Green growth indicators for the tourism sector in the Netherlands

(project financed by Ministry of Economic Affairs)

Connecting TSA and SEEA, a case study for the Netherlands, 2016
Maarten van Rossum (Madrid, Januari 2017)

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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)

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
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

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)
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

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
− 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
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.

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:
Overview of results

<table>
<thead>
<tr>
<th>Total tourism sector</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014*</th>
<th>2015*</th>
<th>average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value added</td>
<td>mln euro</td>
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<td></td>
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<tr>
<td>Supply of waste</td>
<td>mln kg</td>
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<tr>
<td>Use of biomass</td>
<td>mln kg</td>
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<tr>
<td>Greenhouse gas emissions</td>
<td>mln kg</td>
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<tr>
<td>Fine dust emissions</td>
<td>mln kg</td>
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<tr>
<td>Use of metals</td>
<td>mln kg</td>
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<tr>
<td>Use of minerals</td>
<td>mln kg</td>
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<td>Nutrient emissions to water</td>
<td>mln kg</td>
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<tr>
<td>Heavy metals emissions to water</td>
<td>mln kg</td>
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<tr>
<td>Net energy use</td>
<td>PJ</td>
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<tr>
<td>Environmental taxes</td>
<td>mln euro</td>
<td></td>
<td></td>
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<tr>
<td>Implicit tax on energy</td>
<td>euro / GJ</td>
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<tr>
<td>Use of water</td>
<td>mln m³</td>
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</tbody>
</table>

Contribution tourism sector

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

Thank you for your attention!

- Feedback very welcome!
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