESE DATA?

The ICEC can be used by individuals, private companies, international organizations, non-profit organizations, and UN system organizations to estimate their carbon inventories for offsetting purposes.

FIND YOUR CARBON FOOTPRINT WITH ICEC

By entering your city of origin and destination, you can check your carbon footprint!
If you have trouble viewing the Carbon Calculator, please click [here](#).

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How to interiorize externalities value. The conceptual origin:

Tax solution by Pigou, A. (1920). Pigouvian tax.

Negotiation solution by Coase, R. (1960)

Advantages cs. Disadvantages DISCUSSION

Some research examples:

Biondo, A. (2012). Tourism and sustainability: the positive externality. *International Journal of Sustainable Economy*, (4) 2, 155-166. <https://doi.org/10.1504/IJSE.2012.046219>

Bianca, B. & Detotto, C. (2010). Crime as Tourism Externality, *Regional Studies*, (4) 48, 693-709, DOI: 10.1080/00343404.2011.649005

Cheramakara, N. (2014). Valuation of aviation externalities: a case study in Bangkok, Thailand. Loughborough University. PhD thesis.


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Thank You

Good luck for you all for the PhD Thesis

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