



Zentrum für Nachhaltigen Tourismus
Centre for Sustainable Tourism



Das Consulting-Unternehmen des DIW Berlin



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Measuring Sustainability of Tourism in Germany – Criteria, Indicators and Data Sources

Preliminary project results

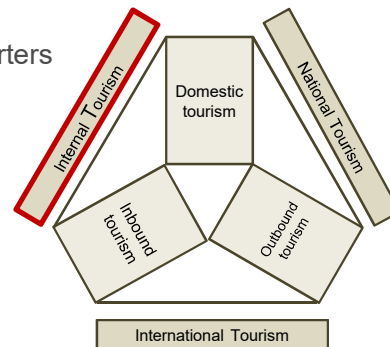
Prof. Dr. Wolfgang Strasdas & Martin Balas, M.A.
ZENAT Centre for Sustainable Tourism
 Berlin, 2 April, 2019

The assignment

- Research project commissioned by German Environment Agency (UBA) and German Fed. Ministry of the Environment (BMU) to a consortium of four consultancies for a period of 3 years
- **Goal** To promote the development of sustainable tourism by ...
 - Creating a **national evidence-based system** that relies on relevant criteria and valid indicators to be measured by statistics and empirical quantitative data
- **Potential usage:** How sustainable is tourism in Germany really? Is it developing in the right direction? Where are priority fields of action?
- *originally:* What is the share of sustainable tourism in Germany and to what degree does it contribute to tourism's overall value generation?

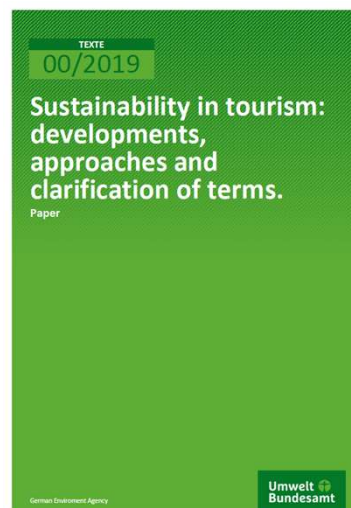
Setting the framework: Tourism & spatial scope

- Tourism as defined by UNWTO 1993, Tourism industries as defined in IRTS 2008
- Germany as a tourism destination and location for tourism company headquarters
⇒ Production-based approach
- Management decisions and impacts within German borders

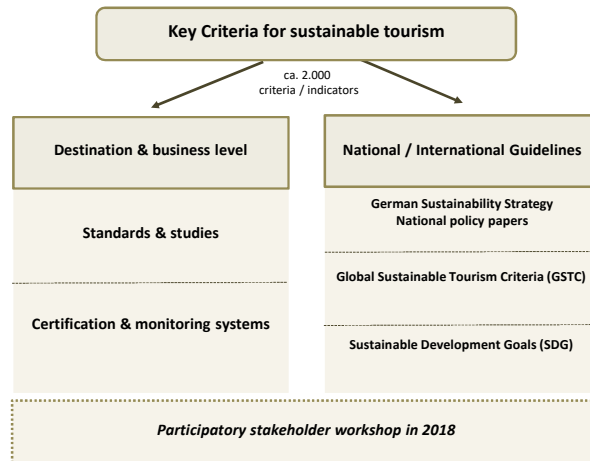


Setting the framework: Sustainability

- Sustainability is a **multi-dimensional** concept = balanced
- Sustainability is a **dynamic** concept that evolves over time = relative
- Sustainability is a result of **participatory** stakeholder processes = subjective
- Sustainability must follow **scientific** evidence = objective (2° threshold)
- Sustainability can be measured against **political** goals (e.g. SDGs)



The methodology: Identification of key criteria



Result: Key criteria for sustainable tourism



Figure: Center for Sustainable Tourism, 2018

The methodology: Identification of suitable indicators

Key Indicators for Sustainability in tourism

Quality assurance of Indicators

- **Significance:** valid information for overall sustainable development
- **Coverage:** Data available for main tourism industries
- **Applicability for the overall market Germany**
- **Data availability / costs:** reasonable expenses for obtaining data
- **Timeliness of the data:** regular data-collection without major time delays
- **Existence of (official) statistical survey methods**
- **Existence of target / limit values / benchmarks**

Other selection criteria

- Causal links; spatial & seasonal relationships; target values / benchmarks

Gender Pay Gap	Description	Evaluation	Overall result
Significance	The gender pay gap is the difference between the average gross hourly earnings of women in the ratio of men. He thus makes a statement on the genders of the sexes.		
Coverage / Applicability	All tourist sub-sectors are available regarding WZ 2008, but only at a higher level (2-digit levels of economic sectors, which partly summarizes subsectors). Due to the different importance of tourism in individual economic sectors at the 2-digit level, it is therefore recommended to carry out an evaluation for the following sub-sectors: Accommodation & Catering (WZ 55 & 56), Tourism (WZ 79) and possibly services of Art & Culture (WZ 90-93)		
Data availability / Costs	Data is freely available. A special evaluation of tourism-specific sub-sectors is to be commissioned. Costs are around 700 €.		
Timeliness	Survey every 4 years; next survey in 2018; Time delay of approx. 19 months.		
Statistical method	Structure of Earnings Survey; Processing by the Federal Statistical Office; only employees are covered.		
Target values / benchmarks	SDG 5.1: Achieve gender equality and empower all women and girls to self-determination German Sustainability Strategy 5.1.a: Reduce Gender Pay Gap: up to 10% in 2030, currently 21%		
Recommendation of spatial use	national		
Recommended method if applied on regional level			
Recommendation on case study			

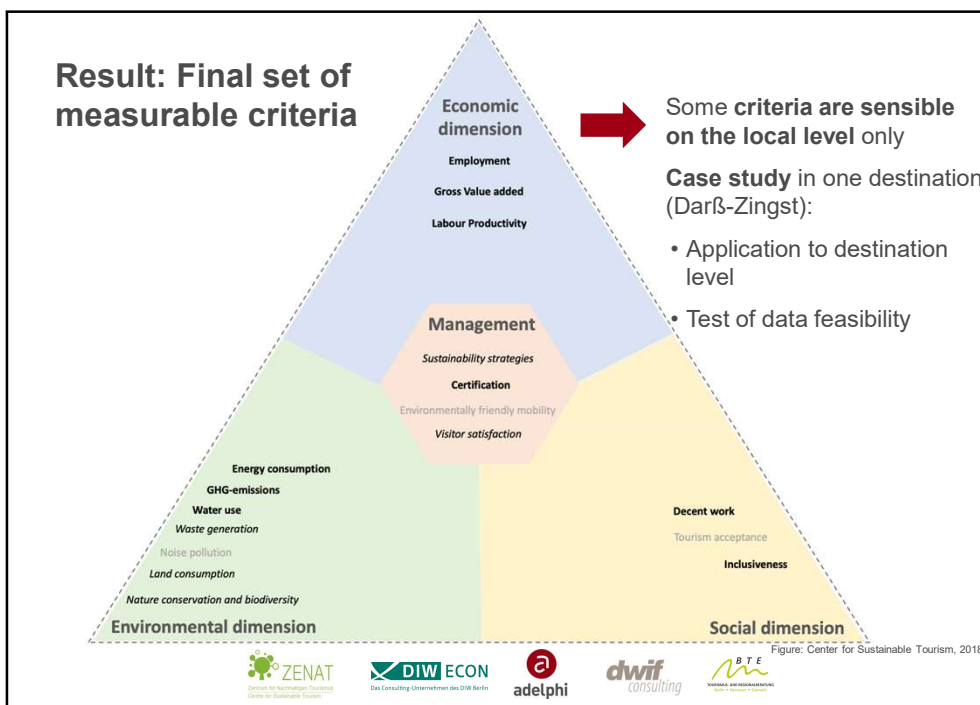


The methodology: Identification of suitable indicators

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Figure: Center for Sustainable Tourism, 2018





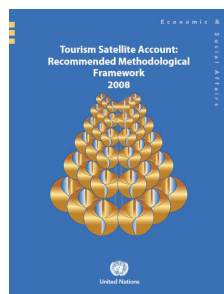
Links to national targets & benchmarks

Subject area of the account	Goals of the German Sustainable Development Strategy (aligned with SDGs)
Certification: Proportion of destinations with sustainability performance certification	12.1.a Market share of goods certified by independently verified sustainability labelling schemes
Sustainability strategies: destinations with sustainability strategies	12.2. EMAS eco-management
Employment: Persons employed	8.5.a/b Employment rate
Value added: Gross value added	8.4. GDP per capita
Productivity: Gross value added per person employed	
Energy consumption: Use of energy and energy intensity	7.1.a/b Final energy productivity and primary energy consumption, 11.2.a/b Final energy consumption in freight transport and passenger transport
Greenhouse gas emissions: Greenhouse gas emissions and greenhouse gas emission intensity	13.1.a Greenhouse gas emissions
Nature and species conservation, biodiversity: n.a.	15.1. Species diversity and landscape quality
Land consumption: n.a.	11.1.a Built-up area and transport infrastructure expansion
Decent work: Gender Pay Gap	5.1.a Gender pay gap: Difference between average gross hourly earnings of women and men
Decent work: Low income share	10.2. Gini coefficient of income distribution
Inclusiveness: Proportion of the German population, who for financial reasons can not spend a holiday of at least one week outside their home town	1.1.a/b Material deprivation: Materially deprived and severely materially deprived persons

Data sources: „Extended“ Tourism Satellite Account

Tourism Satellite Accounts

Size and structure of tourism demand in Germany



Environmental Economic Accounts

Representing overall material and energy flows associated with economic production



Other statistical data sources

Management & social dimension

DISTATIS
Statistisches Bundesamt

DGB

EUROSTAT



Conclusion



Easy to measure:

- Classical economic effects
- Natural resource consumption & emissions
- Some social effects (wage levels)

Difficult to measure:

- Socio-cultural effects
- Impacts on biodiversity
- Highly localised impacts (noise, acceptance of tourism)



Responsibility/credit for tourism impacts outside of Germany?

- Transboundary transportation
- Supply chains of tour operators
- Tourist behaviour

➔ **currently: Measurement of tourism companies' management**

