



# Executive Summary of the TRANSFORMATION AGENDA Copenhagen (D.2.2)

---

*Else Kloppenborg – City of Copenhagen*

**March 20<sup>th</sup>, 2015**

<p><b>Status Quo &amp; Vision :</b></p> <ul style="list-style-type: none"> <li>• To whom is the TA addressed?</li> <li>• What is the City's overall energy/CO2 emissions situation (SEAP)?</li> <li>• What are the energy/CO2 emissions challenges (SEAP)? Mid- term? Long term</li> <li>• Does the context (political, financial, regulatory, ...) support them?</li> </ul>	<p>The Transformation Agenda in Copenhagen is addressed to:</p> <ul style="list-style-type: none"> <li>- Executives in the Technical and Environmental Administration, The Climate Secretariat and the Executive Climate Project Director in particular.</li> <li>- European institutions, networks, partner cities or other associate and interested parties.</li> </ul> <p>Compared to the <i>set goals for 2015</i>, the Climate Plan, CPH 2025, is on track: At least 20% CO2-reduction in 2015. Yet, relative to the <i>ultimate goal</i> of carbon neutrality in 2025, CPH 2025 is not on track <i>if</i> the implementation continues at the current speed and level.</p> <p>To remedy this, the Climate Secretariat identified a number of areas in which action could be taken to close the gap – pending political approval and funding in 2015.</p> <div data-bbox="472 869 1391 1330"> <p style="text-align: center;"><b>CO2 EMISSIONS BY SECTOR (INCLUDING CREDITED RENEWABLE ENERGY)</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Electricity</th> <th>District heating</th> <th>Traffic</th> <th>Other</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>2005</td> <td>1,137</td> <td>611</td> <td>536</td> <td>74</td> <td>2,358</td> </tr> <tr> <td>2008</td> <td>1,118</td> <td>569</td> <td>557</td> <td>76</td> <td>2,321</td> </tr> <tr> <td>2009</td> <td>1,144</td> <td>623</td> <td>582</td> <td>80</td> <td>2,408</td> </tr> <tr> <td>2010</td> <td>1,011</td> <td>612</td> <td>549</td> <td>71</td> <td>2,243</td> </tr> <tr> <td>2011</td> <td>782</td> <td>478</td> <td>537</td> <td>68</td> <td>1,867</td> </tr> <tr> <td>2012</td> <td>697</td> <td>466</td> <td>520</td> <td>82</td> <td>1,786</td> </tr> <tr> <td>2013</td> <td>824</td> <td>475</td> <td>487</td> <td>88</td> <td>1,874</td> </tr> </tbody> </table> </div> <div data-bbox="472 1402 1347 1778"> <p style="text-align: center;"><b>tonnes CO2/inhabitant</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>tonnes CO2/inhabitant</th> </tr> </thead> <tbody> <tr> <td>2005</td> <td>4.7</td> </tr> <tr> <td>2008</td> <td>4.5</td> </tr> <tr> <td>2009</td> <td>4.6</td> </tr> <tr> <td>2010</td> <td>4.2</td> </tr> <tr> <td>2011</td> <td>3.4</td> </tr> <tr> <td>2012</td> <td>3.2</td> </tr> <tr> <td>2013</td> <td>3.3</td> </tr> </tbody> </table> </div>	Year	Electricity	District heating	Traffic	Other	Total	2005	1,137	611	536	74	2,358	2008	1,118	569	557	76	2,321	2009	1,144	623	582	80	2,408	2010	1,011	612	549	71	2,243	2011	782	478	537	68	1,867	2012	697	466	520	82	1,786	2013	824	475	487	88	1,874	Year	tonnes CO2/inhabitant	2005	4.7	2008	4.5	2009	4.6	2010	4.2	2011	3.4	2012	3.2	2013	3.3
Year	Electricity	District heating	Traffic	Other	Total																																																												
2005	1,137	611	536	74	2,358																																																												
2008	1,118	569	557	76	2,321																																																												
2009	1,144	623	582	80	2,408																																																												
2010	1,011	612	549	71	2,243																																																												
2011	782	478	537	68	1,867																																																												
2012	697	466	520	82	1,786																																																												
2013	824	475	487	88	1,874																																																												
Year	tonnes CO2/inhabitant																																																																
2005	4.7																																																																
2008	4.5																																																																
2009	4.6																																																																
2010	4.2																																																																
2011	3.4																																																																
2012	3.2																																																																
2013	3.3																																																																
<p><b>Gap Analysis:</b></p> <ul style="list-style-type: none"> <li>• What are the main lacks/challenge? How to meet the gaps?</li> </ul>	<p>The Transformation Agenda identified <i>four overall, strategic</i> challenges, including:</p> <ul style="list-style-type: none"> <li>• The <i>annual</i> Budget negotiations as a source of potential delay in implementation – as opposed to the potential for long-term</li> </ul>																																																																

<ul style="list-style-type: none"> <li>• What are the main improvement points (strategy/operational)?</li> </ul>	<p>planning that funding for longer periods of time would enable.</p> <ul style="list-style-type: none"> <li>• The instability and risk of loss of key competences that result from the recruitment policy in the City. About one third of the staff is on a contract as opposed to permanent positions.</li> <li>• The missing strategy to involve citizens in CPH 2025, caused by the strong focus on structural solutions (i.e. 74% CO2-reductions to come from the sector of energy production which is publicly owned (i.e. district heat and wind power)). The missing focus on citizens creates a risk of less or no effect of the structural solutions, even in certain mostly structural areas, if the success of the solutions depends on citizens deciding to use them (e.g. bicycle infrastructure, retrofit).</li> <li>• The lack of formal coordination with other City Administrations or units implies a risk of less or delayed effect of initiatives.</li> </ul> <p>The Transformation Agenda worked on challenges concerning <i>three specific themes</i>:</p> <ul style="list-style-type: none"> <li>• Dialogue with Developers (how to get more sustainability through dialogue with developers?)</li> <li>• Flexible Energy Buildings (how to enable buildings to interact more with surroundings and the energy system in particular?)</li> <li>• Flexible Energy System (how to make energy production more flexible and introduce measures to accommodate more flexible energy consumption?).</li> </ul> <p>Supplementary to this, the Climate Secretariat identified a CO2 gap in 2025 that can be met through a series of initiatives which target, for instance, energy use in buildings, mobility, energy production, waste and increased levels of collaborative efforts, aimed at both citizens, stakeholders and research institutions.</p>
<p><b>Action plan:</b></p> <ul style="list-style-type: none"> <li>• What is the core of the action plans?</li> <li>• How the action plans were defined? With who?(SWOT &amp; PESTLEGS)</li> <li>• Process to implement the action plan (political governance , involvement of stakeholders)</li> </ul>	<p>The Transformation Agenda proposes that at the <i>strategic</i> level, the following four ideas should be considered:</p> <ul style="list-style-type: none"> <li>• Allocate funding for longer periods than a year at a time only (e.g. periods of four years, corresponding to the sub-periods of CPH 2025).</li> <li>• Offer permanent positions to all key staff required to implement CPH 2025.</li> <li>• Develop strategies and allocate funding to involve citizens to strengthen the implementation power of CPH 2025.</li> <li>• Strive to make CPH 2025 mainstream and to broaden the ownership of the project across the City Administrations and units working on similar challenges (e.g. retrofitting) or relevant issues (e.g. schools, children – to change mind sets through education).</li> </ul> <p>Concerning the <i>three specific themes</i> (Dialogue with Developers, Flexible Energy Buildings and Flexible Energy System), the general observation is</p>

	<p>that the City and Climate Secretariat need to step up their work with stakeholders. In many cases, the formal powers of the City are very limited and only through dialogue, lobbying (vis-à-vis national Government), or a proactively engaging role may the City aspire to persuade others to contribute to the implementation of CPH 2025.</p> <p>There is, however, a general – and in certain cases critical – lack of business cases to support this dialogue. Moreover, in many cases more advanced uses of data &amp; ICT are a prerequisite for stepping up action; yet the challenges to do so are considerable.</p> <p>The action plans were developed during various TRANSFORM-workshops with stakeholders, or in informal working groups in and between the City and HOFOR (the City-owned utility company), using a variety of methods (e.g. SWOT-analysis, PESTLEGS).</p> <p>The process of implementing the action plan depends on the City's executive level and the Climate Secretariat.</p>
<p><b>Conclusions</b></p> <ul style="list-style-type: none"> <li>• What was the added value of TRANSFORM to improve the TA discussed above? (State this in simple 3-5 bullet points)</li> <li>• What key lessons can be drawn from TRANSFORM for your city and for EC Smart Cities policies?</li> </ul>	<p>The added value of TRANSFORM was to:</p> <ul style="list-style-type: none"> <li>• Put 'smart city' high on the agenda among executives.</li> <li>• Pave the way for other smart city priorities, including the establishment of the Smart City Project Council.</li> <li>• Enable a comprehensive review of CPH 2025 in both strategic perspective and with regard to three specific themes, pointing out weak spots that, if remedied, would strengthen the City's ability to implement CPH 2025.</li> <li>• Function as a pilot, allowing both the City and HOFOR to refine their thinking and position with regard to, e.g. data, smart city solutions in buildings or serving the energy system. Some of these ideas have already been transferred to new projects for further elaboration.</li> </ul> <p>Key lessons include:</p> <ul style="list-style-type: none"> <li>• Data is a big challenge: How to get it? And how to get it ready to help cities solve challenges in better ways?</li> <li>• An EU project may help, especially large City Administrations, to collaborate across units and Administrations, thus creating new networks and knowledge sharing.</li> <li>• The project enabled a very fruitful collaborative effort with HOFOR, the City-owned utility company, thus boding well for future joint projects.</li> <li>• The organisation of an EU project is important, and it is essential to ensure close connections to the staff and units working on a daily basis on the challenges which the project addresses.</li> </ul>