



# Exploring Climate Transitions in the Making: Integrative Planning Towards a Sustainable Built Environment (ExTra)



# A collaborative project

- The Centre for Climate Science and Policy Research, Linköping University and Norrköping municipality
- Funded by the research council FORMAS 2015-2019, 800 kEuro + 350 kEuro in kind + 100 kEuro from Norrköping
- The project team consists of: Mattias Hjerpe (project leader), Sofie Storbjörk, Erik Glaas, Tina Neset, Jimmy Johansson, Carlo Navarra + Municipal officials and politicians from departments and utilities.



# Aim and research objectives

To increase our understanding of how urban planning and decision-making can facilitate urban climate change transitions.

Three current bottlenecks for climate transition:

**RQ 1 Leadership and Governance:** How to effectively govern and lead urban climate transitions?

**RQ 2 Private-public collaboration:** How to strengthen collaboration between private and public actors in concrete planning and building projects?

**RQ 3 Citizen dialogues:** How to enable fruitful dialogues between citizens, planners, and politicians?

# Analysing collaboration across

- University – municipality



- Municipal departments



- Officers – politicians



- Municipality – companies



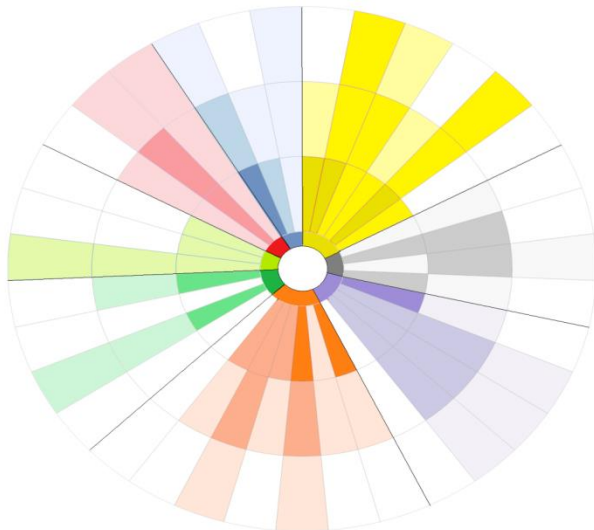
- Municipality – citizens



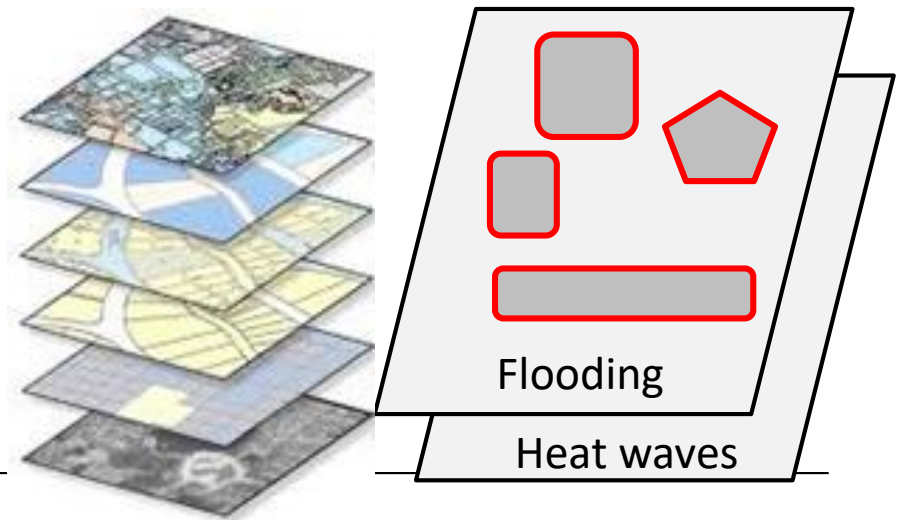
# RQ 1 – Steer and overview climate risks and actions

- Especially: Hard to overview
  - climate vulnerability
  - ongoing climate activities
- Two visualisation tools under development - tested with political and departmental leadership

Municipal climate transition profiles



Climate vulnerability mapping tool





## RQ 2 – Cooperation for sustainable planning & building

- Follow and learn from concrete collaborative building projects in exposed areas:

- Norrköping (Inner harbor)



- Karlstad (Water front building)



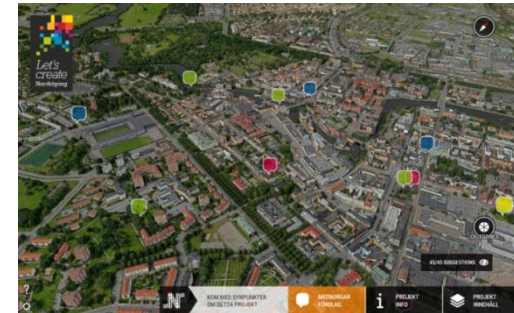
- Stockholm (Norra Djurgårdsstaden)



# RQ3 - Fruitful citizen participation



1. What role can (and should) citizens have in urban planning and decision-making for sustainability?
2. How effective are visualization platforms for citizen participation to spur engagement in planning?
3. (how) Can visualization platforms facilitate sustainable urban planning?



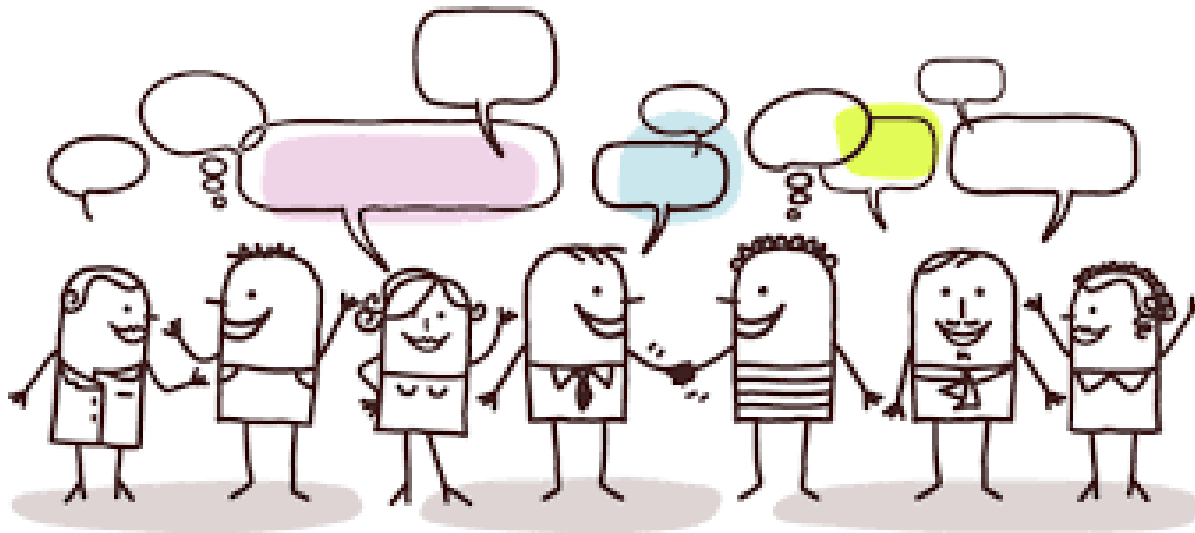
# Methodology

- Interviews ( $\approx 25$ ) with :
  - Municipal officials
  - Vis-platform developers and users
  - Politicians
  - Citizens
- Focus groups interviews incl. vis-platform testing ( $\approx 6$ ) with citizens:
  - Climate vulnerable areas
  - Walking and biking
- Assessment of comments in CityPlanner ( $\approx 4000$ ):
  - App. 10 Swe municipalities



# 1. What role can (and should) citizens have in urban planning and decision-making for sustainability?

- Somewhat different rationales for participation expressed by interviewees:
  - Mostly democracy – voice opinions (officials and politicians)
  - Mostly efficiency – facilitate better planning (citizens)



# 1. What role can (and should) citizens have in urban planning and decision-making for sustainability?

- Somewhat different rationales for participation expressed by interviewees:
  - Mostly democracy – voice opinions (officials and politicians)
  - Mostly efficiency – facilitate better planning (citizens)
- Perceived benefits of participation
  - Identify co-benefits in new planning projects
  - Identify good ideas for planning and management (but when?)
  - Increase cooperativeness and trust in building



# 1. What role can (and should) citizens have in urban planning and decision-making for sustainability?

- Somewhat different rationales for participation expressed by interviewees:
  - Mostly democracy – voice opinions (officials and politicians)
  - Mostly efficiency – facilitate better planning (citizens)
- Perceived benefits of participation
  - Identify co-benefits in new planning projects
  - Identify good ideas for planning and management (but when?)
  - Increase cooperativeness and trust in building
- Perceived challenges of participation
  - Create engagement
  - Internal capacity and time
  - Different objectives among staff

## 2. How effective are visualization platforms for citizen participation to spur engagement in planning?

- Generally, vis-platforms seem to provide:
  - A bigger spread in age, gender and *area* (when effort is put in)
  - Good opportunities to initiate dialogue among citizens (open up complexity)
  - A wide (too wide?) spread in perspectives
    - depend on questions asked (objectivity vs. engagement conflict)
    - Easier to respond than to envision (without clear alternatives)



## 2. How effective are visualization platforms for citizen participation to spur engagement in planning?

- Generally, vis-platforms seem to provide:
  - A bigger spread in age, gender and *area* (when effort is put in)
  - Good opportunities to initiate dialogue among citizens (open up complexity)
  - A wide (too wide?) spread in perspectives
    - depend on questions asked (objectivity vs. engagement conflict)
    - Easier to respond than to envision (without clear alternatives)
- Maps are an effective tool - but abstract for some people to use
  - More effective when combined with local images - e.g. Google Street View





## 2. How effective are visualization platforms for citizen participation to spur engagement in planning?

- Generally, vis-platforms seem to provide:
  - A bigger spread in age, gender and *area* (when effort is put in)
  - Good opportunities to initiate dialogue among citizens (open up complexity)
  - A wide (too wide?) spread in perspectives
    - depend on questions asked (objectivity vs. engagement conflict)
    - Easier to respond than to envision (without clear alternatives)
- Maps are an effective tool - but abstract for some people to use
  - More effective when combined with local images - e.g. Google Street View
- Keys for long-term engagement include:
  - Outreach
  - Timing and “audienceing”
  - Showcase how comments are used in practice

### 3. (how) Can visualization platforms facilitate sustainable urban planning?

- Add good ideas in planning
  - when the "right" questions are posed (a clear progress over time in terms of detail)
    - Sustainability issues are frequently raised - but implicitly in relation to e.g traffic
  - when aligning with practical planning processes (timing)
  - when used in a systematic manner (so far often ad hoc)
    - clear out the when, how and why:s



### 3. (how) Can visualization platforms facilitate sustainable urban planning?

- Add good ideas in planning
  - when the “right” questions are posed (a clear progress over time in terms of detail)
    - Sustainability issues are frequently raised - but implicitly in relation to e.g traffic
  - when aligning with practical planning processes (timing)
  - when used in a systematic manner (so far often ad hoc)
    - clear out the when, how and why:s
- Add legitimacy to decisions taken
  - Get a sense of commonalities (can be further developed)
  - Test ideas or approaches

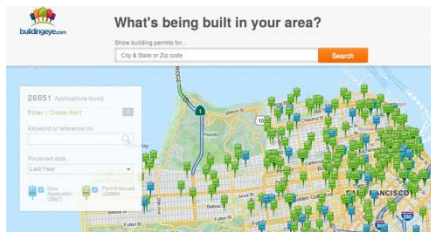


### 3. (how) Can visualization platforms facilitate sustainable urban planning?

- Add good ideas in planning
  - when the “right” questions are posed (a clear progress over time in terms of detail)
    - Sustainability issues are frequently raised - but implicitly in relation to e.g traffic
  - when aligning with practical planning processes (timing)
  - when used in a systematic manner (so far often ad hoc)
    - clear out the when, how and why:s
- Add legitimacy to decisions taken
  - Get a sense of commonalities (can be further developed)
  - Test ideas or approaches
- Challenges ahead in vis-platform development
  - Changes in digital media
  - Align outputs to planning realities (smart ways to sum up comments)

# Our further studies

- Compare with, and learn from, international examples
  - E.g. Hamburg, Helsinki, Rotterdam, Vancouver, San Francisco



- Analyse how internal planning processes can be developed to better incorporate citizen perspectives
- Analyse how to effectively communicate back to citizens how their perspectives were used
  - Creating a two-way dialogue



# Thanks!

[erik.glaas@liu.se](mailto:erik.glaas@liu.se)