



## Sustainable development

- The sustainable development discourse
  - The Brundtland report (WCR) itself has six different (and to some extent competing) definitions!
  - The debate on sustainable development is to much extent a "battle" on the content (and hence; implications) of the concept
  - This has led to a widening of the concept, thus leading us to ask the very pertinent question: "if sustainable development is everything, maybe it is nothing
- SD as an evaluation criteria
  - Go back to the core of sustainable development
  - The (original) three core perspectives on SD
    - 1. Ecological sustainability
    - 2. Global justice
    - 3. Generational justice
  - The core indicator: Total energy use
- Energy-use as the core issue of sustainable development
  - Derived from one (of very few) concrete goals in the WCR: 50% reduction of energy-use in the industrialised countries
  - (which is an even tougher goal than the goal of 50% reduction of GHG, because it inevitable leads to the discussion of sustainable consumption; which again points at the necessity of reducing the volume of consumption in the rich part of the world!)



## Leisure-time consumption and sustainable development

#### A "non-issue"

- Policy-making focus on the production side of society (sustainable production) with very little focus on the environmental impacts of consumption (sustainable consumption)
- The environmental impacts of leisure-time consumption a "non-issue" for environmental NGOs

### The "knowledge gap"

- Research on consumption and environment focus rarely on leisure activities
- Research on planning and sustainable development focus on every-day consumption
- Research on sustainable tourism of some relevance

### Part of the <u>problem</u>

- Leisure-time consumption in post-industrialised countries are "exploding"
- The most environmental damaging types of leisure-time consumption increases the most

### Part of the <u>solution</u>

- Making leisure-time consumption more sustainable
- Making leisure-time consumption as an arena for learning more environmentally friendly consumption patterns to be adopted within everydayconsumption



### Research questions of our project

- 1. How can we categorise leisure time consumption?
- 2. What categories are the most end least important when it comes to relative and total environmental impact, and what are the main impacts?
- What is the total impact of leisure time consumption compared with everyday life and ordinary consumption
- 4. How do impacts of leisure time consumption relate to the goal of a sustainable development?



# Main categories of leisure-time consumption

A combined activity and time based approach!

	Production	School	Reproduction	Recreation
'Bound' time	1) Work	2) Compulsory education and professional training	3) Domestic work and care	4) Organisational and voluntary work
'Free' time	5) Work-related welfare measures (e.g. conference tourism)	6) Non-compulsory education (e.g. hobby/evening courses)	7) Free everyday life (e.g. shopping)	8) Holidays and leisure time



# Sub-categories of leisure-time consumption

Trips to second homes		
Outdoor recreation (motorised and traditional)		
Culture/entertainment (Aqua parks, Libraries, Cinemas,		
Concerts, Museums, Theatre/opera, Theme parks, etc.)		
tc)		
Traditional games)		
ternet, TV and		
radio, Audio-visual equipment)		
Organisational work (Religious organisations, Others)		
day consumption)		
Shopping  Hobbies-related evening courses		
		Conference tourism

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# Calculation of the environmental impacts of leisure-time consumption

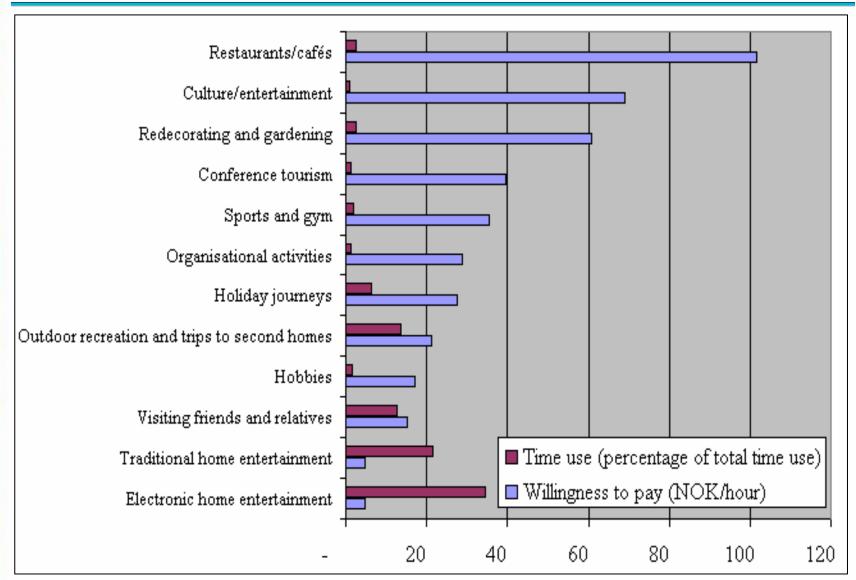
- Reference year
  - "Circa" 2001
- Who's consumption?
  - Consumption by Norwegians in Norway and abroad
- Calculating the amount of leisure-time consumption
  - Statistical Norway: National survey on time use (hours)
  - Statistical Norway: National survey on consumption (monetary units)
  - National transport research institute: National survey on transportation habits
  - Import statistics
- Calculating the "total" energy-use
  - Direct energy-use at the end-use (e.g. energy-use for driving your car and running your TV)
  - Indirect energy-use to produce the goods and services (e.g. energy-use to produce your car, the roads and the TV)
  - Recalculated to primary energy-use (that is, to ad production-related losses in energy production and the distribution of energy)

## OI •St

Startside

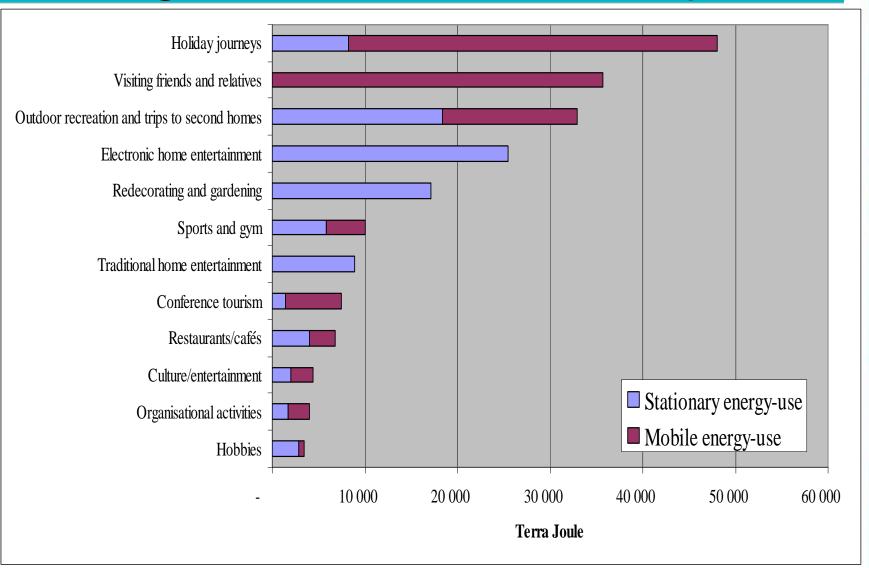
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## What do Norwegians prefer to do in their leisure-time?



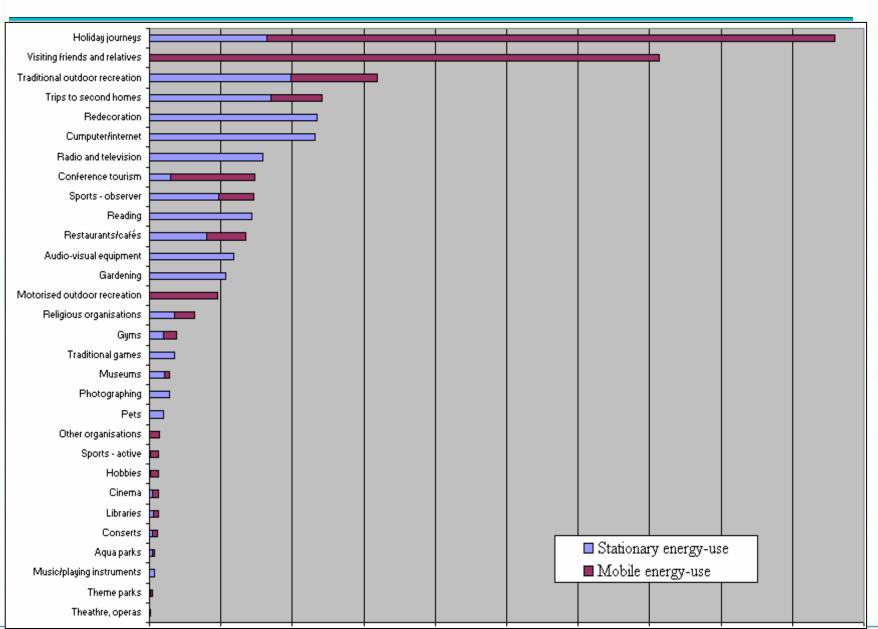


# What is the total energy-use of Norwegian leisure-time consumption?



# Startside

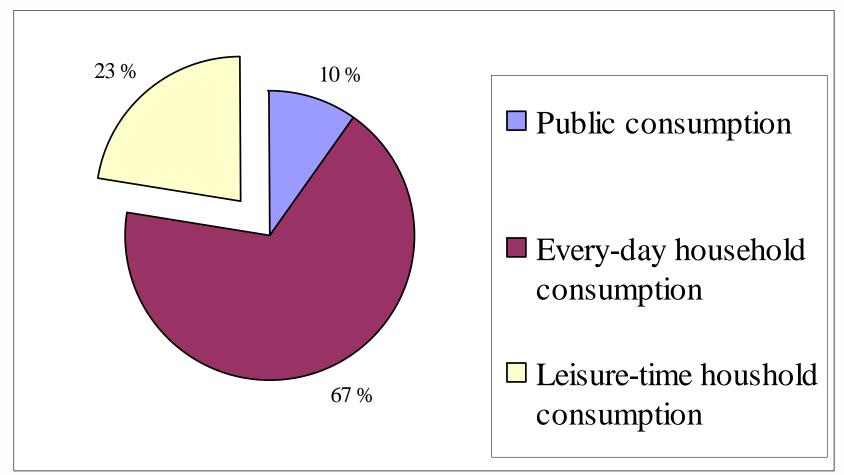
## The detailed picture



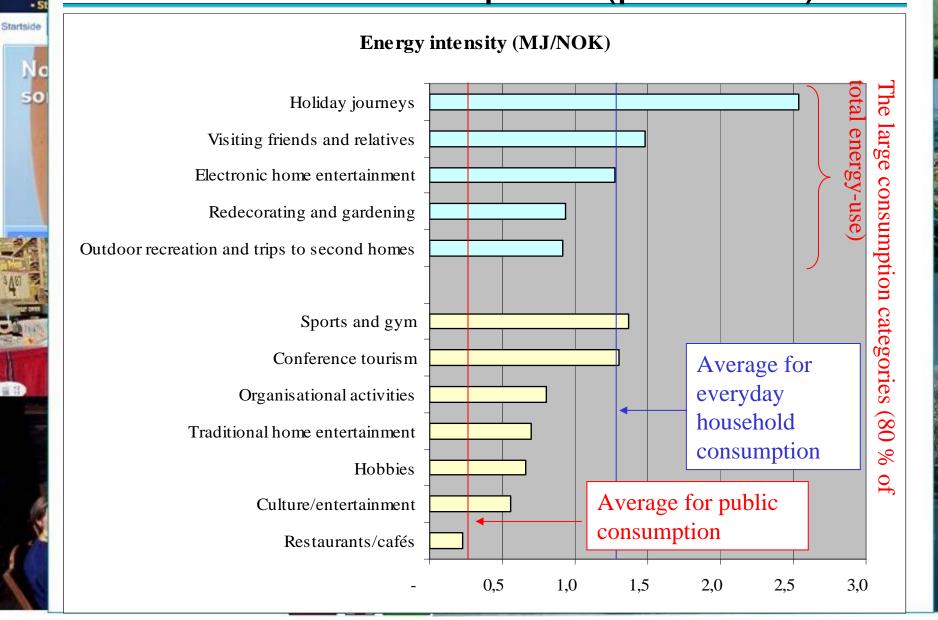


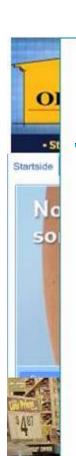
## Energy consumption from leisure-time in relation to other categories of consumption





# The energy intensity of Norwegian leisure-time consumption (per NOK)





## Recent development in Norwegian leisure-time consumption (2001-05)

- Leisure-time consumption increase more than everyday household consumption
  - Spending (NOK): +24% for "culture and leisure time" compared to +13% for private consumption at large
- The most energy-intensive categories of leisure-time consumption increase the most
  - Spending (NOK): + 87% in passangerkm of non-charter airplane holiday journeys compared to +/- 0% on "restaurant visits"
- Examples of changes on a more detailed level
  - + 29% in the size (m²) of newly built second homes in Norway
  - + 37% in the number of Norwegians with a second home abroad
  - + 75% the amount of time spent on home computers
  - + 100% in the weight of imported sports equipment
  - + 115 % in NOK in purchases of audiovisual equipment and home computers
  - + 180% in the weight of imported leisure boats



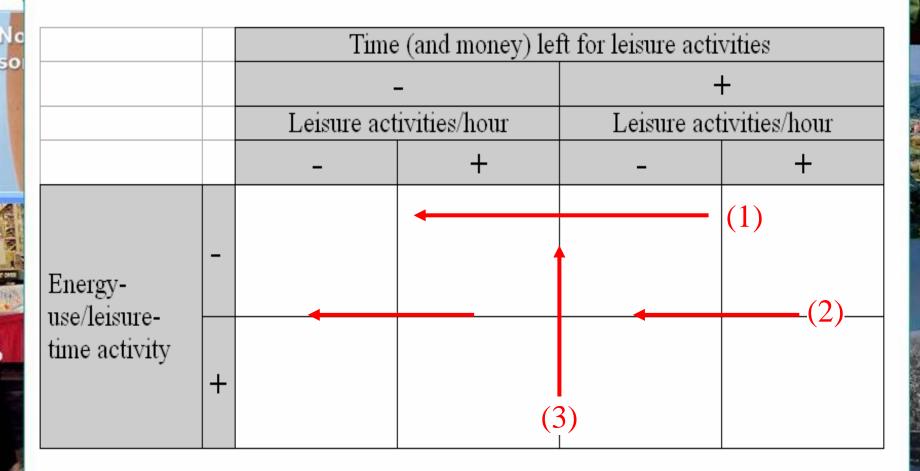
## International trends in leisure-time consumption

- Changes in leisure-time
  - Increase in leisure-time for the society (mainly due to an increase in the fraction of retired people in the population)
  - A (small) reduction in the leisure-time for the "hard-working" part of the population ("much money – little free-time")
- Changes in leisure activities (which is "bad" for the environment)
  - Increase in commercialisation
  - Increase of diversification and specialisation
  - Increase in the number of leisure activities per unit of time
  - Increase in the number of holiday trips per year
  - Increase of transport-intensity
  - Increase in resource-intensity
  - Reduction in the number of time-consuming activities
  - Reduction of the number of "serious" activities
- Changes in leisure activities (which is "good" for the environment)
  - Increase in "slow activities" (slow food, slow cities, soft mobility etc)

(Based on Røpke and Godksen (2006))



## Possible ways of decreasing the environmental impacts of leisure



Based on Røpke and Godksen (2006)



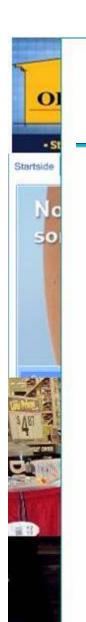
## Five main approaches in making leisure more in line with sustainability

### Leisure as part of the problem

- 1. Making resource consumption more effective
  - E.g. use more energy efficient equipment for electronic home entertainment
- 2. Changing patterns of consumption
  - E.g. less spending on holiday travels and respectively more on restaurants
- 3. Reducing the volume of certain types of leisure time consumption
  - E.g. spend less money on leisure time activities

### Leisure as part of the solution

- 4. More leisure time
  - If the extra time is spent on the least environmentally harmful leisure time activities
- 5. Leisure time as an educational arena
  - Learning new and more environmentally friendly forms of behaviour (e.g. biking or eating organic food) during your leisure time and implementing these behaviours in you everyday lives



## Some thoughts on the need for further research

- (in the context of our Norwegian project!)
- The overriding questions:
  - How should we conceptualise the "leisure society" in post-industrialised countries?
  - What are the mechanisms that determine the volume, type and environmental impacts of leisure-time consumption?
  - How can we make leisure-time consumption to become more in line with the goal of a sustainable development?
- Some more detailed questions:
  - To what extent can "shopping" be defined as a leisure-time activity; and what are the environmental impacts of shopping?
  - What are the volume of "leisure-time" redecoration and maintenance of homes?
  - Fill in the more detailed knowledge gaps as to life cycle assessments of certain categories of leisure-time consumption
- (some of this could be of relevance to the EU project?)



## Thank you for your attention!

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