

# Green growth indicators for the tourism sector in the Netherlands

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Connecting TSA and SEEA, a case study for the Netherlands, 2016

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## Set-up presentation

- Introduction
- Relevance of connecting TSA and SEEA
- Concepts and definitions
- Production approach
- Green indicators for the tourism sector
- In practice: what ingredients do we need for compiling TSA-SEEA indicators
- Available TSA and SEEA data in the Netherlands
- Results



## Introduction

- My name is Maarten van Rossum
- Employer: Statistics Netherlands
- Experience: Environmental accounts (7 years), National accounts (10 years), Tourism accounts (3 years)

3



## Relevance of connecting TSA and SEEA

- The UN Sustainable Development Goals (SDGs) leave no doubt: sustainability is at the forefront of policy. Tourism, considered in three of these Goals (Target 8.9, 12.b and 14.7), is more than ever before expected to live up to the expectations of sustainability—not only of tourism itself, but also of tourism as a contributor to sustainable development.
- There is a clear need to monitor progress (both the economy and the environment)
- Therefore there is a clear need for unquestionable indicators based on indisputable conceptual frameworks
- Ministry of Economic Affairs very much interested in these kind of indicators. Project initiated which is financed by Ministry of Economic Affairs

4



## Concepts and definitions

- Internationally agreed conceptual frameworks: TSA, SNA and SEEA
- Linking the SEEA to the Tourism Satellite Account (TSA).  
both these sets of accounts have their corresponding methodological frameworks agreed internationally and rooted in the SNA, an explicit link—a SEEA-tourism—is still necessary.
- Resident principle used in both TSA, SNA and SEEA
- Scope of production is the same in TSA, SNA and SEEA

5



## Set of indicators for sustainable tourism

- It is recognized that “sustainable tourism” (much like sustainable development) is largely a policy construct without a precise definition.
- In favor of a set of indicators in stead of only one composite indicator to monitor the phenomenon.
- **Production approach (in scope)**
- Consumption approach (out of scope)
- Ecosystem flows (out of scope)

6



## Production approach

- **Production approach:**

**Quantify contribution of Dutch tourism activities on environmental pressure and resource use**

Compare value added of tourism sector with associated environmental pressure and resource use

7



## Green indicators for the tourism sector

- **Environmental pressures**

- 1) Greenhouse gases (Climate change): 2010 t/m 2015
- 2) Fine dust: 2010 t/m 2015
- 3) Heavy metals to water: 2010 t/m 2014
- 4) Nutrients to water: 2010 t/m 2014
- 5) Waste production: 2010, 2012 & 2014

- **Use of resources**

- 6) Net energy use: 2010 t/m 2014
- 7) Water use: 2010 t/m 2012
- 8) Use of biomass: 2010 & 2012
- 9) Use of metals: 2010 & 2012
- 10) Use of minerals: 2010 & 2012

- **Policy instruments & economic opportunities**

- 11) Environmental taxes: 2010 t/m 2015
- 12) Implicit tax on energy use: 2010 t/m 2014

8



## NACE 2- digit information as a starting point; but finetuning is needed, why?

- Not all so-called tourism characteristic NACE 2-digit classes are 100% percent tourism related (cargo air transport, lunching bar, snack bar for example not included in tourism economy) → you need to correct for this overestimation
- Also non –characteristic tourism activities have emissions and use natural resources. Emissions related to these activities should also be taken into account. → you need to correct for this underestimation

### – Production approach

(1) Tourism related production in mln euro per NACE activity (TSA)

(2) Environmental variables per NACE activity (SEEA)

(3) Production per NACE activity (SNA)

Environmental variables related to tourism production:  $(1) * ((2) / (3))$

Scope used for the economy should be the same as the scope used for residuals and natural resource use; fair comparison.

9



## TSA and SEEA data in the Netherlands

- Tourism; key indicators, National Accounts

<http://statline.cbs.nl/Statweb/publication/?VW=T&DM=SLEN&PA=83466ENG&D1=a&D2=a&HD=160916-1549&LA=EN&HDR=G1&STB=T>

- Tourist expenditure; National Accounts

<http://statline.cbs.nl/Statweb/publication/?VW=T&DM=SLEN&PA=82671ENG&D1=a&D2=a&HD=160916-1550&LA=EN&HDR=G1&STB=T>

- We also produce and publish information on residuals in the environmental accounts. See for example:

<http://statline.cbs.nl/Statweb/publication/?DM=SLEN&PA=82873ENG&D1=0-9,14-15,17&D2=0-2,37-39&D3=10-12&LA=EN&VW=T>

10



## Overview of results

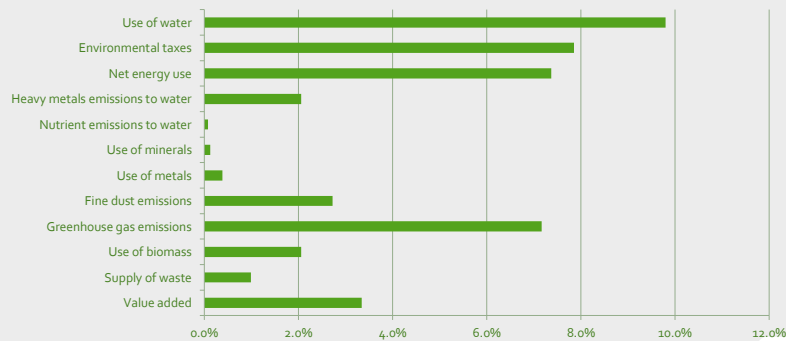
Total tourism sector Netherlands		2010	2011	2012	2013	2014*	2015*	average
Value added	mln euro	17300	17855	18690	19576	21200	22341	19660
Supply of waste	mln kg	469	.	537	.	547	.	518
Use of biomass	mln kg	.	.	2804	.	.	.	2804
Greenhouse gas emissions	mln kg	12818	13334	13816	13748	13855	14250	13637
Fine dust emissions	mln kg	0,8	0,8	0,8	0,7	0,8	.	1
Use of metals	mln kg	.	.	96	.	.	.	96
Use of minerals	mln kg	.	.	.	.	.	.	182
Nutrient emissions to water	1 000 kg	.	.	.	.	.	.	12
Heavy metals emissions to water	1 000 kg	0,8	.	.	.	0,9	0,9	1
Net energy use	PJ	.	205	211	210	210	.	209
Environmental taxes	mln euro	593	617	594	614	641	663	620
Implicit tax on energy	euro / GJ	.	2	1,9	2,1	.	.	2
Use of water	mln m <sup>3</sup>	29	29	29	.	.	.	29

11



## Contribution tourism sector

average contribution to totals over years (2010-2015, dependent on data availability)



12



## Relative decoupling



13



## Thank you for your attention!

- Feedback very welcome!
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14

