



LCA application in governmental policy making

Key learnings after three years of personal experience

79th LCA Discussion Forum
Zurich, 18.11.2021

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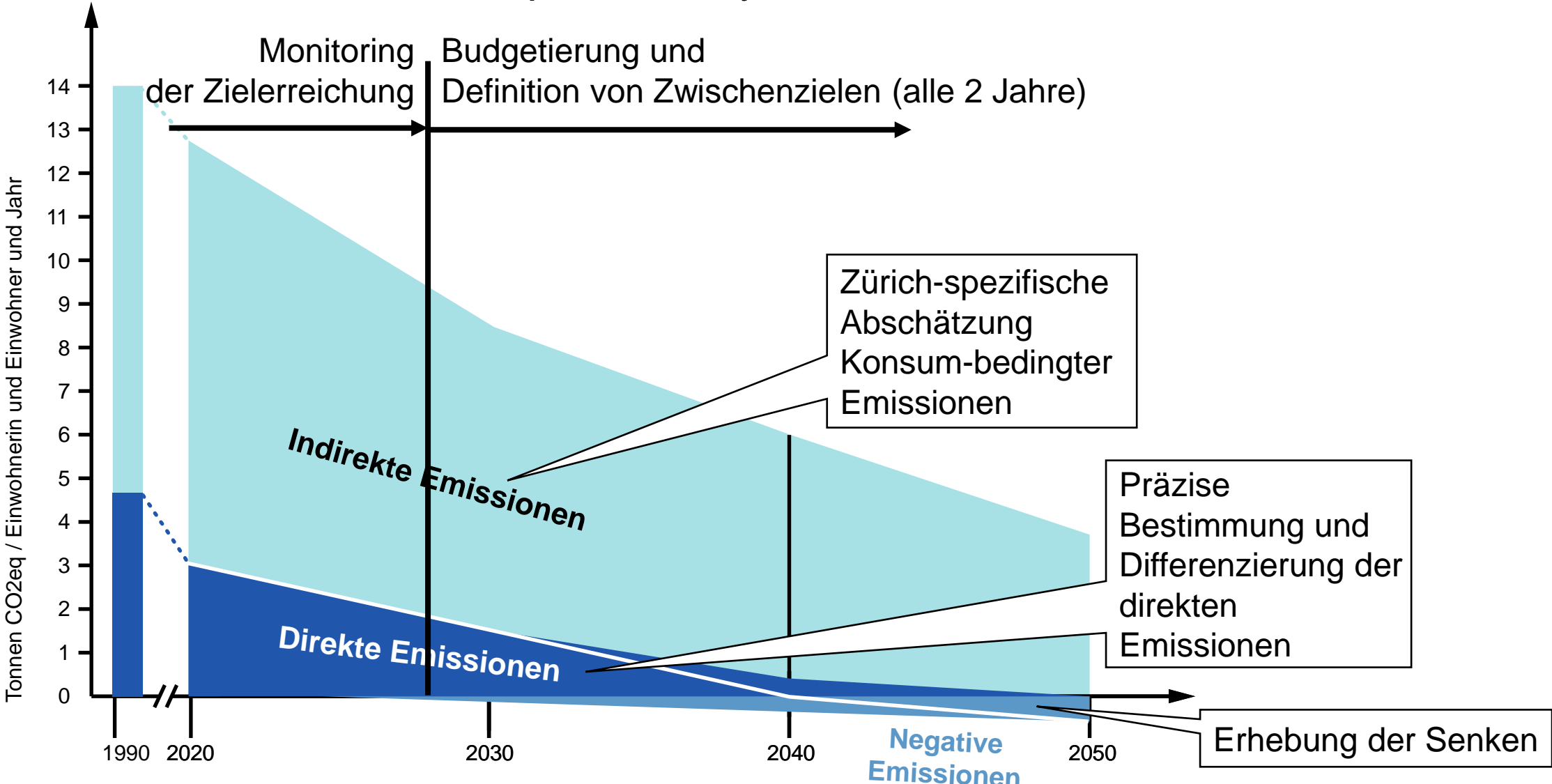
The toilet case

Which one is more sustainable?



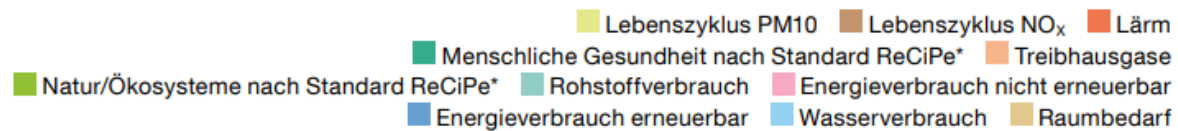
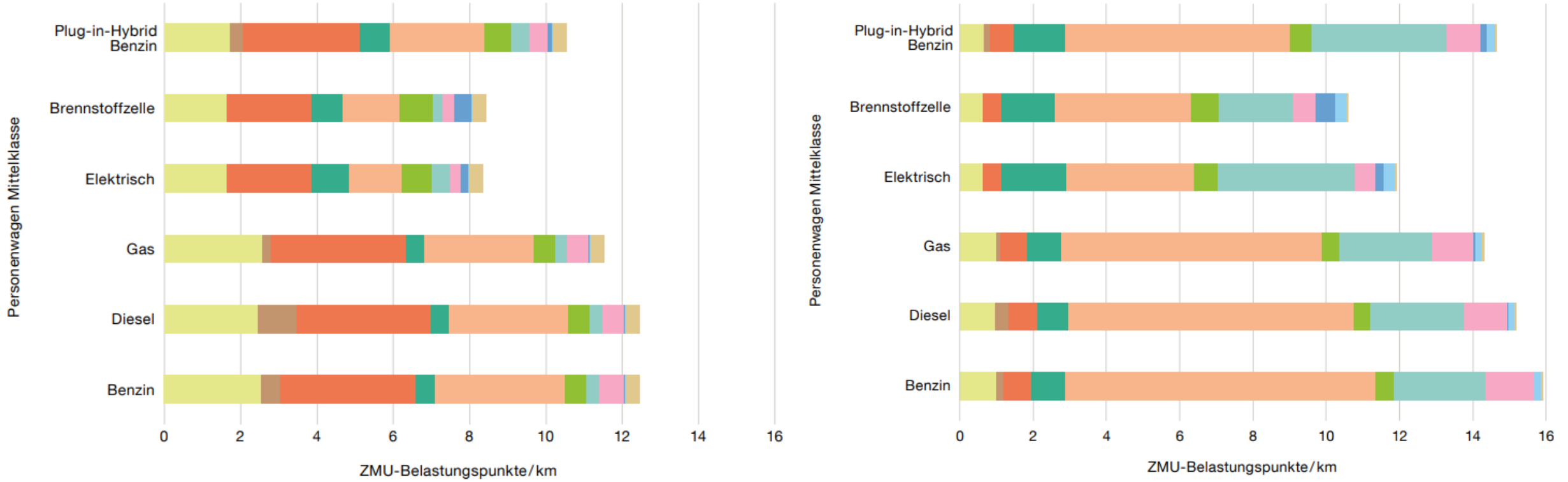
LCA is mandatory for assessing life-cycle GHG emissions

Net-zero GHG reduction path of City of Zurich



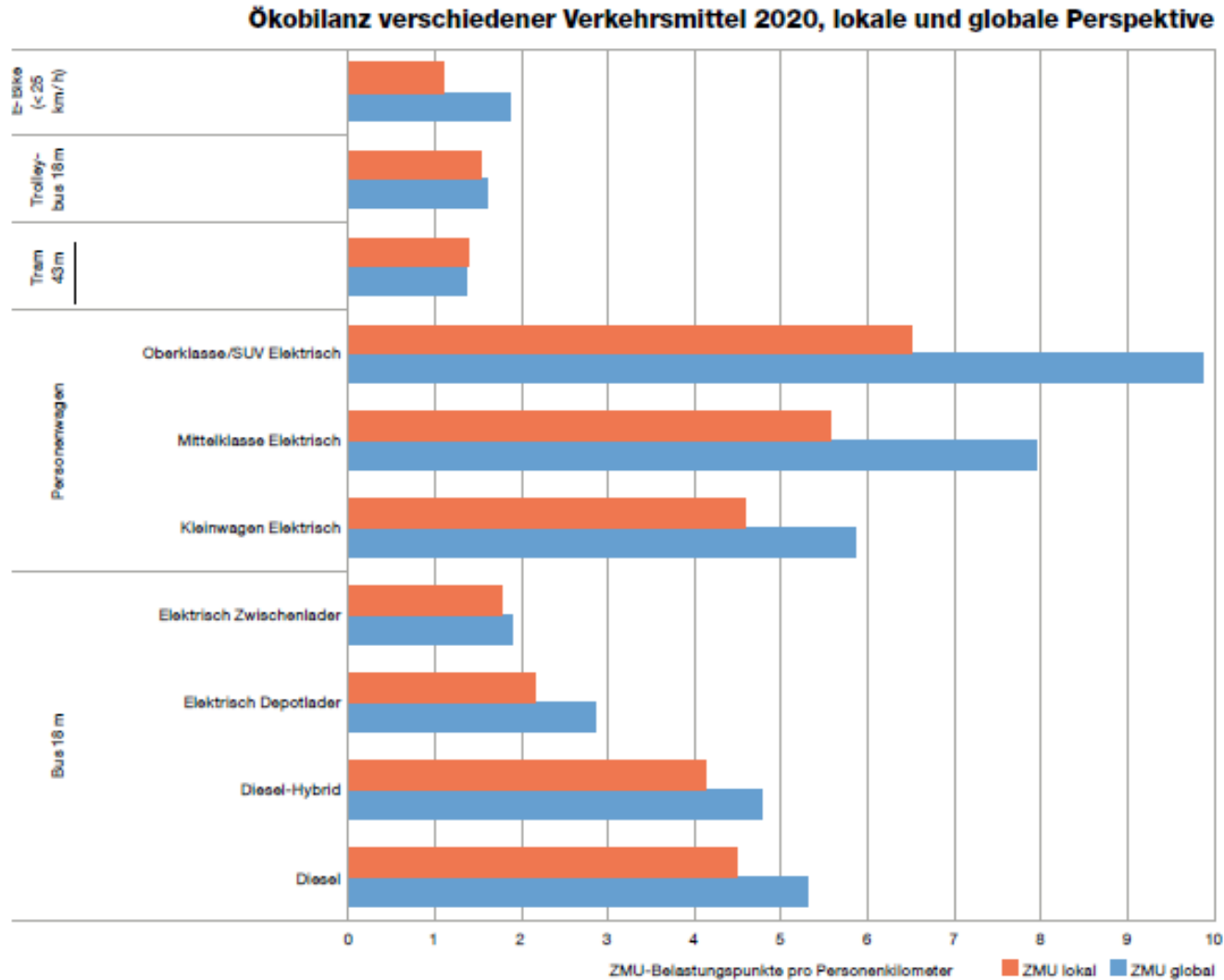
LCA-results as Basis for the Mobility Strategy

Zurich-Mobility-Environmental-Index (ZMU)



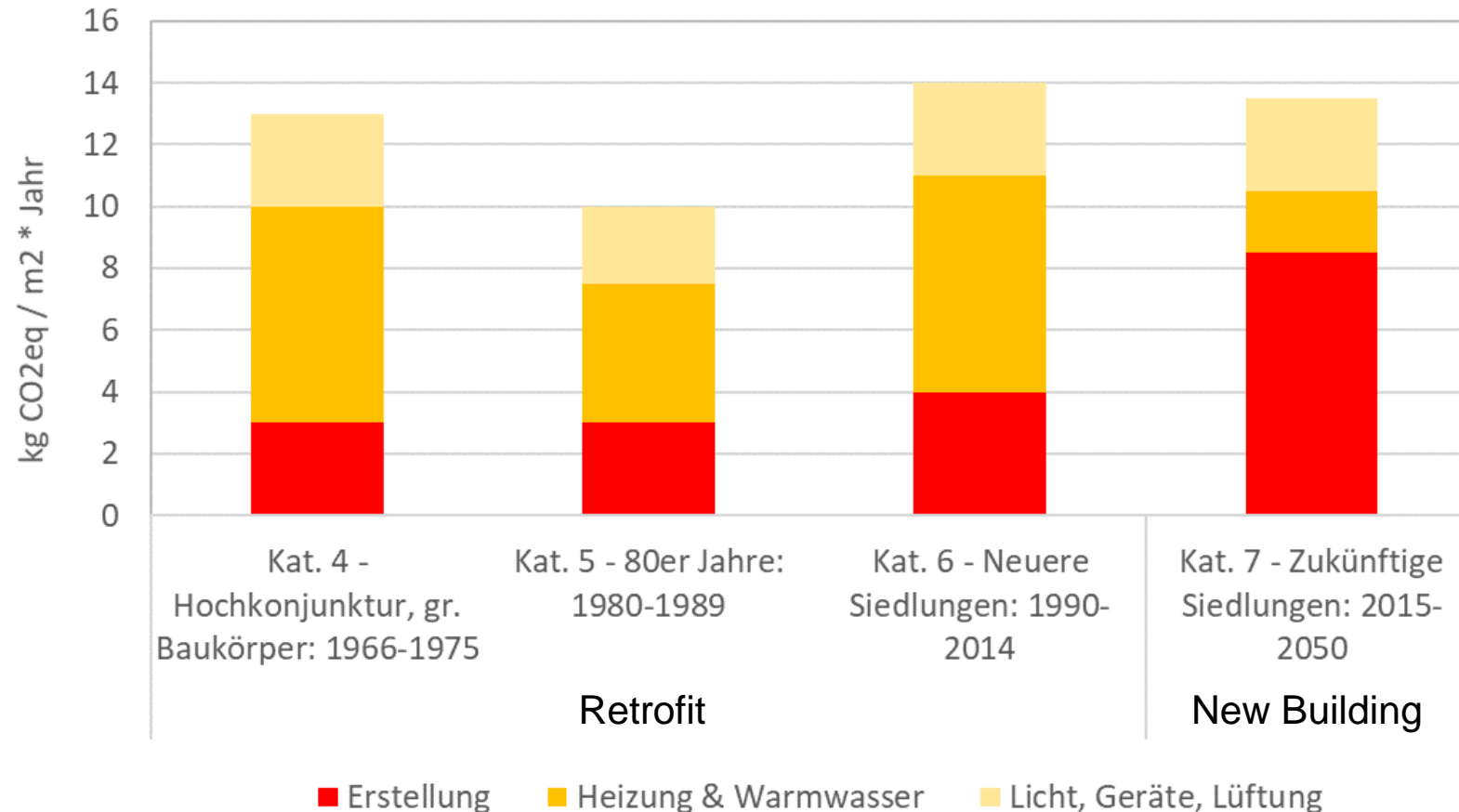
LCA-results as Basis for the Mobility Strategy

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Decision Making in the Building Sector?

Retrofit vs. new building: relevance of indirect emissions



AHB 2013: Wohnsiedlungen auf dem Weg zur 2000-Watt-Gesellschaft

The Vision in Environmental Data Management

Environmental Strategy (2022-)

Targets	Topics
climate-neutral city	climate protection
healthy urban environment	noise, air quality, local climate, artificial lights, NIS, climate adaptation
connected urban nature	biodiversity
intelligent resource use	energy, water, soil, mineral resources

Spatial Visualization of all Environmental Indicators



Already running: 3D noise immission mapping

Missing link to LCA!

Key learnings

1. LCA is key - especially for implementing net-zero climate strategies
2. LCA is often not directly visible or not recognized (which is ok)
3. Standards are highly preferred (for reasons of comparability and compliance)
4. Decision makers like to deep-dive in scope discussions (which is great to bring the topics forward)
5. Digitization is the hot topic (smart city, BIM, real time data visualization, etc.) → still an undiscovered field for LCA
→ **applied research collaboration highly welcome!**



Thank you!