IALE-D Bonn 2015

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Nature-based solutions for infill-development in the City of Bonn (Germany)

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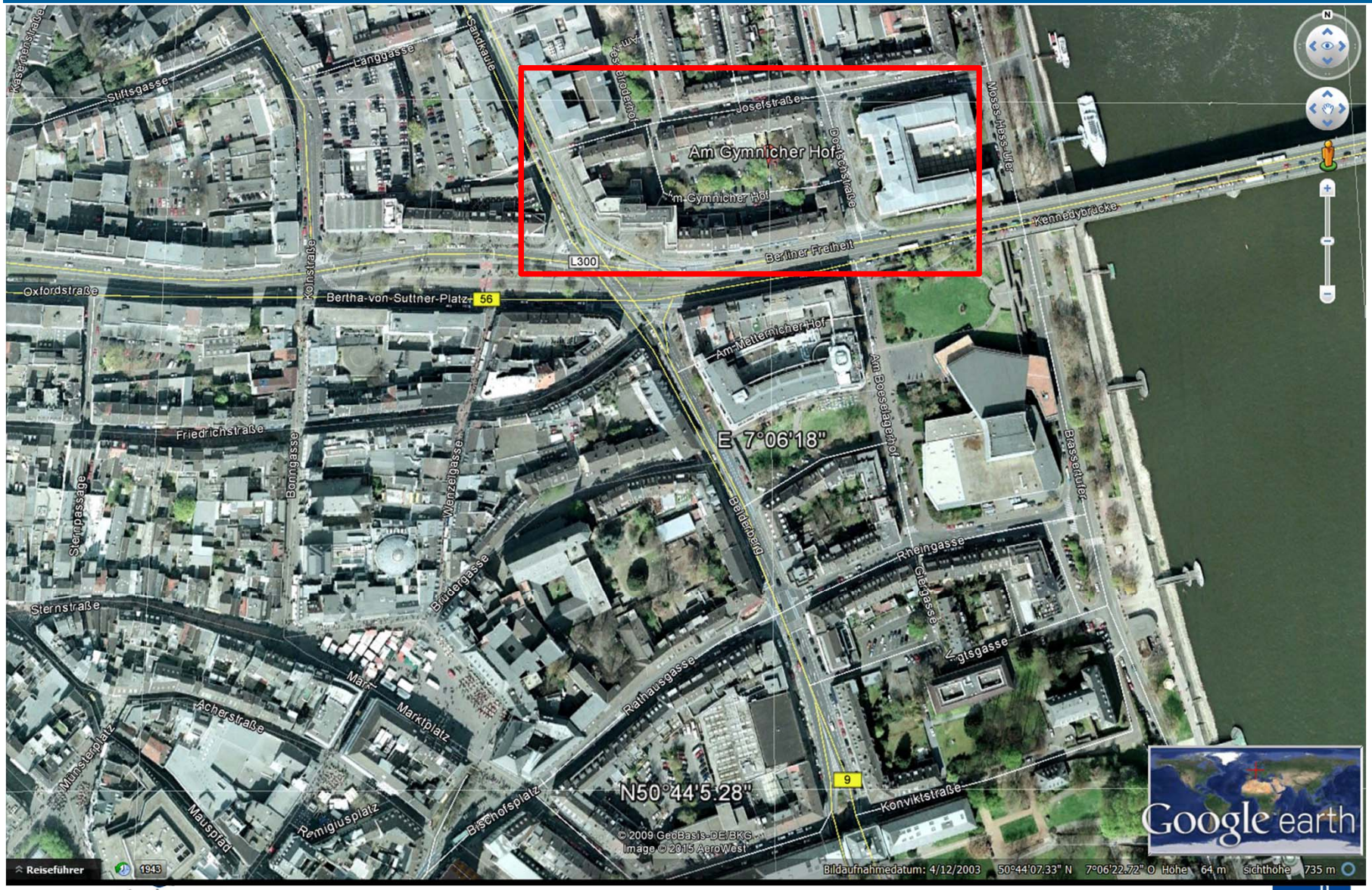
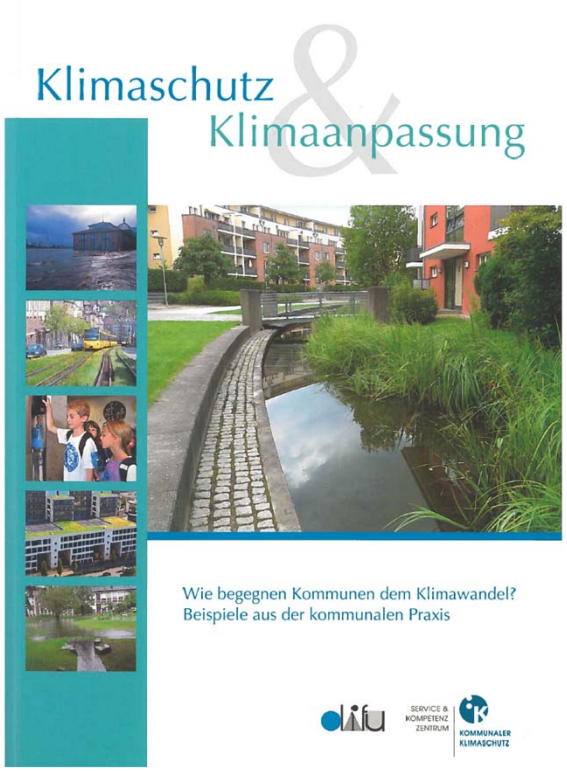
Case study – Rheinviertel Bonn (Gymnicher Hof)



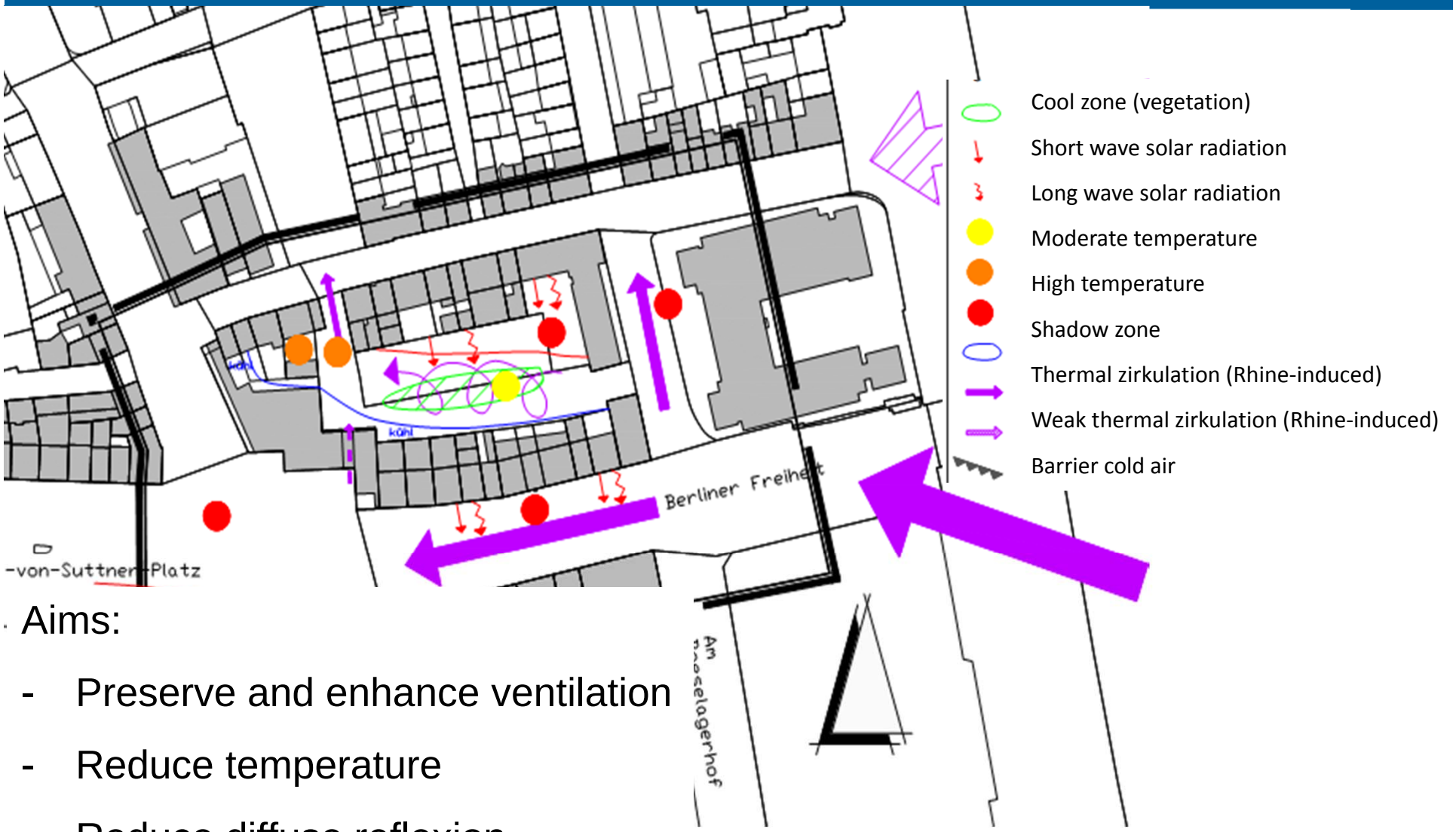
Case study – Rheinviertel Bonn (Gymnicher Hof)

Background:

- KommAKlima (2011-2014 Difu, BMUB)
- planning workshop (Municipality)
- „Rheinviertel“ prototype for future strategies of climate change adaptation
- Planning proposals University of Bonn (coop. Prof. L. Katzschner) > development of building scenarios & qualitative climate analysis



Local climate conditions



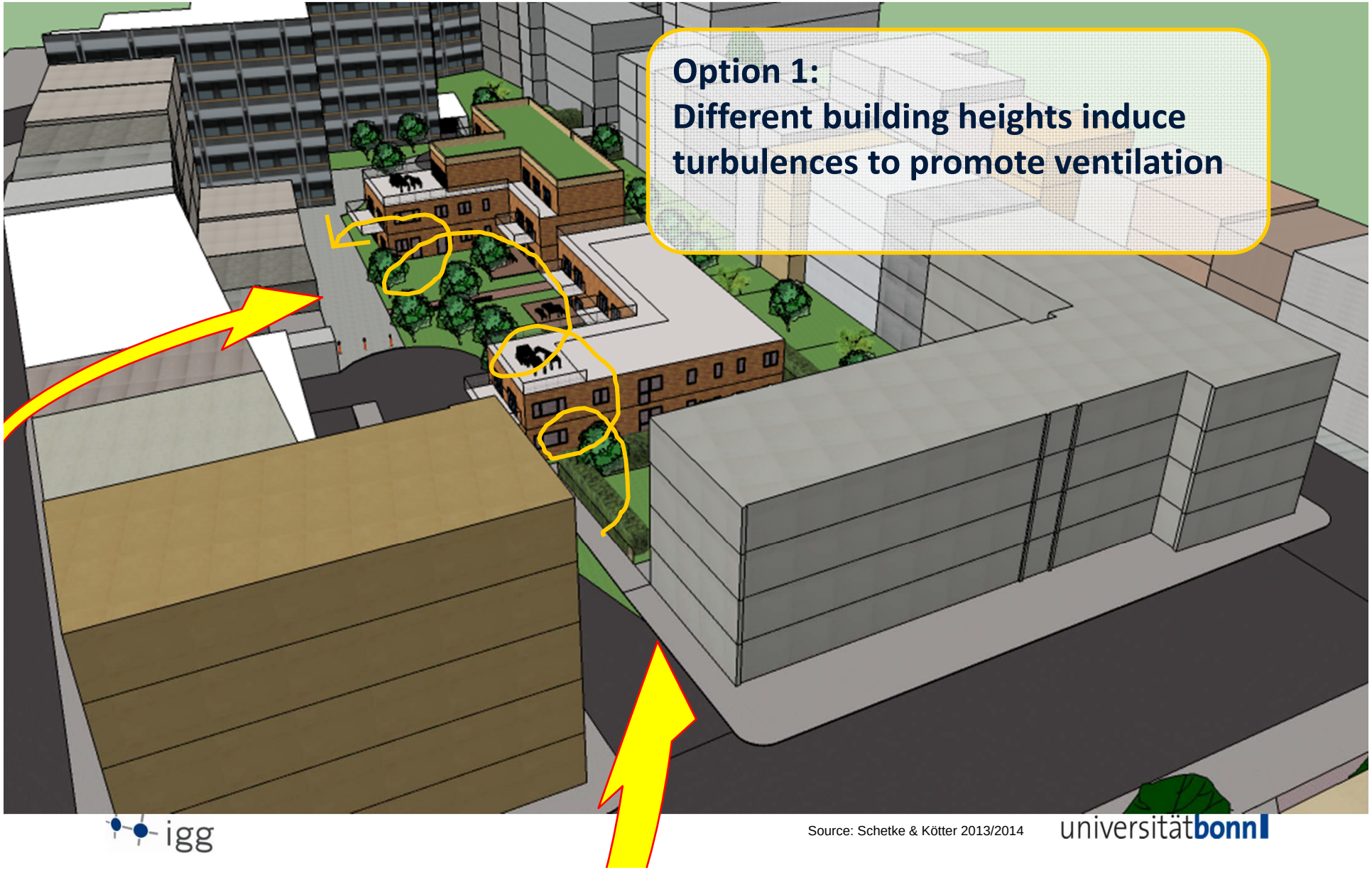
- Aims:
  - Preserve and enhance ventilation
  - Reduce temperature
  - Reduce diffuse reflexion

Source: Schetke & Kötter 2013/2014

Status Quo

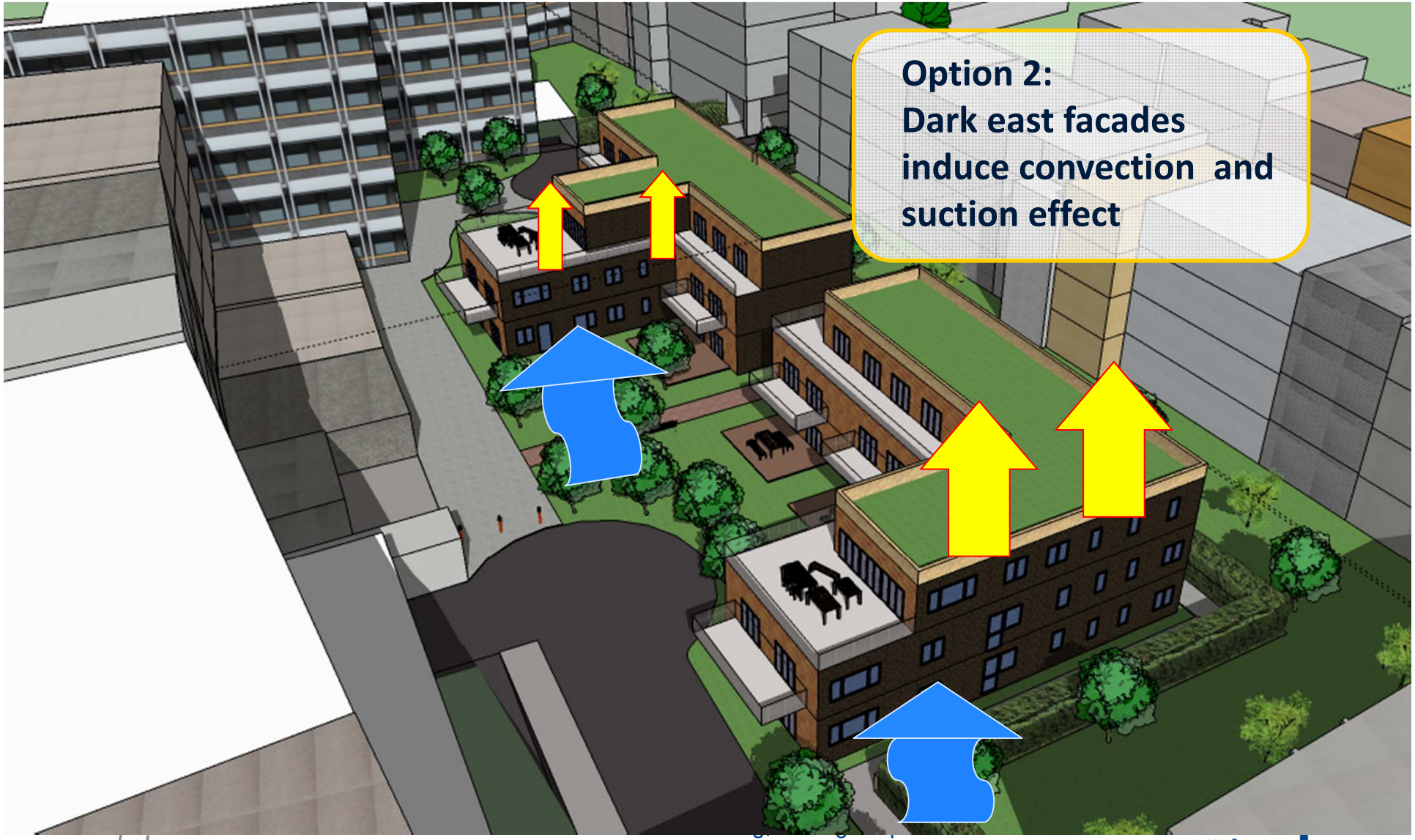
Source: Schetke & Kötter 2013/2014

Scenario “moderate densification“



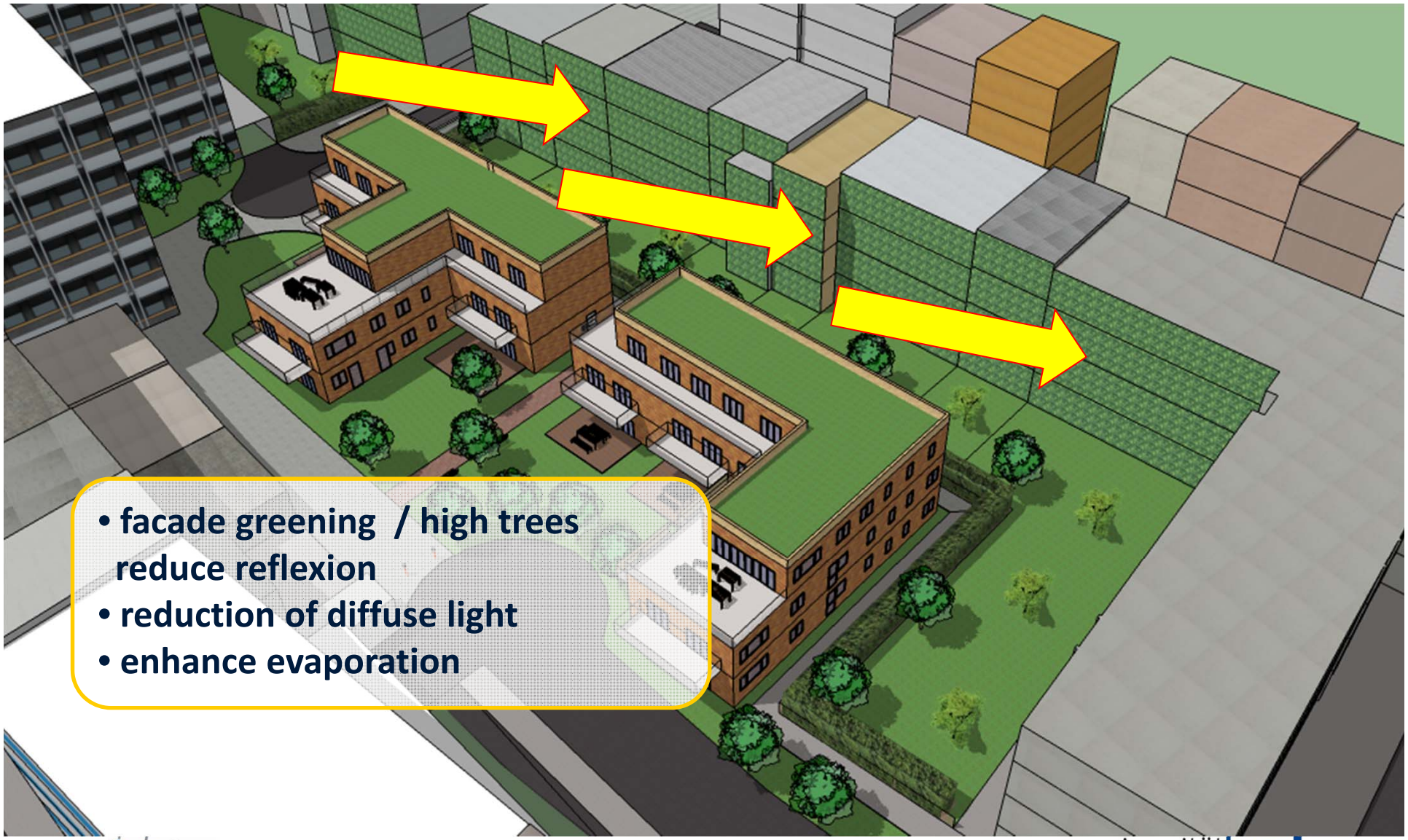
Source: Schetke & Kötter 2013/2014

Scenario “moderate densification“



Source: Schetke & Kötter 2013/2014

Scenario “moderate densification“

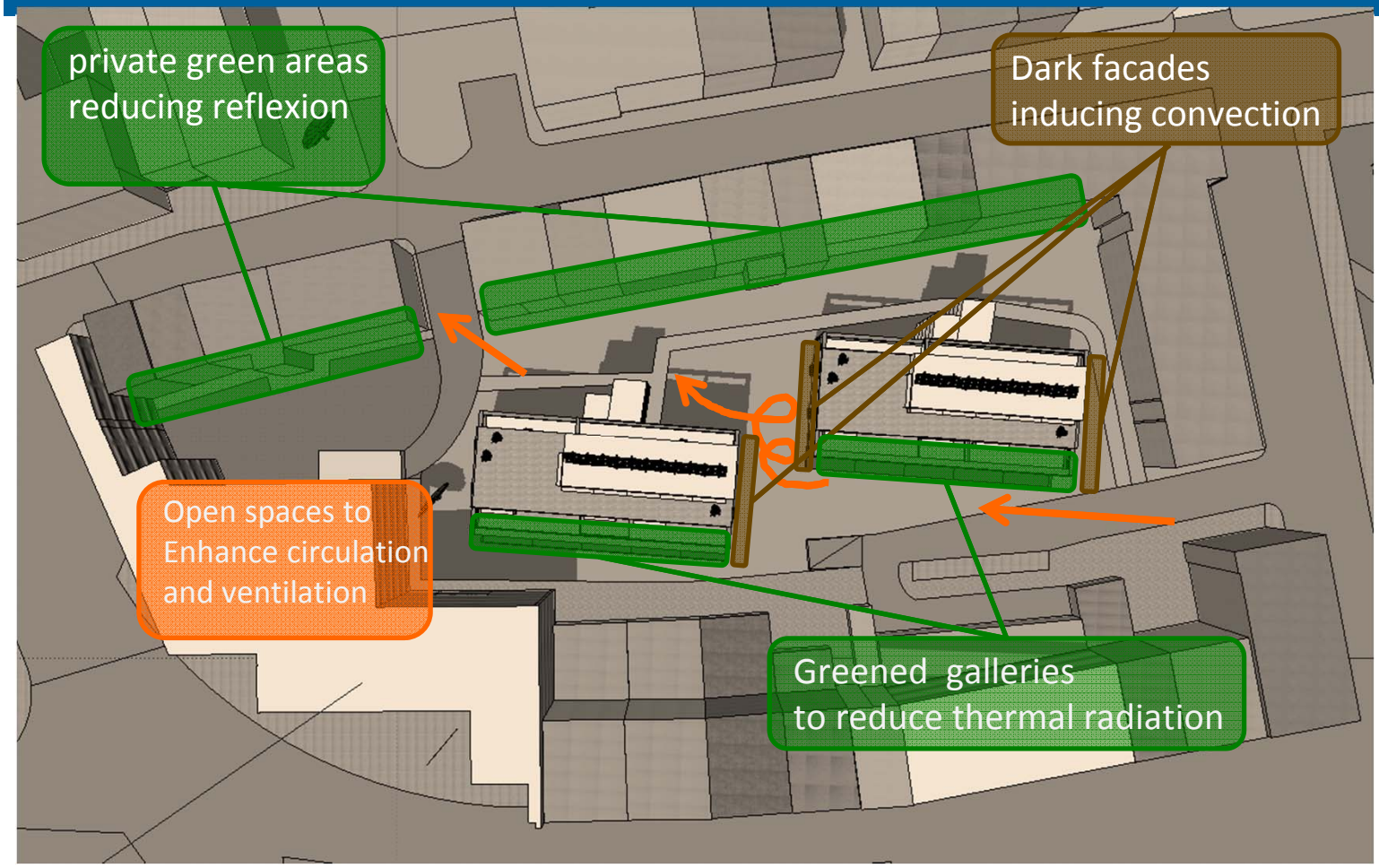


Source: Schetke & Kötter 2013/2014

Scenario “intensive densification“

Source: Schetke & Kötter 2013/2014

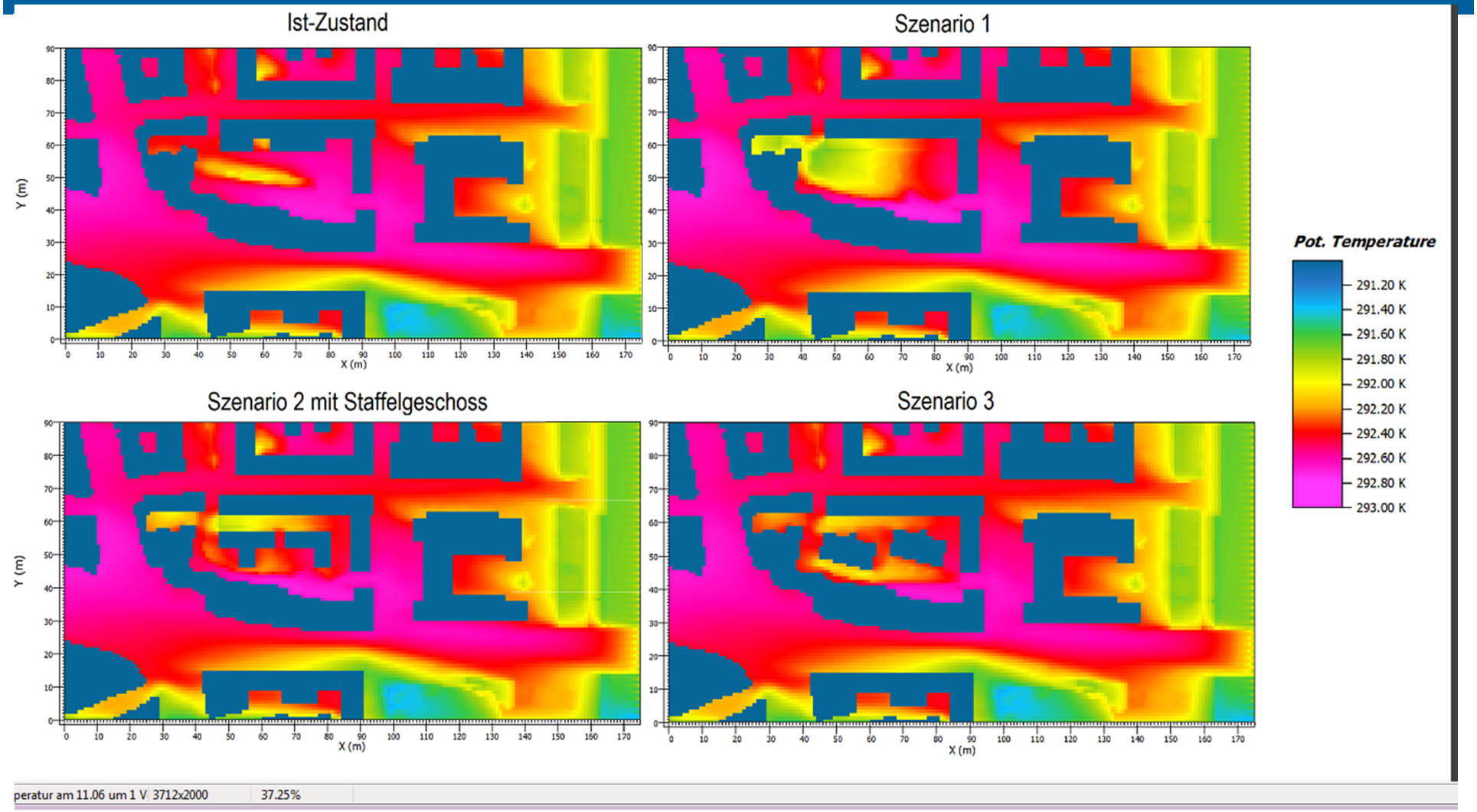
Scenario “intensive densification“



Source: Schetke & Kötter 2013/2014

Scenario “intensive densification“

Discussion

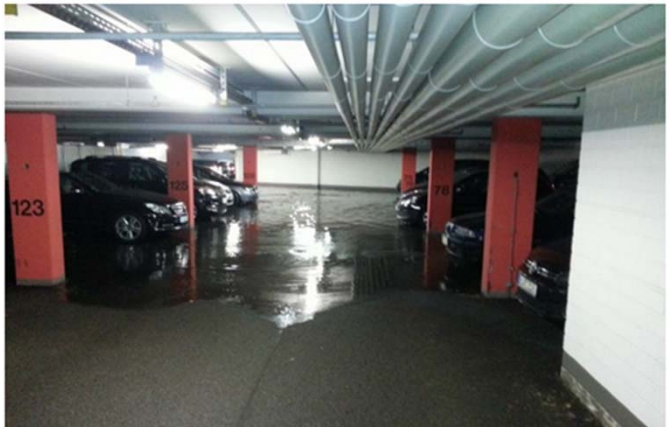


Source: Bsc-thesis Simon Bertram (Schetke/Kötter 2015)

Discussion

Challenges:

- provision of housing space vs. green space provision
- Provision of inner city parking space vs. desealing
- underground parking vs. rentention areas in the event of massive rain falls
- Need for local up-to-date climate data
- Legal constraints: separation areas (*dt. Abstandsflächen*), redemption agreement for parking spaces (*dt.Stellplatzablösung*)



http://www.general-anzeiger-bonn.de

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https://www.klimaschutz.de/sites/default/files/page/downloads/kommunalkonferenz_2014_forum1_bonn_helbiggaedker.pd