Real Cities in the Real World

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New cities?
City of the Future

City of the future:
- **human-friendly** (socially just and participatory),
- **climate-friendly** (low-carbon) and
- **resilient** (less vulnerable to climate variations and disasters)

• Based on existing structures
• Built structures and social structures important
• **Wise application, modification and combination** of available technologies with some new ITC elements, e.g. renovation to passive house standard, full exploration of small-scale renewables, smart flexible public transport
Unresolved Questions and Key Issues

- Compactness to optimise land use/transport versus energy efficiency and renewables
- Strategic long-term development of infrastructure

- Consider both Megacities and smaller cities and towns

- Innovation needed for
  - Transition process towards city of the future,
  - Cities as a political sphere
Focus on Megacities?

- Break-even-point urban - rural population reached, both still increasing
- Majority of urban population lives in smaller cities
- E.g. Germany: 70% of pop. in cities below 100,000
- EU-27: total number of local governments: 90,000
Status of Local Climate Policy

• A few outstanding examples
• A number of quite good examples with some weak points
• A great number of singular actions
• Thousands of other local governments sound asleep

→ Mainstreaming in day-to-day policies required
External Obstacles

(beyond the responsibility of the city)

- Role of local governments underestimated
- Lack of responsibilities and power
- Most local governments underfinanced
  Large variation in the share of local expenditure from total public expenditure e.g.
  DE: 16%, FR: 20%, UK: 29%, SE: 45%, ES: 54%
- Public sector expected to shrink (outsourcing etc.)
- Lack of national regulations (e.g. energy efficiency)
Internal Obstacles

- Lack of awareness, information and expertise
- Other priorities than climate policy prevailing, e.g. short-term economic interests
- Political process, e.g. dominance of party politics, irrational decisions, lack of effective participatory approaches, too limited time horizon
- Budgetary structure and rules
- Inertia of institutions
- Lack of enforcement
- Lack of cross-departmental collaboration and cooperation beyond city borders
Local government in the UNFCCC process

Separate observer constituency - LGMA

City networks considered as NGOs

Options:

- Multi-stakeholder process (see CDB)
- Short-term:
  - Inclusion of local and regional representatives in national delegations
  - Consideration of multilevel issues at thematic workshops
  - Inclusion of local (and regional) level activities in reporting requirements
Involvement of Local (and Regional) Levels

• Binding quantified commitments

• Inclusion of local governments in commitments analogue to proposals for developing countries, e.g. Incentives, SD-PAMs, Action targets

• Quality labels and minimum requirements e.g. Climate Star, European Energy Award

• Voluntary commitments e.g. Climate Alliance target

- obsolete under cap & trade system?
The Carbon Market Won’t Solve the Problem

• Project based mechanisms:
  - Incentives only for individual projects
  - No stimulus for mainstreaming, long-term decisions, and areas with difficulties of quantification
  - Market driven not adequate for all areas
  - No reliability of revenues
  - Additionality?

• Emissions trading:
  - Limited influence on total emissions
  - Problem of inventorisation and monitoring
Multi-level Arrangements and Incentives

- Covenants such as Dutch and Flemish scheme
  Per cap. funding rate, connected to proper planning and implementation of action programme

- Funding based on real achievements
  - Per capita values, relative improvements etc.
  - Indicators other than GHG emissions per cap.?

- Legal basis / legal requirement for local climate policy
A Research Agenda on Local Governments and Climate Change Policy

- Survey and evaluation of existing methodologies (Climate Alliance: Climate Compass, ICLEI: Milestones etc., review of reports)
- Influencing factors for cities’ carbon intensity
- What is best practice?
- Design, consultation and testing of incentive programmes and multi-level arrangements incl. monitoring and reporting
  Appropriate indicators / performance indices
- Governance issues, cross-country comparisons
Thank you for your attention!

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Annex 1: Climate Compass Compendium of Measures: Activity charts for the fields of action

www.climate-compass.net
## Climate Compass Compendium of Measures

### Example: Transport

#### Ambition levels

<table>
<thead>
<tr>
<th>TRANSPORT</th>
<th>Step 1: getting started</th>
<th>Step 2: moving forward</th>
<th>Step 3: forging ahead</th>
<th>Step 4: taking the lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Develop an integrated transport strategy</td>
<td>Define a vision, set targets and extract priority areas for action</td>
<td>Adapt rules for implementation and planning principles</td>
<td>Set up a detailed action plan</td>
</tr>
<tr>
<td>B</td>
<td>Get your own staff on the right track</td>
<td>Inform your employees about the impact of their travel to and from work and about the alternatives</td>
<td>Set up a mobility plan for your local administration</td>
<td>Value the mobility behaviour of your staff and promote it towards the public</td>
</tr>
<tr>
<td>C</td>
<td>Mobilise stakeholders for sustainable mobility</td>
<td>Involve relevant companies, institutions and organisations in the development of the transport strategy</td>
<td>Train some local authority staff to help companies customise specific mobility plans</td>
<td>Offer accompanying services and test restrictions to support the individual mobility plans</td>
</tr>
<tr>
<td>D</td>
<td>Increase the share of zero carbon modes</td>
<td>Set targets in terms of the market share of cycling and walking</td>
<td>Work continuously on the extension and improvement of your cycling and pedestrian network</td>
<td>Consider cyclists and pedestrians as main actors when reorganising the distribution of roadways</td>
</tr>
<tr>
<td>E</td>
<td>Provide a convenient public transport</td>
<td>Increase insights in the possibilities of existing public transport</td>
<td>Improve public transport facilities and services</td>
<td>Develop and implement action plans on smooth and efficient intermodal interchanges</td>
</tr>
<tr>
<td>F</td>
<td>Restrict traffic flows by managing parking space</td>
<td>Increase compliance with existing parking regulations</td>
<td>Start in the city centre to use parking and access restrictions to target users back to sustainable modes of transport</td>
<td>Set up and implement step-by-step an integrated parking programme</td>
</tr>
</tbody>
</table>

#### Themes and Tasks
Climate Scan, based on CC Compendium

- For each field of action, mark the cells which best describe actual activities.
- For clarification, refer to the detailed descriptions.
- Result: Your activity profile.

<table>
<thead>
<tr>
<th>ENERGY</th>
<th>Step: 1: getting started</th>
<th>2: moving forward</th>
<th>3: forging ahead</th>
<th>4: taking the lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Define your energy policy and adopt targets</td>
<td>Define fundamental objectives of your energy policy</td>
<td>Lay the ground for your energy policy, formulate the action programme</td>
<td>Adopt detailed targets for individual sectors or subjects</td>
</tr>
<tr>
<td>2</td>
<td>Institutionalise your energy policy</td>
<td>Define responsibilities and allocate staff</td>
<td>Install cross-sectoral cooperation structures within the administration</td>
<td>Involve municipally owned companies in the energy policy</td>
</tr>
<tr>
<td>3</td>
<td>Use innovative financing schemes</td>
<td>Inform yourself about national and European funding opportunities</td>
<td>Identify first buildings for Energy Performance Contracting (EPC)</td>
<td>Analyse results of your first contract and potentials for enlargement to additional buildings</td>
</tr>
<tr>
<td>4</td>
<td>Bring your own facilities up to scratch</td>
<td>Check selected own facilities in terms of energy use and saving potentials</td>
<td>Establish energy performance standards for municipal buildings</td>
<td>Install an energy management system for all municipal buildings, including energy audits</td>
</tr>
<tr>
<td>5</td>
<td>Become a model for sustainable energy use</td>
<td>Define a package of sustainable energy measures with low initial investment or very short pay-back time</td>
<td>Define a package of sustainable energy measures that require higher initial investments</td>
<td>Purchase green electricity to supply a portion of your energy demand</td>
</tr>
<tr>
<td>6</td>
<td>Provide &quot;green&quot; public lighting</td>
<td>Analyse potentials for immediate savings in public lighting</td>
<td>Formulate a public lighting policy plan focusing on energy efficiency</td>
<td>Purchase green electricity for public lighting</td>
</tr>
<tr>
<td>7</td>
<td>Support the implementation of renewable energy projects</td>
<td>Generate a share of your municipality’s electricity and/or heat demand in own RES plants</td>
<td>Set up a land register for the potentials of RES use</td>
<td>Create an offer of green electricity for your citizens</td>
</tr>
<tr>
<td>8</td>
<td>Inform and involve the citizens</td>
<td>Inform the citizens about your energy policy and give hints for own contributions</td>
<td>Install a local energy advice centre</td>
<td>Organise targeted campaigns on energy efficiency</td>
</tr>
<tr>
<td>9</td>
<td>Refurbish existing housing stock</td>
<td>Inform house-owners about the potentials to increase the energy efficiency of their building</td>
<td>Collect data and set up a land register for energy use in the housing stock</td>
<td>Label the housing stock according to their energy efficiency and offer targeted advice and recommendations</td>
</tr>
<tr>
<td>10</td>
<td>Work on green office buildings</td>
<td>Promote your energy management system towards external companies</td>
<td>Investigate and establish energy performance standards for offices</td>
<td>Set up demonstration projects</td>
</tr>
</tbody>
</table>
**Strategising, based on CC Compendium**

- Mark the cells where you intent to be more active
- Again, refer to detailed descriptions and case studies
- Result: Proposed activity profile as input for decision-makers

<table>
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<tr>
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<tbody>
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<td>Define fundamental objectives of your energy policy</td>
<td>Lay the ground for your energy policy, formulate the action programme</td>
<td>Adopt detailed targets for individual sectors or subjects</td>
<td>Adopt the target: 100% renewable!</td>
</tr>
<tr>
<td>Institutionalise your energy policy</td>
<td>Define responsibilities and allocate staff</td>
<td>Install cross-sectoral cooperation structures within the administration</td>
<td>Involve municipally owned companies in the energy policy</td>
<td>Install a local/regional energy agency</td>
</tr>
<tr>
<td>Use innovative financing schemes</td>
<td>Inform yourself about national and European funding opportunities</td>
<td>Identify first buildings for Energy Performance Contracting (EPC)</td>
<td>Analyse results of your first contract and potentials for enlargement to additional buildings</td>
<td>Platform financial framework conditions to facilitate internal EPC and apply it to all public buildings</td>
</tr>
<tr>
<td>Bring your own facilities up to scratch</td>
<td>Check selected own facilities in terms of energy use and saving potentials</td>
<td>Establish energy performance standards for municipal buildings</td>
<td>Install an energy management system for all municipal buildings, including energy audits</td>
<td>Improve energy performance standards for public buildings</td>
</tr>
<tr>
<td>Become a model for sustainable energy use</td>
<td>Define a package of sustainable energy measures with low initial investment or very short pay-back time</td>
<td>Define a package of sustainable energy measures that require higher initial investments</td>
<td>Purchase green electricity to supply a portion of your energy demand</td>
<td>Resolve upon the continuous progression of the share of green electricity</td>
</tr>
<tr>
<td>Provide “green” public lighting</td>
<td>Analyse potentials for immediate savings in public lighting</td>
<td>Formulate a public lighting policy plan focusing on energy efficiency</td>
<td>Purchase green electricity for public lighting</td>
<td>Implement the policy plan and move forward to 100% Renewable Energy Sources (RES) target for your public lighting network</td>
</tr>
<tr>
<td>Support the implementation of renewable energy projects</td>
<td>Generate a share of your municipality’s electricity and/or heat demand in own RES plants</td>
<td>Set up a land register for the potentials of RES use</td>
<td>Create an offer of green electricity for your citizens</td>
<td>Implement a long-term action programme for RES and Combined Heat and Power generation (CHP) to achieve a 100% community</td>
</tr>
<tr>
<td>Inform and involve the citizens</td>
<td>Inform the citizens about your energy policy and give hints for own contributions</td>
<td>Install a local energy advice centre</td>
<td>Organise targeted campaigns on energy efficiency</td>
<td>Mainstream energy in education and professional training</td>
</tr>
<tr>
<td>Refurbish existing housing stock</td>
<td>Inform house-owners about the potential to increase the energy efficiency of their building</td>
<td>Collect data and set up a land register for energy use in the housing stock</td>
<td>Label the housing stock according to their energy efficiency and offer targeted advice and recommendations</td>
<td>Set up a loan programme for retrofitting the housing stock in terms of energy efficiency</td>
</tr>
<tr>
<td>Work on green office buildings</td>
<td>Promote your energy management system towards external companies</td>
<td>Investigate and establish energy performance standards for offices</td>
<td>Set up demonstration projects</td>
<td>Establish energy forums and offer energy performance services</td>
</tr>
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Annex 2: Relevant City Networks
Climate Alliance of European Cities

• Some 1400 members in Europe
• Covers all aspects of climate change policy
• Climate protection target:
  initially: 50% GHG reduction
  new: 10% reduction every 5 years
• Various projects in core areas of climate policy
• Partnership with indigenous rainforest peoples
• http://www.climatealliance.org
ICLEI - Local Governments for Sustainability

• Some 180 members in Europe
• Plus offices and members in various world regions
• Cities for Climate Protection (CCP) Campaign
• Milestones method (step by step approach)
• Various projects in the energy and transport sector, public procurement
• http://www.iclei.org
Energie-Cités

• 140 members in 24 European countries and representing more than 500 towns and cities
• Promotion of local sustainable energy policies.
• Best practice, collaboration projects, lobbying
• http://www.energie-cites.org/