

# New Issue Areas:

# Climate Change

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# 1. Measuring climate change and tourism

**CLIMATE  
CHANGE**

Impacts

Emissions

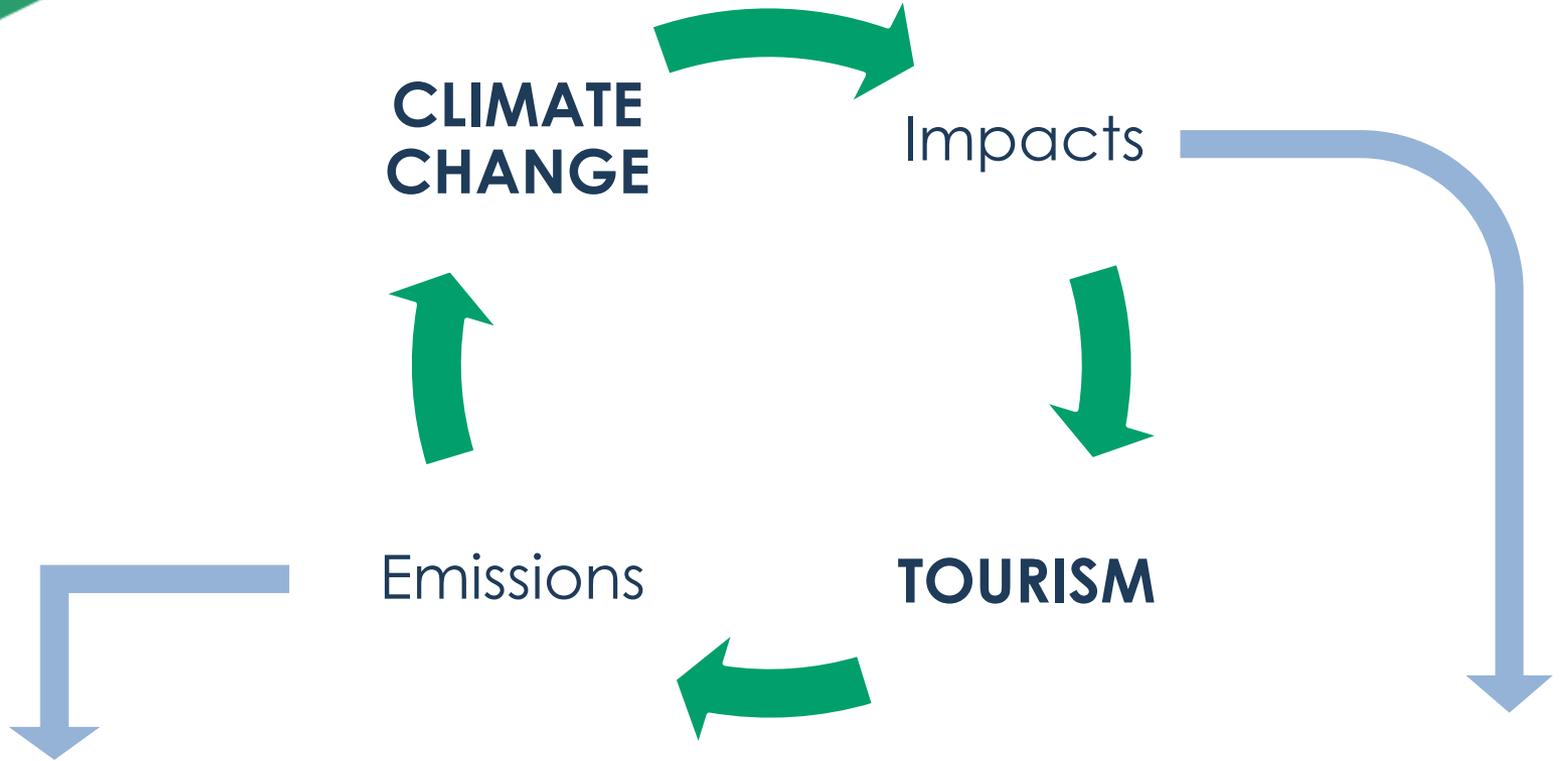
**TOURISM**

## MITIGATION

1. GHG Inventories
2. Carbon footprints

## ADAPTATION

1. Climate projections
2. Vulnerability assessments





1. Calculation, not measurement
2. Bottom up vs top down
3. Destination vs resident approach

### CARBON FOOTPRINT APPROACH

- 1) Identify the activities and group them along the Tourism Value Chain pillars.
- 2) Identify their flows and boundaries (double accounting) in a process map



### GHG Accounting and reporting (Ad-hoc, C40, PAS 2070)

- **SCOPE 1: direct emissions**
  - ✓ Direct energy consumption
  - ✓ Transportation on site
  - ✓ Air conditioning (fluorinated gases)
  - ✓ Waste management and water
- **SCOPE 2: indirect emissions**
  - ✓ Electricity consumption (even if produced elsewhere)
  - ✓ Including electricity for transportation (railways)
- **SCOPE 3: other indirect emissions**
  - ✓ International transportation
  - ✓ Upstream and downstream services (providers, clients): food and beverage, agencies, etc.
  - ✓ Capital goods
  - ✓ Other combustion sources

SCOPE	Category	Source
DIRECT EMISSIONS	Heating and Sanitary Hot Water	Regulated accommodation, food and beverage services, other services and vacation homes
	Transportation (fuel consumption)	Road transport, maritime transport and air transport
	Waste management	Regulated accommodation, food and beverage services, other services and vacation homes
	Fluorinated gases	Regulated accommodation, food and beverage services, other services and vacation homes Road transport
SCOPE	Category	Source
INDIRECT EMISSIONS	Electricity consumption	Regulated accommodation, food and beverage services, other services and vacation homes Railway transport

Geographical distribution	Sector	Source
IN-COUNTRY EMISSIONS	Accommodation and other services	Fuel consumption by tourists in: <ul style="list-style-type: none"> <li>•Accommodation services</li> <li>•Food and beverage services</li> <li>•Travel agencies services</li> <li>•Cultural services</li> <li>•Sport and recreational services</li> <li>•Other services</li> </ul>
	Road transport	Fuel consumption of vehicles used for tourists transportation within Montenegro
	Railway transport	Fuel and electricity consumption due to tourists using the railway system within the Montenegro
	Air transport	Fuel and electricity consumption in land activities and airport facilities due to tourists visiting Montenegro
	Ship transport	Fuel and electricity consumption due to: <ul style="list-style-type: none"> <li>•Inland navigation for tourists transportation</li> <li>•Cruises at berth</li> </ul>
	Waste	Degradation of waste generated by tourists during their stay in Montenegro: <ul style="list-style-type: none"> <li>•Solid waste</li> <li>•Wastewater</li> </ul>
Geographical distribution	Sector	Source
OFF-COUNTRY EMISSIONS	Road transport	Fuel consumption of vehicles used for foreign tourists transportation from origin country to Montenegro and back
	Railway transport	Fuel and electricity consumption due to foreign tourists using the railway system from origin country to Montenegro and back
	Air transport	Fuel consumption of planes due to foreign tourists transportation from city of origin to Montenegro and back
	Ship transport	Fuel consumption of ships used for foreign tourists transportation from origin country to Montenegro and back



1. Calculating a GHG inventory or a carbon footprint is **a process rather than a product**
2. Carbon footprint is not just about the results, but also about **what you can do with it: share, manage, reduce, offset, etc.**
3. No need to start from scratch, many **experiences exist and results from several countries are available**
4. However, when comparing results, take into account that they may differ **depending on the approach, scope and methodology**

**Thank you!**

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