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Touristic activities risk assessment - Approach and results

SASTDes WP3.7 Report

SASTDes - Smart Assessment Sustainable Tourist Destinations

DISCOVER YOUR WORLD

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1 Introduction

1.1 The SASTDes tool and the role of the activities risk assessment

Project SASTDes aims to resolve key issues in the sustainability assessment process of tourism destinations, with the objective to reduce the costs of assessments both in time and money, and to use the results of assessments for destination branding and marketing. The project's core research question is: 'How can sustainability assessments effectively and efficiently contribute to the sustainable development of tourism destinations and tourism products?'

Figure 1 shows the SASTDes-tool setup. In the upper-left corner the scheme shows the destination manager. When using the tool, this manager starts with providing the location of the destination (in terms of the municipality name). Based on that information, the databases gathered by Wageningen will provide hundreds of data for this destination, compare these with averages for instance for all destinations in a country or Europe. It will also generate a couple of additional questions like the accessibility of nature reserves if it found any near the destination. After that, a status report for the sustainability indexes for more than ten sustainability categories will be automatically provided as well as a suitable marketing mix in terms of 'personas'. Furthermore, the tool confronts sustainability indexes with current tourism activities offered by the destinations and this will raise red flags for those highly conflicting. For example, a tourist activity like jet skiing will conflict with a nature reserve where silence is one of the main qualities. The SASTDes-tool will also allow to change activities, stop certain activities, and enter plans for new ones, ask the tool what a more sustainable mix could be and what impact such a mix would have on the sustainability index and the persona- (marketing-)mix. In this way, the tool informs the discussion between policy-makers, stakeholders, tourists and citizens who attempt to develop the destination sustainably. In Figure 1 we have indicated the place where the risk assessment table will play a role by adding a green shades box.



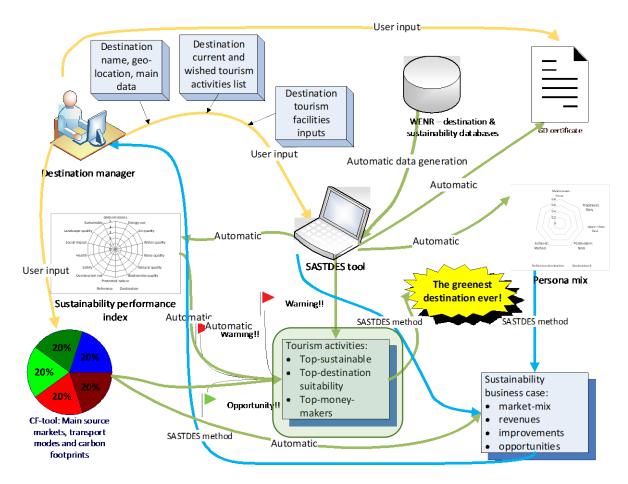


Figure 1: Scheme of the SASTDes tool. The position of the risk-table is part of the Tourism activities block. We have shaded green in the scheme.

1.2 Objective for WP3.7

The objective of Work Package (WP) 3.7 is to develop a list of tourism activities and sustainability categories and to assess the risk each activity poses for each category. The tourism activity list is described in section 2, the sustainability categories in section 3 and the final risk assessment in section in section 4.



2 The tourism activities master list

The activities list contains currently 131 different activities divided over 21 categories from 'aerial sports' to 'winter sports'. The list has initially been developed from Dutch tourism and leisure activities research. For this task, we compiled then list by combining a list used by the NBTC (Netherlands Board of Tourism & Conventions) for the CVTO (Continu VrijeTijdsOnderzoek) in 2015 (NBTC-NIPO, 2015) and a recreational activity inventory (Metİn, Katırcı, Yüce, Sarıçam, & Çabuk, 2017). The list has been adjusted accordingly to relevant tourist activities offered in the wider range of European destinations outside The Netherlands. Appendix 1 provides the full list of activities.

3 The sustainability categories

A commonly used method to make tourism more sustainable is by subjecting tourism products (package tours, accommodations, destinations) to a sustainability assessment. Tourist actors who work with sustainability often experience difficulties in communicating their commitment in this area and in achieving benefits for the consumer (Font, Elgammal, & Lamond, 2017; Villarino & Font, 2015). This project relates to this communication problem and is based on a completely new strategy by focusing on activities that (certain groups of) tourists prefer. In this project, the activities are rated for the risk they pose on a dozen sustainability themes, linked to the opportunities that a destination offers with its characteristics and the extent to which the activity is attractive for certain market segments. In this way, a tourist destination can both improve its sustainability and better market itself and thereby gives substance to the three descriptions of sustainability People, Planet and Profit.

We distinguish twelve sustainability themes, related to People and Planet. The themes deal with the potential impact of an activity on the environment. Each activity scores on the possibility of a risk of sustainability. The scores are not scientifically substantiated, but based on an expert judgment. The scores range from a very high risk to a low risk. And some activities will not pose any risk on one or more themes. The score sends out a 'warning signal' and the tool indicates where sustainability bottlenecks may lie. Alertness is required if a destination wants to develop or promote an activity with a high score on one or more sustainability themes.

The following twelve sustainability themes are distinguished:

- 1. GHG EMISSIONS: Activity is a contributor to carbon emissions (CO₂)
- 2. ENERGY USE: Consumption of energy while doing the activity or visiting an entity (facility) which use energy
- 3. AIR QUALITY: Activity produces air quality of less than 10 microns of diameter (PM10) and of less than 2.5 microns
- 4. WATER USE: Consumption of water by the entity (facility) offering the activity
- 5. WATER QUALITY: An activity could have a negative influence on water quality
- 6. NOISE QUALITY: An activity produces noise (more than 55 dB) that comes at the expense of silence/tranquillity
- 7. BIODIVERSITY QUALITY: An activity disrupts the flora & fauna in such a way that they are threatened in their survival



- 8. SAFETY: An activity can be dangerous for the user or for others
- 9. LANDSCAPE QUALITY: The facilities or land use in participating in the activity disturbs the original landscape
- 10. SUSTAINABLE MOBILITY ACCESS INDEX: The impact of the used transport mode to reach the activity
- 11. LITTERING/POLLUTION: An activity where tourists produce uncontrolled waste
- 12. WASTE QUANTITY: The produced waste quantity of the entity (facility) offering the activity



4 The risk assessment

Several steps were involved in the risk assessment of these 131 tourist activities on the 12 sustainability themes. The first attempt was to determine the level of the activities' risks by reviewing literature and previous studies about tourist activities and their impact on certain environmental themes. However, the spectrum of studies was not sufficient enough to cover the majority of activities. Therefore, it was decided to consult a panel of experts for each of the 12 sustainability themes and let them assess the risk of 131 tourist activities by filling out a survey. Testing the survey with an expert in energy use raised more questions about each activities' definition, the number of people participating in an activity as well as the circumstances and environment in which an activity is offered. Furthermore, assessing 131 activities times 12 sustainability themes seemed too time-consuming. Consequently, for a more efficient and effective risk assessment procedure, a direct dialogue with the experts was required.

Therefore, a focus group of experts in the area of sustainable tourism was formed. During a one-day session, the risk of every activity on the 12 sustainability themes was assessed and the session was moderated by two facilitators. The experts were provided with the following materials; a description list of all 131 tourist activities, a description of the 12 sustainability themes, 12 cards for each sustainability theme, and three containers (see Figure 2). For a more reliable assessment, experts were asked twice to evaluate the risk of each activity. First, by placing the cards with sustainability themes in one of the three containers. The first container was low risk (scores 0-1), the second container medium risk (scores 2-3), and the third container high risk (scores 4-5). For the second evaluation, the risk of the assessed activity on each sustainability theme was ranked on a scale from zero to five, where zero means no risk and five means extremely high risk.



Figure 2: Set up of the risk assessment materials

The experts were asked to assess the risk of each activity assuming the highest possible number of participants. Since a low number of participants is not as risky as a high



number. For each activity of the 131 tourist activities the experts went through the following procedure:

1) Facilitator One presents on a screen the excel sheet with the activities and points out

the activity to be assessed

(Figure 3).

2)



Figure 3: Screen with excel sheet

3) One by one the cards with the sustainability themes are shown to the experts, and they mutually decide whether it is a low risk, medium risk, or high risk (Figure 4). Facilitator One places the card into the dedicated container (Figure 2).





Figure 4: Experts assessing 1

- 4) Facilitator One takes out the cards with the sustainability themes of the low risk container and places them on the table.
- 5) Experts are asked to mutually rank the sustainability themes with a zero or one.
- 6) Facilitator Two records the decisions in the excel sheet that is shown on screen (Figure 5).
- 7) Facilitator One takes out the cards with the sustainability themes of the medium risk container and places them on the table.
- 8) Experts are asked to mutually rank the sustainability themes with two or three.
- 9) Facilitator Two records the decisions in the excel sheet that is shown on screen.
- 10) Facilitator One takes out the cards with the sustainability themes of the high-risk container and places them on the table.
- 11) Experts are asked to mutually rank the sustainability themes with four or five.
- 12) Facilitator Two records the decisions in the excel sheet that is shown on screen.



Figure 5: Presenting decisions to facilitator two

All 131 activities were assessed and in a closing discussion round finalised during this one-day session. We used a full description of most of the tourism activities created by (Praat, Sensagir, Goossen, Eijgelaar, & Peeters, 2020) as reference. The output of the assessment will be presented in the next section. Later some smaller issues were solved by the project leader in collaboration with those involved in the assessment session.

After the session it appeared that sports spectator events were not well-covered. These have been added by Paul Peeters with some exchange of thoughts through e-mail. Appendix 2 provides a full overview of the sustainability risks scores for all activities.



5 Results and final notes

The resulting risk table can be found in Appendix 2. The table shows colour codes from green (no risk) to red (high risk) and shows the large variance in risks between activities. Activities with an overall high impact are activities like tours with a 4wd, quad or cross motor, skiing and heli-skiing and car and motorcycle races. Very low-risk are activities like Yoga, walking for pleasure, outdoor athletics, visiting classical concert or theatre and even sunbathing. An important issue is the scale at which an activity is performed. At very high numbers, also sunbathing becomes an unsustainable activity due to the infrastructure then required.

Some matters to note when using the results in the SASTDES-tool are:

- 1. The current assessment is based on a mutual researcher-opinion. The scores may need to be updated based on:
 - a. Experience with the tool delivering unrealistic results according to practitioners (DMO managers
 - b. As a follow-up project the assessment might be updated based upon opinions by experts per each sustainability category.
- 2. The size and volume of an activity is an important parameter to consider when assessing the sustainability risk.
- 3. Social and economic sustainability are not part of the Risk-table. Economy is taken care of through the marketing and specifically the Personas (WP4). The social sustainability will be part of the sessions with stakeholders and citizens of the destination where the SASTDES-tool provides the insights for market, economy, and environment. This is delivered by WP5.



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Appendix 1 Activities list

The following table provides the master table for activities sorted per alphabetical category.

Act_code	Activity name	Act category
AB01	Horseback riding	Animal-based activity
AS01	Flight small motorised	Aerial sports
AS02	Flight glider/sailplane	Aerial sports
AS03	Flight helicopter	Aerial sports
AS04	Hot air balloon ride (non-motorised)	Aerial sports
AS05	Jumping with a parachute (outdoor)	Aerial sports
AS06	Paragliding unmotorised	Aerial sports
AS07	Paragliding motorised (Paramotor)	Aerial sports
CAI01	Cinema or film house (indoor)	Cultural activities (indoor)
CAI02	Classical concert / opera / operetta (indoor)	Cultural activities (indoor)
CAI03	Concert (pop / jazz / blues / rock) (indoor)	Cultural activities (indoor)
CAI04	Cultural event / festival (indoor)	Cultural activities (indoor)
CAI05	Gallery or studio (indoor)	Cultural activities (indoor)
CAI06	Museum / art hall / exhibition (indoor)	Cultural activities (indoor)
CAI07	Musical (indoor)	Cultural activities (indoor)
CAI08	Theater / ballet / dance performance	Cultural activities (indoor)
CAO01	(indoor) Archaeological / archaeological objects	Cultural activities (outdoor)
CAOUI	(excavations, burial mounds, dolmens)	Cultural activities (outdoor)
CAO02	Classical concert / opera / operetta	Cultural activities (outdoor)
	(outdoor)	
CAO03	Concert (pop / jazz / blues / rock) (outdoor)	Cultural activities (outdoor)
CAO04	Cultural event / festival (outdoor)	Cultural activities (outdoor)
CAO05	Monument / place of interest (such as	Cultural activities (outdoor)
	castles, churches, villages, or boroughs) (outdoor)	
CAO06	Museum / art hall / exhibition (outdoor)	Cultural activities (outdoor)
CAO07	Musical (outdoor)	Cultural activities (outdoor)
CAO08	Open-air cinema (outdoor)	Cultural activities (outdoor)
CAO09	Theatre / ballet / dance performance	Cultural activities (outdoor)
	(outdoor)	
FW01	Canoeing (Fresh-water-based recreation)	Fresh-water-based recreation
FW02	Fishing (Fresh-water-based recreation)	Fresh-water-based recreation
FW03	Snorkelling (Fresh-water-based recreation)	Fresh-water-based recreation
FW04	Jet Skiing (Fresh-water-based recreation)	Fresh-water-based recreation
FW05	Kite surfing (Fresh-water-based recreation)	Fresh-water-based recreation



Act_code	Activity name	Act category
FW06	Rafting (Fresh-water-based recreation)	Fresh-water-based recreation
FW07	Rowing (Fresh-water-based recreation)	Fresh-water-based recreation
FW08	Scuba diving (Fresh-water-based	Fresh-water-based recreation
	recreation)	
FW09	Water ball (Fresh-water-based recreation)	Fresh-water-based recreation
FW10	Water skiing (Fresh-water-based	Fresh-water-based recreation
	recreation)	
FW11	Wind surfing (Fresh-water-based	Fresh-water-based recreation
F14/40	recreation)	
FW12	Swimming (Fresh-water-based recreation)	Fresh-water-based recreation
G001	Bar / café visit	Going out
GO02	Casino, gaming hall and similar	Going out
GO03	Dance club	Going out
GO04	Dining out	Going out
HA01	Sunbathing (land-based)	Hedonic Activities
HA02	Sunbathing (seaside)	Hedonic Activities
HA03	Sunbathing (lake-river)	Hedonic Activities
HA04	Wellness centre \ sauna \ thermae \ mud	Hedonic Activities
	bath \ steam bath	
MA01	Classes for developing skills and	Mental Activity, Relaxation,
	academically (i.e. cooking, design,	and Self-Awareness (indoor)
MA02	psychology, philosophy) (indoor)	Montal Activity Polavation
IVIAUZ	Classes for developing skills and academically (i.e. cooking, design,	Mental Activity, Relaxation, and Self-Awareness
	psychology, philosophy) (outdoor)	(outdoor)
NA01	Activities with campfire	Nature Activity
NA02	Bird-spotting	Nature Activity
NA03	Cave visit	Nature Activity
NA04	Collecting wild fruits, vegetables,	Nature Activity
	mushrooms, plants, etc.	
NA05	Discovering the wildlife	Nature Activity
NA06	Hiking off-tracks	Nature Activity
NA07	Hiking on-tracks	Nature Activity
NA08	Hunting	Nature Activity
NA09	Ice climbing	Nature Activity
NA10	Photography, film, video	Nature Activity
NA11	Rock climbing/mountaineering	Nature Activity
NA12	Walking for pleasure	Nature Activity
NA13	Wild camping	Nature Activity
NA14	Picnic	Nature Activity
		-



Act_code	Activity name	Act category
PVO01	Active games (outdoor/GPS-Enabled	Play/Video games (outdoor)
	Smartphones)	, ,
SI01	Artificial rock climbing (indoor)	Sport (indoor)
SI03	Ball sports (indoor)	Sport (indoor)
SI04	Bowling (indoor)	Sport (indoor)
SI05	Gym (indoor)	Sport (indoor)
SI06	Rollerblading and Skateboarding (indoor)	Sport (indoor)
SI07	Winter sports (indoor)	Sport (indoor)
S108	Yoga / Tai Chi / Meditation and similar	Sport (indoor)
	(indoor)	
SI09	Swimming (indoor)	Sport (indoor)
SO01	Athletics (outdoor)	Sport (outdoor)
SO02	Ball sports (outdoor)	Sport (outdoor)
SO03	Beach ball sports (outdoor)	Sport (outdoor)
SO04	Bungee jumping (outdoor)	Sport (outdoor)
SO05	Car Race (outdoor)	Sport (outdoor)
SO06	Cycling (outdoor)	Sport (outdoor)
SO07	Golf (outdoor)	Sport (outdoor)
SO08	Jogging / running (outdoor)	Sport (outdoor)
SO09	Mountain biking (outdoor)	Sport (outdoor)
SO10	Rollerblading and Skateboarding (outdoor)	Sport (outdoor)
SO11	Swimming (outdoor artificial pool)	Sport (outdoor)
SO12	Yoga / Tai Chi / Meditation and similar	Sport (outdoor)
	(outdoor)	
SO13	Flying kites	Sport (outdoor)
SO14	Climbing park (outdoor)	Sport (outdoor)
SP01	Weekly market	Shopping for pleasure
SP02	Shopping	Shopping for pleasure
SW01	Canoeing (Sea-water-based recreation)	Sea-water-based recreation
SW02	Discovering underwater caves	Sea-water-based recreation
SW03	Fishing (Sea-water-based recreation)	Sea-water-based recreation
SW04	Snorkelling (Sea-water-based recreation)	Sea-water-based recreation
SW05	Jet Skiing (Sea-water-based recreation)	Sea-water-based recreation
SW06	Kite surfing (Sea-water-based recreation)	Sea-water-based recreation
SW07	Scuba diving (Sea-water-based recreation)	Sea-water-based recreation
SW08	Surfing (Sea-water-based recreation)	Sea-water-based recreation
SW09	Water ball (Sea-water-based recreation)	Sea-water-based recreation
SW10	Water skiing (Sea-water-based recreation)	Sea-water-based recreation
SW11	Wind surfing (Sea-water-based recreation)	Sea-water-based recreation
SW12	Swimming (Sea-water-based recreation)	Sea-water-based recreation
TA01	4wd tour	Touring Activity (motorised)



Act_code	Activity name	Act category
TA02	Cross motor driving (motorised)	Touring Activity (motorised)
TA03	Electric bicycle tour (motorised)	Touring Activity (motorised)
TA04	Motorcycle driving (motorised)	Touring Activity (motorised)
TA05	Quad driving (motorised)	Touring Activity (motorised)
TA06	Renting boat (rowing boat, canoe, etc.)	Touring Activity (non-
		motorised)
TA07	Renting a boat (motorised)	Touring Activity (motorised)
TA08	Sailing (with sailing-boat with or without	Touring Activity (non-
	auxiliary engine)	motorised)
TA09	Taking boat tour (motorised)	Touring Activity (motorised)
VA01	Amusement park / Theme park	Visit attractions
VA02	Ornamental, botanical garden	Visit attractions
VA03	Zoo / bird park / sea aquarium / etc.	Visit attractions
VE01	Visit Conference	Visit attractions
VE02	Fair / exhibition / show	Visit events
VS01	Football/soccer (spectator)	Visit sport events
VS02	Tennis/cricket/baseball (spectator)	Visit sport events
VS03	Athletics (spectator)	Visit sport events
VS04	Field hockey/rugby (spectator)	Visit sport events
VS05	Car/motor cycle racing (circuit) (spectator)	Visit sport events
VS06	Boxing/wrestling/fight sports (spectator)	Visit sport events
VS07	Ice hockey/skating (spectator)	Visit sport events
VS08	Volleyball/handball/basketball (spectator)	Visit sport events
VS09	Badminton/table tennis (spectator)	Visit sport events
VS10	Cycling (spectator)	Visit sport events
VS11	Swimming (spectator)	Visit sport events
VS12	Skiing (spectator)	Visit sport events
VS13	Horse Racing (spectator)	Visit sport events
VS14	Other sports (spectator, outdoor)	Visit sport events
VS15	Other sports (spectator, indoor)	Visit sport events
WS01	Cross-country skiing ('langlauf')	Winter sport
WS02	Heli-skiing	Winter sport
WS03	Off-piste skiing/snowboarding	Winter sport
WS04	On-piste skiing/snowboarding	Winter sport



Appendix 2 Risk table

The table provides a score from 0 (no risk) to 5 (high risk). The sum is a simple unweighted sum of all 12 individual sustainability categories scores. The theoretical maximum is 60 points, but maximum in the list is 38. Colouring is based on the minimum value (1) with dark green and this maximum value (38) with dark red.

Legend:

Code	Sustainability category
GHGE	GHG emissions
ENER	Energy use
AIRQ	Air quality
WATU	Water use
WATQ	Water quality
NOIS	Noise quality
BIOD	Biodiversity quality
SAFT	Safety
LAND	Landscape quality
SMOB	Sustainable mobility access index
LITT	Littering/pollution
WAST	Waste quantity
SUM	Sum of all scores

Act code	Activity name	GHGE	ENER	AIRQ	WATU	WATQ	NOIS	BIOD	SAFT	LAND	SMOB	ш	WAST	SUM
AB01	Horse back riding	0	0	0	0	3	0	2	1	2	3	3	1	15
AS02	Flight glider/sailplane	1	1	1	0	1	0	0	0	1	3	0	0	8
AS06	Paragliding unmotorised	2	2	2	0	0	0	0	3	0	3	0	0	12
AS04	Hot air balloon ride (non- motorised)	3	3	3	0	0	1	0	1	0	2	0	0	13
AS07	Paragliding motorised (Paramotor)	3	3	3	0	0	2	0	3	0	3	0	0	17
AS01	Flight small motorised	5	5	3	0	0	4	2	2	2	3	0	0	26
AS05	Jumping with a parachute (outdoor)	4	4	4	0	0	5	2	3	2	3	0	0	27
AS03	Flight helicopter	5	5	5	0	0	4	2	2	2	3	0	0	28
CAI05	Gallery or studio (indoor)	1	1	0	0	0	0	0	0	0	0	0	0	2
CAI02	Classical concert / opera / operetta (indoor)	1	2	0	0	0	0	0	0	0	0	0	1	4
CAI08	Theater / ballet / dance performance (indoor)	1	2	0	0	0	0	0	0	0	0	0	1	4
CAI06	Museum / art hall / exhibition (indoor)	2	2	0	0	0	0	0	0	0	0	0	1	5
CAI01	Cinema or film house (indoor)	1	2	0	0	0	0	0	0	0	0	0	3	6
CAI07	Musical (indoor)	1	2	0	0	0	1	0	1	0	0	0	1	6

Act		GHGE	ENER	AIRQ	WATU	WATQ	NOIS	BIOD	SAFT	LAND	SMOB	E	WAST	SUM
code	Activity name	ច		A	X	Š	ž	ā	SA	Z	S	=	Š	ns
CAO0	Classical concert / opera /						_							
2	operetta (outdoor)	0	1	0	0	0	2	0	0	0	1	1	1	6
CAO0	NA STATE OF THE ST	0	4								4	4	4	_
7	Musical (outdoor)	0	1	0	0	0	2	0	0	0	1	1	1	6
CAO0	Theater / ballet / dance	0	4								4	4	4	_
9	performance (outdoor)	0	1	0	0	0	2	0	0	0	1	1	1	6
C4.00	Monument / place of interest													
CAO0	(such as castles, churches, villages	0							4	_	4	_	4	
5	or boroughs) (outdoor)	0	0	0	0	0	2	0	1	2	1	2	1	9
CAIOO	Concert (pop / jazz / blues / rock)	4	_				4		٦				٦	10
CAI03	(indoor)	1	3	0	0	0	1	0	2	0	0	0	3	10
CAI04	Cultural event / festival (indoor)	1	2	0	0	0	2	0	2	0	0	0	3	10
CAO0	Museum / art hall / exhibition													
6	(outdoor)	1	1	0	0	0	0	1	0	2	2	2	1	10
	Archaeological / archaeological													
CAO0	objects (excavations, burial													
1	mounds, dolmens)	0	0	0	0	0	3	0	1	2	2	2	1	11
CAO0														
8	Open-air cinema (outdoor)	0	1	0	0	0	3	3	0	0	2	2	2	13
CAO0	Concert (pop / jazz / blues / rock)													
3	(outdoor)	0	2	0	0	0	4	0	3	0	1	2	3	15
CAO0														
4	Cultural event / festival (outdoor)	1	3	1	0	0	5	3	3	3	2	2	4	27
	Rowing (Fresh-water-based													
FW07	recreation)	0	0	0	0	0	1	1	1	0	1	2	1	7
	Swimming (Fresh-water-based													
FW12	recreation)	0	0	0	0	2	1	1	2	0	1	0	0	7
	Snorkeling (Fresh-water-based													
FW03	recreation)	0	0	0	0	2	0	3	1	0	2	0	0	8
	Kite surfing (Fresh-water-based													
FW05	recreation)	0	0	0	0	1	0	2	3	1	2	1	1	11
	Rafting (Fresh-water-based													
FW06	recreation)	0	0	0	0	2	0	1	4	0	3	0	1	11
	Water ball (Fresh-water-based													
FW09	recreation)	0	0	0	0	2	2	1	1	1	2	1	1	11
	Wind surfing (Fresh-water-based													
FW11	recreation)	0	0	0	0	1	0	2	3	1	2	1	1	11
	Scuba diving (Fresh-water-based													
FW08	recreation)	1	1	0	0	2	0	2	3	1	2	0	1	13
	Fishing (Fresh-water-based													
FW02	recreation)	0	0	0	0	2	0	4	1	0	2	3	2	14
	Canoeing (Fresh-water-based													
FW01	recreation)	0	0	0	0	3	0	3	1	2	2	3	1	15
	Water skiing (Fresh-water-based													
FW10	recreation)	2	3	2	0	3	4	3	3	3	3	0	1	27
	Jet Skiing (Fresh-water-based													
FW04	recreation)	2	3	2	0	5	5	4	5	2	3	0	1	32
GO02	Casino, gaming hall and similar	1	2	0	0	0	0	0	0	0	0	1	2	6



Act		GHGE	ENER	AIRQ	WATU	WATQ	NOIS	BIOD	SAFT	LAND	SMOB	E	WAST	SUM
code	Activity name											占		
GO01	Bar / café visit	1	2	0	0	0	4	0	2	0	0	1	2	12
G003	Dance club	1	2	0	0	0	3	0	3	0	1	1	3	14
G004	Dining out	3	3	0	3	1	2	0	0	0	0	1	5	18
HA01	Sunbathing (land-based)	0	0	0	0	0	0	0	0	0	0	2	2	4
HA02	Sunbathing (seaside)	0	0	0	0	1	1	2	0	2	2	3	2	13
HA03	Sunbathing (lake-river)	0	0	0	0	1	1	3	0	3	3	3	2	16
	Wellness center \ sauna \ thermae													
HA04	\ mud bath \ steam bath	2	3	1	4	2	2	0	2	3	2	0	1	22
	Classes for developing skills and academically (i.e. cooking, design,													
MA01	psychology, philosophy) (indoor)	1	1	0	0	0	0	0	0	0	1	0	1	4
	Classes for developing skills and													
	academically (i.e. cooking, design,													
MA02	psychology, philosophy) (outdoor)	0	0	0	0	0	1	0	0	0	1	1	1	4
NA12	Walking for pleasure	0	0	0	0	0	1	0	0	0	0	1	1	3
NA10	Photography, film, video	0	0	0	0	0	0	2	1	2	2	0	0	7
NA02	Bird-spotting	0	0	0	0	0	0	2	0	1	3	1	1	8
NA14	Picnic	1	0	0	0	0	1	0	0	0	1	3	3	9
NA07	Hiking on-tracks	0	0	0	0	0	1	2	1	3	2	1	1	11
NA09	Ice climbing	0	0	0	0	0	0	1	5	0	3	1	1	11
NA05	Discovering the wildlife	0	0	0	0	0	1	2	1	3	2	2	1	12
NA03	Cave visit	0	0	0	0	2	0	2	4	2	3	1	1	15
NA11	Rock climbing/mountaineering	0	0	0	0	0	0	2	5	3	3	2	1	16
	Collecting wild fruits, vegetables,													
NA04	mushrooms, plants, etc.	0	0	0	0	0	1	5	2	3	1	3	2	17
NA06	Hiking off-tracks	0	0	0	0	0	1	4	3	4	2	2	1	17
NA13	Wild camping	0	0	0	0	3	0	3	2	2	2	4	2	18
NA08	Hunting	0	0	0	0	1	3	5	5	3	3	3	1	24
NA01	Activities with campfire	1	1	5	0	1	2	2	5	2	0	4	2	25
PVO0	Active games (outdoor/GPS-													
1	Enabled Smartphones)	0	0	0	0	0	2	2	4	2	2	2	1	15
SI03	Ball sports (indoor)	1	2	0	0	0	0	0	1	0	1	0	1	6
SI05	Gym (indoor)	1	2	0	0	0	0	0	1	0	1	0	1	6
SI08	Yoga / Tai Chi / Meditation and	1	2	0	0		0		1		1		1	6
	similar (indoor)	1		0	0	0		0	1	0	1	0	1	6
SI04	Bowling (indoor) Rollerblading and Skateboarding	1	2	0	0	0	0	0	1	0	2	0	1	7
SI06	(indoor)	1	2	0	0	0	0	0	3	0	2	0	1	9
SI01	Artificial rock climbing (indoor)	1	2	0	0	0	0	0	4	0	2	0	1	10
SI07	Wintersports (indoor)	3	4	0	0	0	0	0	2	2	3	0	2	16
SI09	Swimming (indoor)	2	3	1	4	1	1	0	2	3	2	0	0	19
2.03	Yoga / Tai Chi / Meditation and								_					, ,
SO12	similar (outdoor)	0	0	0	0	0	0	0	1	0	0	0	0	1



Act code	Activity name	GHGE	ENER	AIRQ	WATU	WATQ	NOIS	BIOD	SAFT	LAND	SMOB	E	WAST	SUM
SO01	Athletics (outdoor)	0	0	0	0	0	1	0	1	0	0	0	1	3
SO02	Ball sports (outdoor)	0	0	0	0	0	1	0	1	0	0	1	1	4
SO13	Flying kites	0	0	0	0	0	1	2	0	0	2	0	0	5
SO06	Cycling (outdoor)	0	0	0	0	0	0	0	1	0	1	2	2	6
5008	Jogging / running (outdoor)	0	0	0	0	0	1	1	1	0	1	1	1	6
5003	Beach ball sports (outdoor)	0	0	0	0	0	2	0	1	0	2	2	2	9
SO04	·		0	0	0			0	3	2		0		
3004	Bungee jumping (outdoor) Rollerblading and Skateboarding	0	U	U	U	0	1	U	3		2	U	1	9
SO10	(outdoor)	0	0	0	0	0	2	0	3	1	1	1	1	9
SO14	Climbing park (outdoor)	0	0	0	0	0	1	2	3	2	3	1	1	13
5009	Mountain biking (outdoor)	0	0	0	0	0	1	1	3	3	2	2	2	14
SO07	Golf (outdoor)	1	2	1	4	2	0	1	2	4	2	0	2	21
SO11				1	4			0				1	1	22
	Swimming (outdoor)	2	3			2	2	_	2	2	2			
SO05	Car Race (outdoor)	4	4	5	0	1	5	1	5	3	4	0	1	33
SP01	Weekly market	0	0	0	0	0	2	0	0	0	2	3	3	10
SP02	Shopping	1	2	0	0	0	2	0	0	0	2	2	2	11
SW12	Swimming (Sea-water-based recreation)	0	0	0	0	2	1	1	2	0	1	0	0	7
37712	Surfing (Sea-water-based	0		0	0		'	1		0	-	U	U	,
SW08	recreation)	0	0	0	0	1	0	0	3	0	3	1	1	9
	Snorkeling (Sea-water-based													
SW04	recreation)	0	0	0	0	2	0	3	3	0	2	0	0	10
CIAVOO	Water ball (Sea-water-based													4.4
SW09	recreation) Wind surfing (Sea-water-based	0	0	0	0	2	1	1	2	1	2	1	1	11
SW11	recreation)	0	0	0	0	1	0	2	3	1	2	1	1	11
3	Canoeing (Sea-water-based							_		·	_	•		
SW01	recreation)	0	0	0	0	1	0	2	3	1	2	2	1	12
SW02	Discovering underwater caves	0	0	0	0	0	0	2	5	2	3	0	0	12
	Kite surfing (Sea-water-based													
SW06	recreation)	0	0	0	0	1	0	2	4	1	2	1	1	12
CMOZ	Scuba diving (Sea-water-based	1	_	_		1	_	٦			٦	_	1	10
SW07	recreation) Fishing (Sea-water-based	1	2	2	0	1	0	3	4	0	2	2	1	18
SW03	recreation)	2	3	3	0	1	0	3	2	0	2	2	1	19
31100	Water skiing (Sea-water-based	_									_		•	
SW10	recreation)	2	3	2	0	3	3	2	3	1	3	0	1	23
	Jet Skiing (Sea-water-based													
SW05	recreation)	2	3	2	0	4	4	3	4	2	3	0	1	28
TA03	Electric bicycle tour (motorised)	0	1	0	0	0	0	0	2	0	1	2	2	8
T. 0.5	Renting boat (rowing boat, canoe,	_	_	_			_	_		_		_	_	4.0
TA06	etc.) Sailing (with sailing-boat with or	1	1	1	0	1	2	2	0	1	1	1	2	13
TA08	without auxiliary engine)	1	1	1	0	3	1	1	2	0	1	1	2	14
TA04	Motorcycle driving (motorised)	2	2	3	0	0	4	0	3	0	0	1	2	17
1AU4	Motorcycle ariving (Motorised)			3	U	U	4	U	3	U	U		2	17



Act		GHGE	ER .	ð	WATU	WATQ	SIS	QC	h:	LAND	SMOB	F	WAST	Σ
code	Activity name	НĐ	ENER	AIRQ	×	3	NOIS	BIOD	SAFT	3	S	<u> </u>	8	SUM
TA07	Renting a boat (motorised)	2	2	2	0	2	1	3	1	2	1	2	2	20
TA09	Taking boat tour (motorised)	2	2	2	0	2	2	3	0	2	2	1	2	20
TA01	4wd tour	4	4	4	0	1	3	2	2	4	2	1	2	29
TA05	Quad driving (motorised)	3	3	4	0	1	5	3	3	4	2	1	2	31
TA02	Cross motor driving (motorised)	3	3	4	0	1	5	3	3	4	3	1	2	32
VA02	Ornamental, botanical garden	0	1	0	2	1	0	1	0	0	1	0	1	7
	Zoo / bird park / sea aquarium /													
VA03	etc.	2	3	1	3	1	1	1	0	4	4	1	3	24
VA01	Amusement park / Theme park	3	5	0	4	1	2	2	2	5	4	1	3	32
VE01	Visit Conference	2	3	1	1	0	0	0	0	2	4	0	3	16
VE02	Fair / exhibition / show Badminton/table tennis	2	3	1	1	0	0	0	0	2	4	0	3	16
VS09	(spectator)	1	2	0	0	0	0	0	0	0	2	0	1	6
VS02	Tennis/cricket/baseball (spectator)	1	1	1	1	0	1	0	0	0	1	0	2	8
	Volleyball/handball/basketball													
VS08	(spectator)	2	3	0	0	0	0	0	0	0	1	0	2	8
VS15	Other sports (spectator, indoor)	1	2	1	0	0	0	0	1	0	1	0	2	8
VS03	Athletics (spectator)	1	1	1	1	0	1	0	0	0	1	2	2	10
VS06	Boxing/wrestling/fight sports (spectator)	2	3	0	0	0	0	0	2	0	1	0	2	10
VS04	Field hockey/rugby (spectator)	1	1	1	1	0	2	0	0	0	2	2	2	12
VS07	Ice hockey/skating (spectator)	3	4	0	1	1	0	0	0	0	1	0	2	12
VS14	Other sports (spectator, outdoor)	1	1	1	0	0	2	0	1	0	1	2	3	12
VS13	Horse Racing (spectator)	1	2	1	1	0	2	0	1	0	3	2	2	15
VS01	Football/soccer (spectator)	1	2	1	1	0	3	0	2	0	2	2	3	17
VS10	Cycling (spectator)	1	2	1	0	0	3	1	1	1	2	4	3	19
VS11	Swimming (spectator)	2	3	1	4	1	1	0	2	3	2	0	0	19
	Car/motor cycle racing (circuit)													
VS05	(spectator)	3	4	4	1	1	5	2	2	3	3	3	3	34
VS12	Skiing (spectator)	3	4	2	5	5	2	3	3	5	2	2	2	38
WS01	Cross-country skiing ('langlauf')	1	1	1	1	1	1	1	1	1	1	0	1	11
WS03	Off-piste skiing/snowboarding	1	2	0	0	0	0	3	4	2	2	1	1	16
WS02	Heli-skiing	5	5	5	0	0	4	4	5	1	4	0	0	33
WS04	On-piste skiing/snowboarding	3	4	2	5	5	2	3	3	5	2	2	2	38





Games



Media



Hote



Facility



Built Environmen



Logistics



Tourism





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