ITALY: MEASURING THE IMPACT OF TOURISM-RELATED AIR EMISSIONS

In Italy, air and water transport services have high energy and emission intensity, particularly in terms of ground level ozone and acidification. In contrast, accommodation and food services for internal tourism consumption have much lower energy and emission intensities. (reference year: 2015)

WHEN COMPARED WITH THE ECONOMY AS A WHOLE, FOR EVERY 1 BILLION EUROS OF OUTPUT PRODUCED, THE TOURISM SECTOR NEEDS TO:

- USE 6% MORE ENERGY
- GENERATE 12% MORE GHG EMISSIONS
- GENERATE 188% MORE ACIDIFICATION
- GENERATE 210% MORE EMISSIONS THAT CAUSE GROUND OZONE LEVELS

+ 6%
+ 12%
+ 188%
+ 210%
POLICY AIMS/CONTEXT OF THE PILOT

1. How many tons of air emissions - causing greenhouse effect, acidification and ground level ozone - are directly generated by the production of all tourism-related products for tourism consumption in Italy?

2. What is the energy intensity and emission intensity (for GHG, acidification and ground level ozone) of tourism output (for tourism consumption in Italy)? Is it high or low compared to economic output as a whole?

3. Which services for internal tourism consumption have a particularly high emission and energy intensity? Which ones have a low energy and emission intensity?

PILOT FOCUSED ON:

- Economic dimension
- Social dimension, incl. culture & institutions
- Environmental dimension

PILOT FOCUSED ON THIS SPATIAL LEVEL:

- National
- Subnational region
- Municipality or location

KEY DATA GENERATED

ECONOMIC OUTPUT OF TOURISM CHARACTERISTIC PRODUCTS (FOR INTERNAL TOURISM CONSUMPTION) AND RELATED EMISSIONS AND ENERGY USE - ITALY - YEAR 2015 (PERCENTAGE OUT OF TOTAL ECONOMY)

ENVIRONMENTAL PROFILE OF TOURISM INDUSTRIES AND OTHER INDUSTRIES ITALY - YEAR 2015

1 Acidification can lead to changes in the chemical composition of the soil and surface water.

2 Ground level ozone causes damaging effects on human health, agricultural cultivations and forestry as well as to historical-artistic heritage.
KEY FINDINGS

1. While tourism products for tourism consumption in Italy account for 5.2 per cent of total economy output in Italy (as of 2015); their production generates 16.4 per cent of total air emissions of ground level ozone, 15.5 per cent for acidification and 5.9 for GHGs and requires 5.5 per cent of total use of energy products by economic activities.

2. In terms of energy intensity (i.e. the ratio of energy use to output) and emission intensity (i.e. the ratio of emissions to output), for the three environmental issues, intensities are higher for tourism products than for the economy as a whole. Specifically, energy use and GHG emissions generated by tourism to produce one billion euros worth of output is about 6 and 12 per cent higher than for the economy as a whole respectively, while the generated acidification and ground ozone levels is about three times as much (188 and 210 per cent higher respectively) as for the whole economy.

3. The observed high level of emission and energy intensity of tourism products for internal tourism consumption, is due to the particularly high emission and energy intensities in the air and water transport services. However, it is worth highlighting that all other services that are typically consumed by visitors, like accommodation services and food services have much lower emission and energy intensities than the economy as a whole.
POLICY ACTION

Data on environmental pressures related to tourism industries were not circulated in a specific report addressed to policymakers. However, the main TSA results, as well as pilot estimates of environmental pressures related to tourism industries were included in the Istat Annual Report 2019, presented to policymakers: https://www.istat.it/it/archivio/230897 (Italian version only). After the first pilot study of environmental pressures related to tourism industries within the TSA-SEEA integrated framework, Istat is planning to repeat the exercise with every TSA exercise (approximately biennially) to the extent possible. Following the release of the Italian TSA for the year 2017, Istat is currently updating its estimates of environmental pressures related to tourism industries for the same year and plans to publish the results by the end of 2020. On the basis that a preliminary feasibility assessment is carried out, estimates could be extended to environmental taxes but no commitment is in place from Istat in this respect.

ORGANIZATION

Year(s) the pilot study was carried out in: 2018
Lead institution(s): Istat - Italian National statistical office
Other institution(s) involved: NONE
Focal point: Istat

LINKS TO MORE INFORMATION

- https://www.istat.it/en/archivio/228239
  Istat website– release of pilot estimates of environmental pressures related to tourism industries
  English version