Climate Alliance
International Conference 2018

CONNECTING CITIES

Local solutions for global challenges

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

Diputació Barcelona #DibaOberta

Xarxa de Ciutats i Pobles cap a la Sostenibilitat

CITIES & REGIONS TALANOA DIALOGUES

Covenant of Mayors for Climate & Energy

Climate Alliance

Agenda

CONNECTING CITIES
Local solutions for global challenges

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 Melcion 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...

CONNECTING CITIES
Local solutions for global challenges

- 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...

CONNECTING CITIES
Local solutions for global challenges

- Main bottlenecks you can think of/you encounter in your work?
  - Needs and whishes 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...

CONNECTING CITIES
Local solutions for global challenges

- Expectations for the speakers' presentations?
  - Concrete examples of good actions
  - Concrete examples from cities
  - Solutions

Climate Alliance
International Conference 2018

CONNECTING CITIES

Local solutions for global challenges

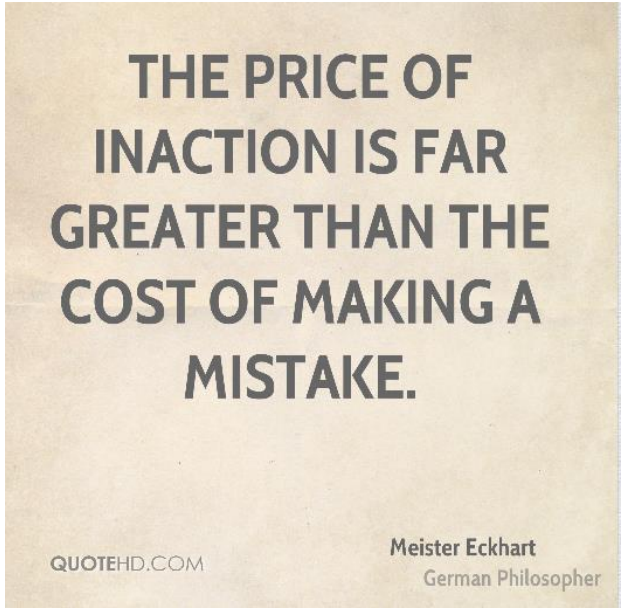
Supporting local authority decision-making with a tool on the cost of not adapting

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

Barcelona, 2nd October 2018

Diputació Barcelona #DibaOberta
Xarxa de Ciutats i Pobles cap a la Sostenibilitat
CITIES & REGIONS TALANOA DIALOGUES
Covenant of Mayors for Climate & Energy
Climate Alliance

WHY?



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.**

Source: https://www.quora.com/Whats-the-best-real-life-example-of-the-butterfly-effect

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

CONNECTING CITIES
Local solutions for global challenges

#CAIC18

10 YEARS Covenant of Mayors for Climate & Energy

Diputació Barcelona #DibaOberta

Climate Alliance

CONNECTING CITIES
Local solutions for global challenges

The tool

CONNECTING CITIES

Choose the municipality

Dades generals del municipi

Municipi	Figaró - Montmany
Codi INE municipi	8134

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

Dades de sòl inundable per període de retorn (T)

Cal calcular les superficies amb el SIG de superficies inundables per periode de retorn de l'ACA

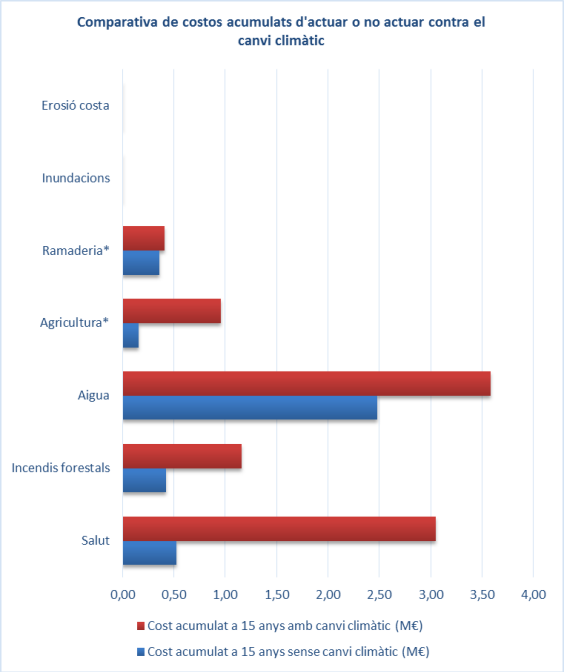
Tipus sòl	T50	T100	Any
Sòl residencial (m^2)			*Any*
Sòl industrial (m^2)			*Any*

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

The tool

The results

Àmbit	Indicador	Perill climàtic principal	Cost acumulat a 15 anys sense canvi climàtic (M€)	Cost acumulat a 15 anys amb canvi climàtic (M€)	Cost acumulat de no actuar a 15 anys (M€)	Detall de la tipologia de costos	Agent afectat
Salut	Costos dels cops de calor	+T	0,52	3,05	2,52	Cost de les conseqüències per a l'administració pública: hospitalitzacions, urgències i morts de majors de 65 anys. També s'han considerat els costos intangibles de les fatalitats.	Públic + intangible
Incendis forestals	Costos dels incendis forestals	-P i +T	0,42	1,16	0,74	Cost dels incendis forestals per a l'administració pública i el privat. Inclou el valor de la producció perduda de recursos forestals i l'extinció, no es consideren els costos de la pèrdua de valors ecosistèmics	Públic + intangible
Aigua	Costos de l'aigua subministrada	-P	2,48	3,58	1,10	Cost per a l'administació pública per cobrir la disponibilitat recurs i increment de demanda d'aigua previsible	Públic
Agricultura*	Costos per a l'agricultura	-P	0,16	0,96	0,80	Costos de l'agricultura per als privats. S'inclou el consum extra d'aigua i la pèrdua de producció	Privats
Ramaderia*	Costos de la ramaderia	-P	0,36	0,41	0,05	Costos de la ramaderia per als privats	Privats
Inundacions	Costos de les inundacions	+p				Cost de les conseqüències de les inundacions per als privats	Privats
Erosió costa	Costos de reposició de sorres i reparació de platges	+ M				Cost de manteniment de platges per a l'administració competent	Públic

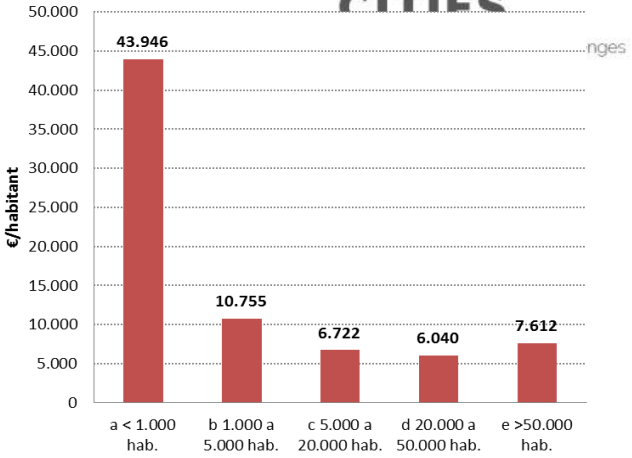


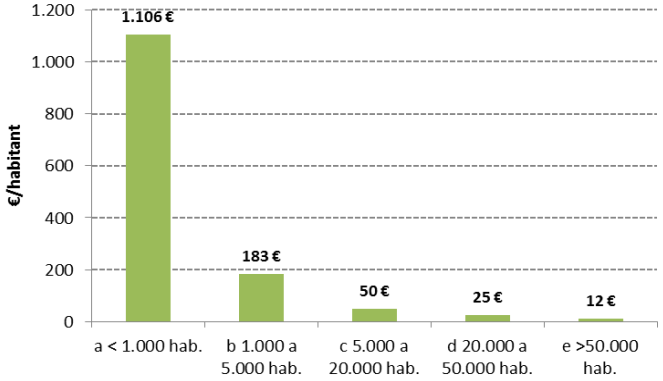
#CAIC18

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





#CAIC18

Conclusions and challenges

© HitToon/iStock/Thinkstock

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.

CONNECTING CITIES
solutions for global challenges

#CAIC18

10 YEARS Covenant of Mayors for Climate & Energy
#DibaOberta

Diputació Barcelona
#DibaOberta

Climate Alliance

CONNECTING CITIES
Local solutions for global challenges

Àrea de Territori i Sostenibilitat

Diputació de Barcelona

melcionfc@diba.cat

T. 934 022 222

Link to the tool:

https://www.diba.cat/documents/102577937/0/DIBA-CoNACC.xlsx/80db8593-6066-4dcf-85ff-e5a42100e582

#CAIC18