Climate Alliance
International Conference 2018

CONNECTING CITIES
Local solutions for global challenges

Circle 1: Co-creating adaptive and resilient cities and regions
Agenda

11:30  Introduction to the workshop, topic and speakers
      Ice-breaker

11:50  Supporting local authority decision-making with a tool on the cost of not adapting
      Carme Melciron Fontbernat, Province of Barcelona

12:05  Q&A & discussion

12:20  Cooperating with public and private actors on climate adaptation: the experience of LIFE CLINOMICS
      Helena Perxacs and Núria Parpal, Province of Barcelona

12:35  Q&A & discussion

12:50  Co-creating the adaptation plan in the Hanau-Großauheim District
      Anja Zeller, City of Hanau

13:05  Q&A & discussion

13:20  Final discussion of questions, wrap-up and harvesting
A few questions...

• Main benefits/opportunities of cooperating on adaptation across different levels?
  • Avoid local egoisms
  • Different city departments working in the same direction
  • Bring science into practice more effectively
  • Avoid duplications
  • Rich ideas and capacities
  • Optimise resources
  • Systematise measures
  • Increase awareness of the population
A few questions...

• Main bottlenecks you can think of/you encounter in your work?
• Needs and wishes in the departments are too different
• Decision making takes too long
• Channels of participation with citizens and stakeholders are not solid
• Different political priorities
• Bureaucracy
• Climate adaptation not a typical topic for local administrations: random, not a must- difficult to make work steady and continuous
A few questions...

• Expectations for the speakers’ presentations?
  • Concrete examples of good actions
  • Concrete examples from cities
  • Solutions
Supporting local authority decision-making with a tool on the cost of not adapting

Carme Melcion
Oficina Tècnica de Canvi Climàtic i Sostenibilitat
Diputació de Barcelona

Barcelona, 2nd October 2018
WHY?

THE PRICE OF INACTION IS FAR GREATER THAN THE COST OF MAKING A MISTAKE.

Meister Eckhart
German Philosopher

BUT......

IS THAT TRUE?
WHY?

- The partnership on Climate Change adaptation of Urban agenda for the EU
- The Adaptation working group of the Network of Towns and Villages towards Sustainability
- Our coordination meetings with other public Authorities
- Our experience drafting Adaptation plans and SECAPs
WHY?

Adaptation to climate change means acting to prevent expected impacts but:

- We know some of the impacts but we do not know for sure their frequency neither their intensity. Future scenarios are uncertain, this increases the difficulty to take decisions and prioritize measures (projects), either by institutions, technicians and private sector.

- Climate change impacts result in other impacts that ... There is a cascade effect, therefore many consequences are still unforeseen.

WHY?

- Monetization of climate adaptation is essential in order to convince and raise awareness among main stakeholders (decision makers at all levels) and potential investors (both private and public sector).

- Some planned actions require big investments,

Source: https://mjbrown.com/monetizing-nature-taking-precaution-on-a-slippery-slope/
The difficulties

- There can be a mismatch between the entity that bears the cost of the investment and that perceiving the benefits;

- The cost of adaptation has to be born in the present while the benefits may occur over a longer period of time;

- The impacts of climate change have both direct and indirect consequences and there are difficulties in establishing boundaries when estimating them.
The tool

- First estimation of costs.
- Easy to use.
- For Local Authorities, no matter their size or their “internal” complexity
- Easy to update
The tool

**BE AWARE:**

Just some costs included and just the primary and more clear impacts have been evaluated.

The REAL cost of non-acting is HIGHER
The tool

- 15 years horizon
- Calculation at the municipal level, it has been thought for medium and small municipalities
- Risk prioritization
The tool

Sectors

01 Health
02 Forest fires
03 Water availability
04 Agriculture and livestock
05 Floods
06 Coastal erosion
07 Energy
08 Urban green areas
09 Tourism
10 Storms

Not included yet
The tool

Choose the municipality

Right now, the only data that must be provided is the floodable surface area

BUT: WE ARE GATHERING THE INFORMATION FOR ALL MUNICIPALITIES OF THE PROVINCE, SO THERE IS NO NEED TO CALCULATE THIS PARAMETER.
The tool

<table>
<thead>
<tr>
<th>Ámbit</th>
<th>Indicador</th>
<th>Perill climàtic principal</th>
<th>Cost acumulat a 15 anys sense canvi climàtic (M€)</th>
<th>Cost acumulat a 18 anys amb canvi climàtic (M€)</th>
<th>Cost acumulat de no actuar a 15 anys (M€)</th>
<th>Detall de la tipologia de costos</th>
<th>Agent afectat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salut</td>
<td>Costes dels cops de calor</td>
<td>+T</td>
<td>0,52</td>
<td>3,05</td>
<td>2,52</td>
<td>Cost de les conseqüències per a l'administració pública: hospitallitzacions, urgències i morts de majors de 65 anys. També s'han considerat els costes intangibles de les fatalitats.</td>
<td>Públic + intangibles</td>
</tr>
<tr>
<td>Incendis forestals</td>
<td>Costes dels incendis forestals</td>
<td>-P i +T</td>
<td>0,42</td>
<td>1,16</td>
<td>0,74</td>
<td>Cost dels incendis forestals per a l'administració pública: el privat, inclou el valor de la producció perduda de recursos forestals i l'extinció, no se consideren els costos de la pèrdua de valors ecològics.</td>
<td>Públic + intangibles</td>
</tr>
<tr>
<td>Aigua</td>
<td>Costes de l'aigua subministrada</td>
<td>-P</td>
<td>2,48</td>
<td>3,58</td>
<td>1,10</td>
<td>Cost per a l'administració pública per cobrir la disponibilitat recurs i increment de demanda d'aigua prèvia.</td>
<td>Públic</td>
</tr>
<tr>
<td>Agricultura*</td>
<td>Costes per a l'agricultura</td>
<td>-P</td>
<td>0,16</td>
<td>0,96</td>
<td>0,00</td>
<td>Costes de l'agricultura per als privats: S'inclosen el consum extra d'aigua i la pèrdua de producció.</td>
<td>Privats</td>
</tr>
<tr>
<td>Ramadería*</td>
<td>Costes de la ramaderia</td>
<td>-P</td>
<td>0,36</td>
<td>0,41</td>
<td>0,05</td>
<td>Costes de la ramaderia per als privats.</td>
<td>Privats</td>
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<tr>
<td>Inundacions</td>
<td>Costes de les inundacions</td>
<td>+P</td>
<td></td>
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<td>Cost de les conseqüències de les inundacions per als privats.</td>
<td>Privats</td>
</tr>
<tr>
<td>Erosió costa</td>
<td>Costes de reposició de sorres i reparació de pleges</td>
<td>+ M</td>
<td></td>
<td></td>
<td></td>
<td>Cost de manteniment de pleges per a l'administració competent.</td>
<td>Públic</td>
</tr>
</tbody>
</table>

### Comparativa de costos acumulats d’actuar o no actuar contra el canvi climàtic

- **Erosió costa**
- **Inundacions**
- **Ramadería**
- **Agricultura**
- **Aigua**
- **Incendis forestals**
- **Salut**

Costs acumulats a 15 anys amb canvi climàtic (M€)
Costs acumulats a 15 anys sense canvi climàtic (M€)

#CAIC18
**The tool**

**General results**

**Without including flooding costs:**

- Small municipalities will have higher costs per inhabitant if they do not act.
- But at the same time acting is also more expensive for them.
Conclusions and challenges

1. Different working groups and municipalities have expressed the need to know the cost of not acting to adapt to climate change.

2. The tool is a way to raise awareness and to prioritize action against certain risks.

3. The tool will be updated with new sectors or information, whenever the information is available.

4. General results show that small municipalities must face higher relative costs to adapt to climate change, but at the same time inaction will cost them much more. As Coordinators of the Covenant of Mayors we must be aware of that when defining our strategies.
Climate change threatens our existence.

Climate change threatens our economy.
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Link to the tool:
https://www.diba.cat/documents/102577937/0/DIBA-CoNACC.xlsx/80db8593-6066-4dcf-85ff-e5a42100e582