How to Overcome Obstacles to the Energy Transition in the Alpine Space by way of Cooperation: the Approach of IMEAS

Dr. Anna Stetter, B.A.U.M. Consult GmbH Munich
Short presentation of B.A.U.M.
B.A.U.M. Consult

Staff of 50+, founded 1991

- Consulting for companies, municipalities and regions
- Focus on the areas
  - Low carbon society, energy transition, mobility, sustainability management
  - Regional marketing and regional development
  - Cooperation municipality – business
- Partner in national and international research

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<table>
<thead>
<tr>
<th>Companies</th>
<th>Municipalities and Regions</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 100 ÖKOPROFIT-projects with more than 1.500 companies</td>
<td>Energy and climate protection concepts</td>
<td>9 Interreg Alpine Space projects</td>
</tr>
<tr>
<td>Operational energy consulting – more than 3.000 companies</td>
<td>Mobility concepts</td>
<td>EUKI project – ALLIES – Activating and Learning from Local Investments in Energy Savings</td>
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<tr>
<td>Compliance service</td>
<td>Regional marketing and development</td>
<td>Numerous other national and international research projects mainly in the field of smart energy</td>
</tr>
<tr>
<td>Operational mobility management</td>
<td>European Energy Award</td>
<td></td>
</tr>
</tbody>
</table>
Interdisciplinary Team

• chemists
• sociologists
• economists
• physicists
• foresters
• political scientists

• Engineers from the field of
  – environmental
  – power
  – mechanical
  – economics

• computer scientists
• legal experts
• urban / spatial planners
• architects
• grographers
• biologists
B.A.U.M. – municipalities’ partner in climate protection

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The Alpine Space and IMEAS
CO2-Emissions per person

<table>
<thead>
<tr>
<th>Land</th>
<th>Konsumprinzip</th>
<th>Produktionsprinzip</th>
<th>Differenz</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuwait</td>
<td>35,4</td>
<td>33,9</td>
<td>1,5</td>
<td>4,4</td>
</tr>
<tr>
<td>Australien</td>
<td>29,4</td>
<td>33,1</td>
<td>-4</td>
<td>-12</td>
</tr>
<tr>
<td>USA</td>
<td>27,9</td>
<td>23,5</td>
<td>4,4</td>
<td>18,7</td>
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<tr>
<td>Schweiz</td>
<td>23</td>
<td>7,3</td>
<td>15,7</td>
<td>215</td>
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<tr>
<td>Österreich</td>
<td>21,5</td>
<td>12,8</td>
<td>8,7</td>
<td>68</td>
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<tr>
<td>Deutschland</td>
<td>18,3</td>
<td>13,2</td>
<td>5,1</td>
<td>38,6</td>
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<tr>
<td>Russland</td>
<td>14</td>
<td>19,4</td>
<td>-5,4</td>
<td>-27,8</td>
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<tr>
<td>China</td>
<td>8,4</td>
<td>9,5</td>
<td>-1,1</td>
<td>-11,6</td>
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</table>

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B.A.U.M. Research Projects in the Alpine Space and Beyond

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The Alpine Space Project IMEAS

Integrated and Multilevel Energy Models for the Alpine Space
IMEAS main output

Platform with around 20 Tools and Guidelines

- IMEAS Energy and Climate Data Inventory Tool
- Sustainable Mobility
- Stakeholder Participation
- Integrating EU energy policies in municipal energy planning
- Managing energy and climate data
- Setting up a baseline emissions inventory
- ...

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IMEAS Energy and Climate Inventory

aggregation + municipality 1

municipality 2

municipality n

benchmark

source type y

source type y

source type x

regional GHG balance

factors

not implemented

*
IMEAS Energy and Climate Inventory

Purpose of the tool

- Low level means to collect and display energy consumption and production data per municipality
- Possibility to aggregate data on next higher governance level (independent of starting level and country organization)
- Benchmarking among all listed municipalities
- Easy to use (with self explanatory user interface)
- Adaptable and upgradable since realized in EXCEL
- Interface planned to IMEAS Software Tools
IMEAS Energy and Climate Inventory

An Example: District Berchtesgadener Land

Instructions
1. Read Users Guide
2. Go to sheet Aggregation and add structural data
3. Go back to sheet Navigation and select Insert Municipality
4. Add the data of the municipality in the yellow cells

IMEAS Energy and Climate Inventory Tool

Links to Municipalities

<table>
<thead>
<tr>
<th>Go to selected municipality</th>
<th>proportion of inserted data [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aćinring</td>
<td>42%</td>
</tr>
<tr>
<td>Anger</td>
<td>42%</td>
</tr>
<tr>
<td>Bad Reichenhall</td>
<td>42%</td>
</tr>
<tr>
<td>Bayerisch Gmain</td>
<td>42%</td>
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<tr>
<td>Berchtesgaden</td>
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<tr>
<td>Bischofswiesen</td>
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<td>Freilassing, St</td>
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<td>Laufen, St</td>
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<tr>
<td>Marktschellenberg</td>
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<tr>
<td>Piding</td>
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<tr>
<td>Ramsau</td>
<td>42%</td>
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<tr>
<td>Schneeizreuth</td>
<td>42%</td>
</tr>
<tr>
<td>Saaldorf-Surheim</td>
<td>42%</td>
</tr>
<tr>
<td>Schönau am Königssee</td>
<td>42%</td>
</tr>
</tbody>
</table>
Holistic approach for Energy Transition

- Standardized tools
- Comprehensive stakeholder engagement
- Integrated approaches
- Dialogue among silos
- Cooperation
- Harmonization across governance levels

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