Catalogue of measures for climate-friendly product design

This catalogue contains a collection of measures aimed at significantly reducing the CO_2e emissions from travel products and sustainably improving climate-related indicators. By regularly identifying products where action is required (using the '*Travel Emissions* Tracker') and the targeted implementation of the measures described here, you can optimise the climate footprint of your entire product portfolio in the long term. This approach offers the opportunity to achieve positive effects for the climate step by step and systematically.

The catalogue covers measures for more climate-friendly product design for tour operators and demonstrates how different areas of action can be combined to achieve their full effect. Furthermore, the potential impact of individual measures is assessed in order to set priorities and achieve the greatest possible influence on the reduction of CO_2e emissions.

A practical checklist helps companies to develop climate-friendly strategies that are effective even across departmental or organisational boundaries. An index overview for assessing the climate-friendliness of destinations also assists in this regard, helping to identify destinations that generally operate in a more climate-friendly manner as a country.

The main section of the catalogue describes specific measures for the individual components of travel – such as getting to and from the destination, accommodation, local transport and activities – which can reduce emissions in various ways. It addresses both the choice of climate-friendly modes of transport and the optimisation of accommodation and mobility decisions during the stay.

By implementing these measures, you can work towards offering more climate-friendly travel options in your product portfolio and thus make a valuable and ongoing contribution to reducing CO_2e emissions from tourism.

Contents of the catalogue of measures

1) Areas of action for climate-friendly product design and their interrelationships
2) Assessment of the potential impact of measures
3) Checklist for general, cross-company measures
4) Index overview for assessing the climate performance of destinations
5) Measures for travel to and from destinations by coach, train or car
6) Measures for travel to and from destinations by airplane
7) Measures for accommodation
8) Measures for in-destination mobility
9) Measures for in-destination activities
10) Checklist for additional measures

1) Areas of action for more climate-friendly product design and their interrelationships

This catalogue of measures divides the proposed measures for more climate-friendly product design into various areas, which are further subdivided into the service components of the 'holiday trip' product. Figure 1 illustrates the interrelationships between these areas for measures aimed at climate-friendly product design, as proposed in the following catalogue.

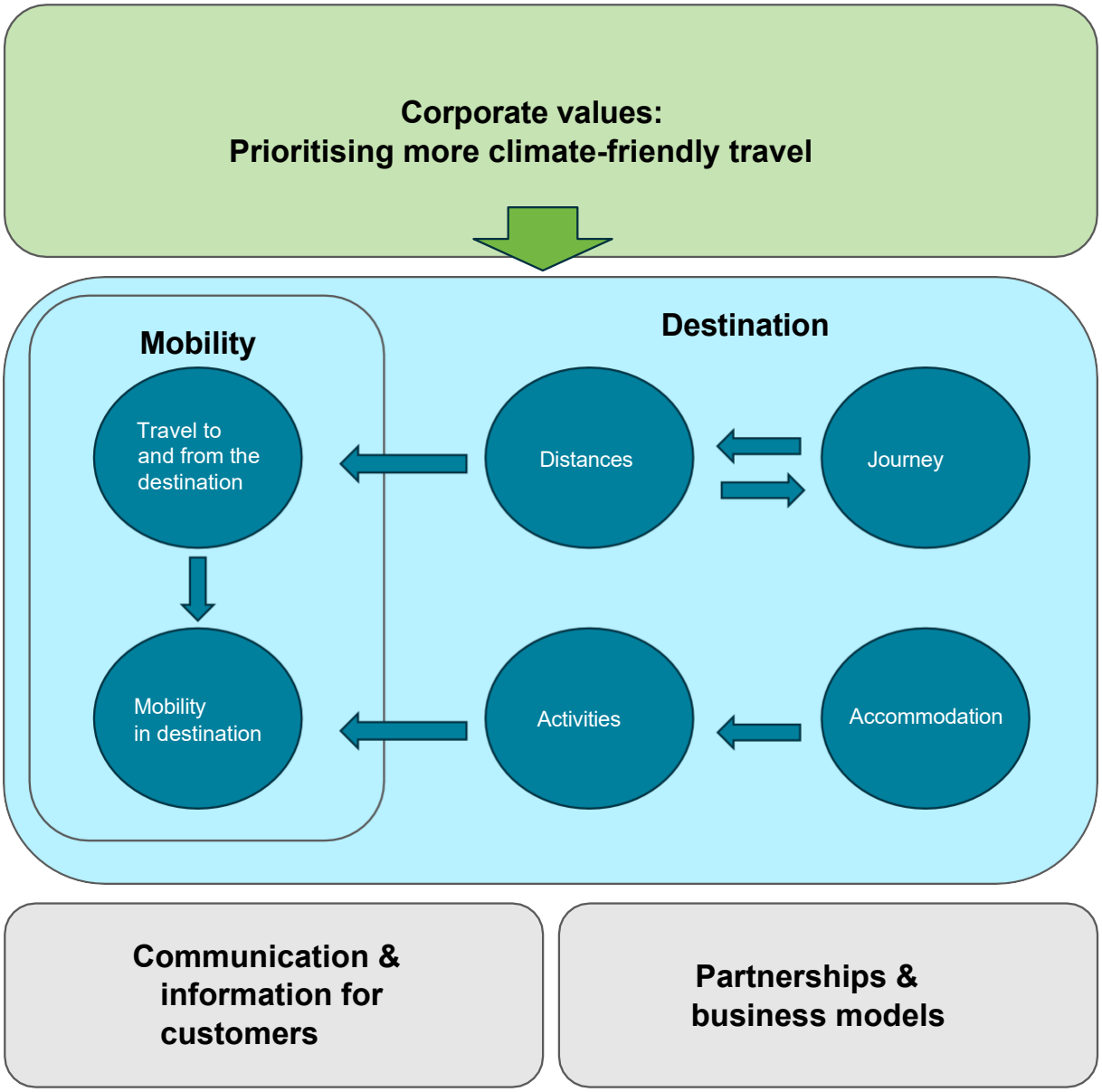

Figure 1 – Interrelationships between areas of action for climate-friendly product design

2) Assessment of the potential impact of measures

In order to assess the potential effectiveness of measures, there are a number of important aspects to consider.

As a general rule, tour operators can improve the carbon footprint of their trips through 'avoidance, reduction and substitution'. This fundamental principle must always be taken into account when selecting measures.

- **'Avoidance'** involves removing trips or trip components with high CO_2e emissions (e.g. long-haul trips with short stays or sightseeing flights) from the portfolio or selling them in reduced numbers.
- **'Reduce'** primarily means 'reducing distances', i.e. offering trips to alternative, closer destinations to enable the same or at least similar experiences with lower emissions.
- **'Substitution'** refers to replacing particularly climate-damaging travel components with more environmentally friendly alternatives, e.g. offering lower-emission modes of transport and more climate-friendly accommodation.

Figure 2 shows the proportion of CO_2e emissions from global tourism attributable to the travel components of 'transport' for outward and return journeys, accommodation, and on-site activities and mobility. This reveals that around 75 per cent of emissions are caused by transport during outward and return journeys. Of this, around 40 per cent is attributable to air travel and a further 32 per cent to journeys to and from the destination by car. All other modes of transport together account for only 3 per cent of emissions. This shows that measures relating to transport for journeys to and from the destination generally offer the greatest potential for high-impact action, as this is where the greatest opportunity for reducing emissions lies. By comparison, whilst measures in the areas of accommodation, activities or local mobility can have positive effects, they have only a comparatively minor impact on the overall emissions from tourism.

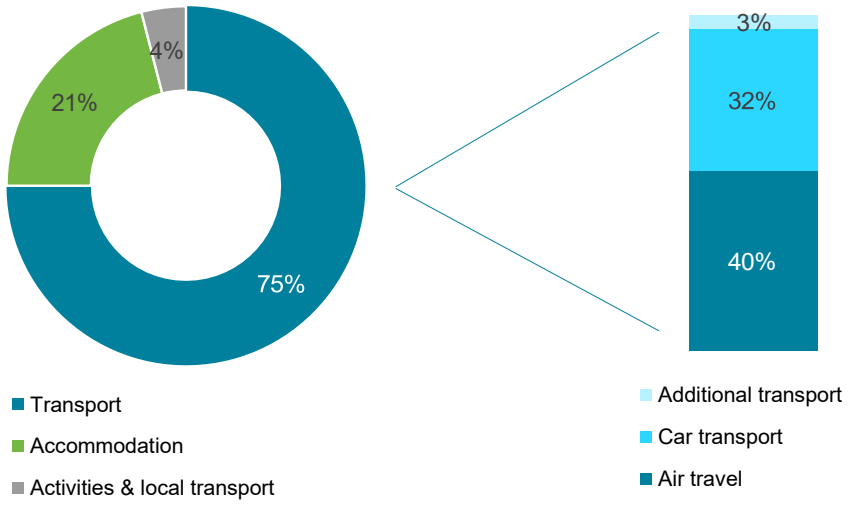

Figure 2 – Share of travel components in tourism-related CO_2e emissions; Source: Adapted from UNWTO (2008): Climate Change and Tourism – Responding to Global Challenges, page 34

When selecting suitable measures, the following should also be taken into account:

- Effectiveness: To what extent does the measure contribute to achieving the target of reducing CO_2e emissions?
- Efficiency: How resource-intensive is the implementation of the measure in relation to the achieved impact?
- Time lag of the effect: How quickly does the measure have an effect on CO_2e emissions? Does the measure have a direct or indirect effect?
- Feasibility: How realistic is it to implement the measure?
- Acceptance: How is the measure accepted by those involved (i.e. cooperation partners, customers)?

The aim is to implement measures with a particularly high impact. On the one hand, this depends on the choice of measure itself – to assist with this, the catalogue provides a categorisation of measures based on whether their impact on the climate is direct or indirect. On the other hand, the choice of journeys to which the measures are applied also influences the impact. To this end, it is recommended first to identify the most emission-intensive products in the portfolio and, in a second step, to assess the economic relevance of these trips by taking economic figures into account. Data from KlimaLink can be used for this purpose in combination with an analysis using the *Travel Emissions Tracker*. The greater the economic relevance for the company, the more important it is to prioritise the analysis of high-emission trips.

The more frequently a trip is booked, the greater the impact of measures on total emissions. If a trip is booked frequently, even small improvements in sustainability can achieve significant cumulative effects, as the CO_2e-reducing impact of the measures multiplies with every booking. It is therefore crucial for tour operators to prioritise measures where they have the greatest reach and impact in order to effectively reduce the overall environmental impact.

In addition to considering entire trips as products, measures can also be applied to individual service components. If a measure targets a service component that is responsible for a high proportion of the product's total CO_2e emissions, its effectiveness is potentially greater. This can be assessed by taking a differentiated view of the emission contribution of the individual service components (see Figure 2).

The effectiveness of the measures in this catalogue is assessed by evaluating their directness. Direct measures have an immediate and measurable effect on the CO_2e emissions of the respective service component of the trip. These measures directly address the sources of emissions and reduce them immediately. Examples of this include the use of lower-emission modes of transport or the decision not to offer particularly resource-intensive activities. Such direct measures can usually be quantified and thus offer clear potential for savings that can become apparent relatively quickly.

Indirect measures, on the other hand, often take full effect in the medium to long term and can contribute to a reduction in CO_2e emissions, depending on their effectiveness and the extent to which they are implemented. They usually influence the behaviour of travellers, service providers or the framework within which services are provided, without directly reducing emissions. These include, for example, awareness-raising initiatives for environmentally conscious travel or the development of cooperation models. The effectiveness of such measures depends on how consistently and successfully they are implemented. Both direct and indirect measures therefore play a crucial role in achieving both short-term and long-term CO_2e reduction targets for your product portfolio.

3) Checklist for general, cross-company measures	
Corporate values	
☐	Embed sustainability (particularly climate protection) in the company's values
☐	Appoint a climate protection officer
☐	Introduce guidelines on mobility for business travel (e.g. flights only if the train journey would take longer than eight hours)
☐	Provide incentives for staff to choose more climate-friendly modes of transport for business travel or their commute (e.g. JobTicket, JobRad, a mobility budget instead of a company car, secure cycle parking facilities)
☐	Alignment with the Glasgow Declaration and/or the Science Based Targets Initiative
Product portfolio management: Destination selection	
☐	Give preference to destinations that can be reached by land-based modes of transport
☐	Give preference to close-by destinations
☐	Prefer destinations with good bus/train connections
☐	Check whether the target groups' holiday motivations or desired travel experiences can also be fulfilled in destinations that are 'as close as possible and as far away as necessary'
☐	Assess current destinations using the index overview regarding climate performance (see appendix)
☐	When adding new destinations, assess them using the index overview (see Annex) and make decisions in favour of more climate-friendly destinations
Product portfolio management: Length of stay[1]	
☐	Where possible, avoid offering flights under 800 km for which CO_2e emissions are not fully offset
☐	Set a minimum stay of at least 7 days for flights between 800 km and 3,800 km
☐	Set a minimum stay of at least 14 days for flights over 3,800 km
Measurement, analysis and communication of the CO_2e emissions of products	
☐	Use a tool to measure and analyse the CO_2e emissions of the product portfolio (see KlimaLink, Travel Emissions Tracker)
☐	Measure the portfolio's CO_2e emissions and communicate them to staff
☐	Monitor changes in CO2e emissions, set targets and communicate them
☐	Create 'zero or low-emission trips'→ Reduce as many emissions as possible, offset the remainder
Offset remaining CO2e emissions	
☐	Implement offsetting via Gold Standard project providers (e.g. Atmosfair, myclimate)
☐	Include this as standard in the trip price, without the customer needing to make a decision
☐	Alternative: Offer it as an opt-in option, so that the customer can choose to include it

[1] Assessment based on Forum Anders Reisen, FairAway and Utopia

4) Index overview for assessing the climate performance of destinations

This overview provides a quick and easy insight into the general climate performance of countries worldwide. To this end, various climate-related aspects of the countries are assessed using four different current indices, as well as the distances of the respective countries from the geographical centre of Germany. This helps to provide information on a country's climate performance in general and to better assess destinations in terms of their climate-related conditions. The ratings from the various indices are converted into assessment scores using a simple colour scale. Furthermore, the existence of an index rating is also factored into the score calculation. Using the individual index scores and the overarching index score, a simple cumulative total score can be determined. This total score for individual countries thus allows for a comparison of the climate performance of different countries.

Index overview for assessing the climate performance of destinations – example

view for countries in Europe:

Country	Index rating								Overall score
	EPI 2024	CCPI 2024	SDG Goal 7	SDG Goal 13	TTDI Pillar 10	TTDI Pillar 12	TTDI Pillar 15	Distance from source market (km)	
Denmark	67,9	75,59			5,53	2,76	5,69	501	**21,8**
Germany	74,6	65,77			5,34	3,47	5,62	0	**21,0**
Sweden	70,5	69,39			4,63	2,87	5,89	1199	**21,0**
Netherlands	67,2	69,98			6,33	2,55	5,55	337	**20,8**
Luxembourg	75	65,09			5,79	1,3	6,17	362	**20,5**
Switzerland	68	61,94			6,24	3,12	5,84	532	**20,3**
Austria	69	58,17			5,02	3,01	5,7	507	**20,0**
Estonia	75,3	72,07			4,63	1,6	5,31	1283	**19,3**
Finland	73,7	61,11			4,41	2,41	5,84	1656	**19,2**
Great Britain	72,7	62,36			5,13	3,96	5,74	1016	**19,0**
Spain	64,2	63,37			4,92	4,95	5,39	1697	**19,0**
Malta	66,6	59,8			4,05	1,68	4,11	1761	**18,8**
Portugal	62,2	67,39			4,35	3,39	5,2	1945	**18,7**
France	67,1	57,12			5,31	5,41	5,89	872	**18,3**
Greece	67,4	60,34			3,73	3,03	5,23	1652	**18,3**
Belgium	66,7	55			5,36	1,91	5,42	427	**18,3**
Slovakia	65	54,47			4,26	2,2	5,8	715	**18,2**
Czech Republic	65,6	45,41			5,01	2,01	5,26	372	**17,8**
Poland	64,4	44,4			4,71	2,84	4,97	656	**17,7**
Slovenia	62,5	53,57			4,72	2,53	6	686	**17,7**
Croatia	62,6	57,32			3,85	3,54	5,22	795	**17,3**
Lithuania	63,9	62,99			4,47	1,6	5,26	992	**16,8**
Ireland	65,7	51,42			4,33	1,98	4,94	1265	**16,8**
Latvia	59,9	57,68			3,75	1,59	5,04	1120	**16,5**
Norway	70	67,48						1168	**16,5**

5) Measures for travel to and from the destination by bus, train or car 	Potential impact
Proportion of 'Car and other transport' travel component in global tourism's CO_2e emissions	*35%*
For destinations that can be reached in less than eight hours: Offer only bus and train journeys	direct
For destinations that can be reached in eight to twelve hours: offer bus/train as the preferred travel option; the second choice is travelling by private car (flying only as a third choice)	indirect
Turn the journey there and back into an experience – not just a necessary evil, but a great memory (stop-offs, storytelling, local guide, etc.)	indirect
Integrate international rail travel into your product/ service portfolio	direct
Include night trains in your portfolio (overview from Germany; Europe; worldwide)	direct
Strengthen cooperation with foreign rail operators and rail portals to make cross-border rail travel easier	indirect
Create an information platform for rail travel as a means of getting to core destinations (in collaboration with other tour operators and rail companies/ platforms)	indirect
Improve online booking options for rail products with partnerships (e.g. Rail Europe, Omio, Trainline, Viator)	indirect
Offer transfers to and from the rail station as well, not just to and from the airport	direct
Assess whether chartered coaches could be used as an alternative to chartered aircraft for travel to the destination and, if appropriate, utilise them.	indirect
Introduce rewards for climate-friendly behaviour/incentives exclusively for customers who choose to travel by bus and train or where applicable, choose not to use privat car hire (e.g. drink at the hotel bar, public transport ticket, bike hire)	indirect
For those travelling by car: prioritise destinations with well-developed charging infrastructure for electric vehicles and provide this information to customers accordingly	indirect

6) Measures for arrival and departure by airplane ✈	Potential impact
Proportion of the 'air travel' component of global tourism's CO_2e emissions	*40%*
For air travel, explicitly recommend the lowest-emission journey to the airport (by train or bus) instead of using a domestic feeder flight	Indirect
Include 'Rail & Fly' for journey to the airport as standard in all products	direct
Provide financial incentives for travelling by train instead of feeder flights (e.g. charge a higher surcharge for feeder flights, include 1st class Rail & Fly as standard in trip price)	Indirect
Prioritize non-stop flights or flights with the lowest emissions (based on reliable data, e.g. from KlimaLink)	direct
Give preference to airlines that actively work on reducing flight emissions, have a particularly modern fleet, or have set themselves scientifically sound climate targets (see, for example, the atmosfair Airline Index, airlines with an SBTI commitment)	direct
Give preference to airlines that already use Sustainable Aviation Fuels or are investing significantly in their production (see, for example, https://www.transportenvironment.org/topics/planes/saf-observatory/airline-saf-ranking)	direct
Always provide buses, trains or shared taxis for transfers from the airport. Do not offer private transfers or hire cars • Ensure the overall journey is as low-emission as possible: maximise bus occupancy rates; where possible, share buses with other tour operators • Engage with and cooperate with local partners to facilitate and promote e-transfers	direct

7) Measures for accommodation	Potential for impact
Proportion of the 'accommodation' component of travel in global tourism's CO_2e emissions	*21%*
Encourage accommodation partners to measure their climate impact using the HCMI (Hotel Carbon Measurement Initiative) tool and to report their CO_2e figures annually	Indirectly
Give preference to accommodations with a lower CO_2e footprint (KlimaLink)	direct
Raise awareness amongst accommodation providers regarding the importance of reducing emissions and draw their attention to available tools and possible measures	Indirectly
Energy and water saving	
Give preference to accommodations with low emission way of construction	direct
Ask accommodation providers what measures have been implemented or are planned with regards to energy saving and climate protection. (Areas: electricity, heat generation, water saving, waste prevention)	Indirectly
Give preference to accommodations powered by renewable energy	direct
Mobility services offered by accommodation providers	
Give preference to accommodations that offers low-emission tourist transport options on site (e.g. shuttle services to the beach, the town centre or tourist attractions, bike-sharing)	direct
Give preference to accommodations that have a public transport link to the railway station/airport, and therefore offer transfers via public transport rather than their own transfer services	direct
Give preference to accommodations offering bike or e-bike hire, highlight this for customers as an added benefit	direct
Give preference to accommodations that provide e-bike charging points	direct
Encourage other key accommodation partners to offer or expand their low-emission transport offers	Indirectly

F&B offering at accommodations	
Give preference to accommodation providers offering regional, seasonal produce and vegetarian/vegan options	direct
Give preference to accommodations that actively reduce food waste generation, particularly where all-inclusive catering is offered	direct
Certification	
Give preference to certified accommodations (though caution is advised, as not all certificates focus on climate protection – pay attention to the criteria used and look for high quality, recognised certifications)	indirectly

8) Measures for in-destination mobility	Potential impact
Proportion of the 'on-site activities and mobility' component of travel in global tourism's CO_2e emissions	*4%*
Where available: Actively include 'visitor cards' or similar schemes for free use of public transport in product descriptions etc., and promote them as added value	Indirect
Promotion of low-emission mobility options at the destination (e.g. visitor cards with public transport access, tourist/seasonal bus routes, car-sharing for tourists) through communication with key destinations and cooperation to ensure implementation	Indirect
Mobility on round-trips/ tours	
Replace domestic flights with other modes of transport (preferably rail, bus, public transport), and redesign routes accordingly	direct
Set emission limits for hire of vehicles/vessels (to be specified in briefings to agencies)	Indirect
Give preference to hiring electric vehicles	direct
Adjust vehicle size to the number of participants	direct
Increase / Offer the use of non-motorised activities such as cycling and walking as a means of transport	Indirect

9) Measures for in-destination activities	Potential impact
Proportion of the 'on-site activities and mobility' travel component in global tourism's CO_2e emissions	*4%*
Prioritise active mobility: in particular, walking, cycling and non-motorised boating such as sailing, canoeing, kayaking and rowing	direct
Offer excursions primarily using public transport, buses, e-bikes, trains and local modes of transport such as rickshaws or similar	direct
Ensure that e-bikes and electric vehicles are charged using renewable energy	direct
Do not offer energy-intensive activities, such as heliskiing or quad bike tours	direct
Active participation in local climate protection measures (offering/including half-day/full-day voluntary assignments, longer-term assignments, work camps, particularly in group package tours or corporate volunteering)	direct
Give preference to catering establishments that offer regional, seasonal, vegetarian and vegan dishes and help to combat food waste	direct

10) Checklist for additional measures	
Communication & information for customers	
☐	Transparency/disclosure of emissions per product at the Point-of-Sale
☐	Comparison value: Display climate-friendly CO_2e budget per person per year
☐	Not only label low-emission products, but provide transparent/neutral information on the climate impact of each journey
☐	Specify and explain offsetting included in the price
☐	Communicate in advance rewards/incentives for more climate-friendly behaviour when travelling
Cooperation and business models	
☐	Lobby for international data standards for rail connections and the synchronisation of systems
☐	Hold discussions with the bus industry to explore whether it would be possible to create comfortable alternatives to flying using existing buses or those to be built specifically for this purpose
☐	Networking between companies, e.g. through a ‘climate protection round table’ to provide mutual support