

Sustainable Urban Development in Göttingen

Introduction
 Cities have become increasingly important when it comes to sustainable development (García López et al. 2021:69) which becomes noticeable when looking at the demographical development between 1950 and 2018: The number of people living in cities on a global level has multiplied by a factor of four (Koch & Krellenberg 2021:1). This leads to great development challenges but also opportunities for promoting and creating a more sustainable development within the city (García López et al. 2021:69).



Image 1. SDGs Logo



Image 2. SDGs 11

Research Question
 To what extent do climate protection goals on the macro level (SDGs/Fit for 55) have an influence on the sustainable urban development in Göttingen, especially on urban mobility?



Image 3. Fit For 55' package Logo

Aim of the work
 To explore the relation of broader climate proposals on the urban development on a local level and depending on the final results to gain a better understanding of the interaction between social inequality and the implementation of climate actions

Theoretical Framework

Daria's Research Focus Sustainable Development Goals (SDGs)

- Agenda 2030 was created to achieve the 17 SDGs
- Adopted by the United Nations in 2015
- Focus for this study:
 - SDG 11 (Sustainable Cities and Communities)
 - Has sub-targets such as **urban mobility**, public spaces, space utilization, disaster protection, integrative and participative urban development (Koch & Krellenberg 2021:9)
 - Focus on sustainability on multiple levels → ecologically, socially, economically, and culturally
 - Urban mobility**: Sub-target 11.2: Access to safe, accessible, affordable and sustainable transport systems
 - Existence shows the importance of cities when it comes to achieving global sustainability goals
 - Acknowledgement that contextualizing SDGs within city's challenges and opportunities is essential

Critique:

- Different meaning and value for different countries in the world
- Ambition Gap as well as Implementation Gap (Koch & Krellenberg 2021:15)
- Not mandatory** to implement and achieve the SDGs
- The implementation of the SDGs is rather a **bottom-up process** (Koch & Krellenberg 2021:13)
- Question arises of **who is accountable** for achieving the SDGs → the **national, county or local level?** → this leads to huge **responsibilities for cities** in achieving the goals

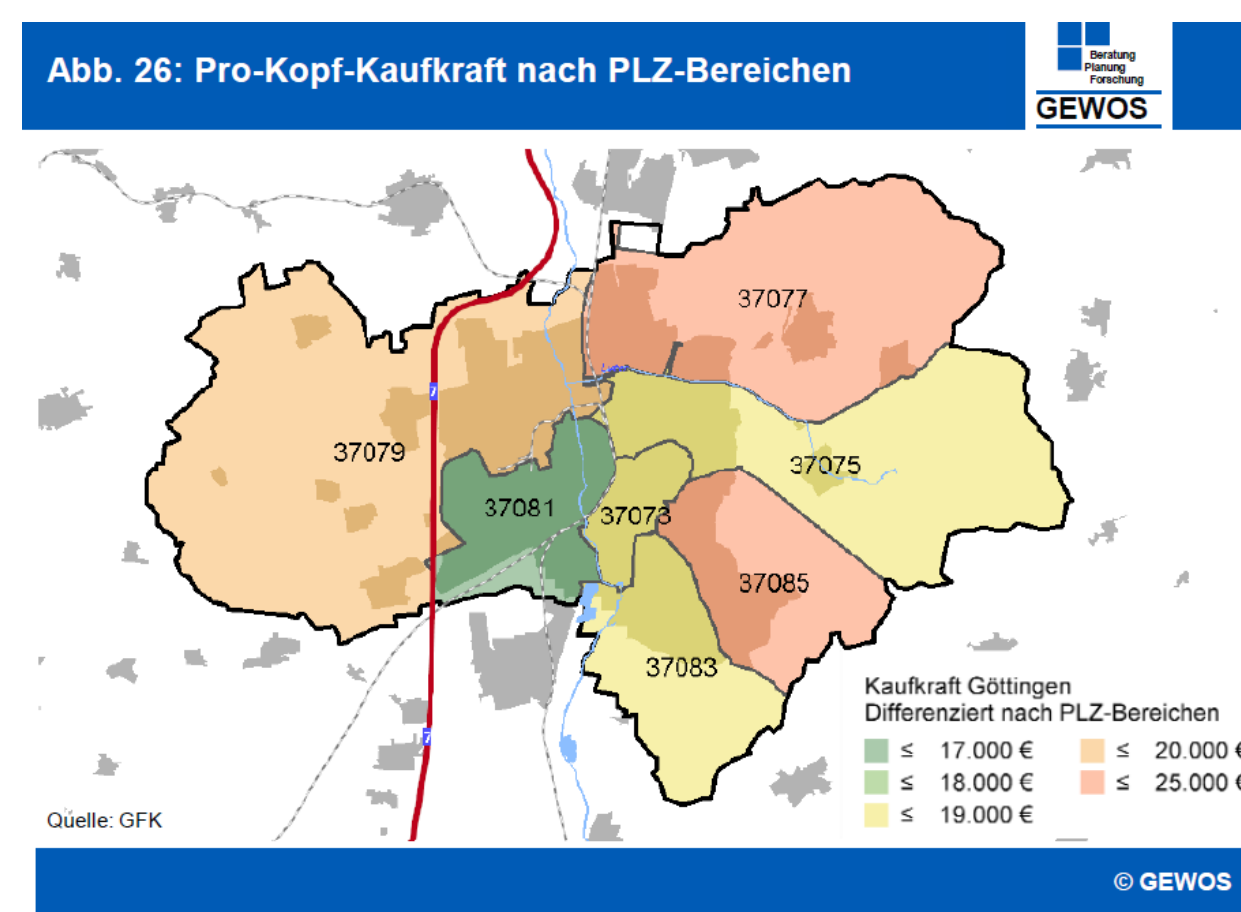


Image 4: Per capita purchasing power at Göttingen, differentiated by postcode

Annika's Research Focus Fit For 55

- EU package for climate protection (European Climate Foundation 2022)
- Covering several proposals which target two overarching climate goals:
 - Reduction of greenhouse-gas emissions of 55% in 2030 (compared to levels of 1990)
 - European **climate neutrality by 2050**

Key elements:

- Cut of fossil fuels by an **expansion of renewable energy** resources
- Stricter regulation of the **EU Emission Trading System (ETS)**
- Establishment of a **new emission trading system**, Effort-Sharing Regulation law (ESR), for transportation, buildings, agriculture etc. (ESR sectors)
- Reduction of CO2 emission through cars and promotion of the development of **electric cars**
- Introduction of a **Carbon Border Adjustment Mechanism (CBAM)** to compensate for disadvantages due to climate standards and support a fair economic competition

Critique:

- Partial **contradictions** between the proposed measures and climate protection (Timothy Searchinger et al. 2022: 27ff.)
- E.g. definition of farming of biomass for green energy as climate neutral → support of further agriculture in this sector → negative effects on a local and global level:
 - Local level: increase of land use → decrease of biodiversity and CO2 storages
 - Global level: outsourcing of the national food production in other countries → environmental damages in respective countries through higher agriculture and increasing CO2 emissions as a result of transportation

Methods and Research Design

- Participant observation** in Grone and Oststadt
- Semi-structured interviews** (in person and online) with ...
 - ... an NGO in Göttingen.
 - ... three employees of the city administration working in different departments in Göttingen.
 - ... a politician from the council in Göttingen who is part of the committee of environment, climate protection and mobility.
- Evaluation methods** inspired by Breidenstein et al. (2013:109ff.)

Preliminary Results

- Most interviewees have **not** referred to the SDGs as the **main foundation** of their work
- The SDGs are understood as **guiding principles** by **one employee** of the city administration which are, however, too ambiguous to address them all
 - Ambition Gap and Implementation Gap
- Urban mobility**: "Tempo 30" as an aspiration was mentioned by most of the interviewees as well as limiting cars in the downtown area (parking, car accessibility, increasing parking prices etc.)
- Necessity in local politics to look especially at local challenges and what is needed in the area
- The question of **responsibility** is essential in the context of who is responsible for the **slow implementation of drafts/ resolutions**
- Acknowledgment that **skills shortage** slows down the needed sustainable urban development and therefore the implementation of the SDGs

Preliminary Results

- Fit For 55 package → sustainable development Göttingen:
- Interviewees **didn't mention any EU drafts** by themselves
 - Are these guidelines of relevance in the work of the actors?
 - Are they of more interest for industrial actors, who participate in a national, European or international market?
- But: EU policies are **mandatory**, therefore their implementation should be visible on a local level
- Sustainable development and social inequality:
- Public data (GEWO 2013:40) as well as own field research **support** the hypothesis of **social inequality** between Grone and Oststadt
- Against the approach, the NGO mentioned stronger activity in the area of Grone
- Also other data from our interviews seem to be **not** in favor of a **positive correlation** of the prestige of an urban district and the implementation of climate actions
- Instead, a reversed impact direction could be considered

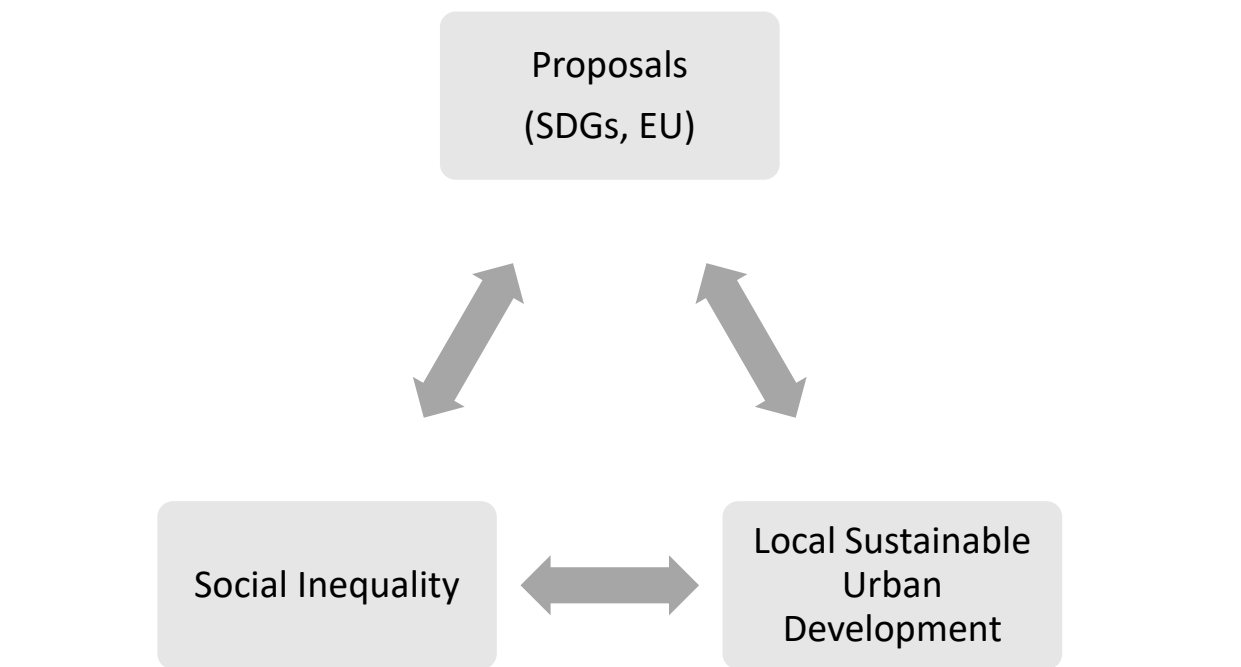


Image 5: Interconnection and foundation of our research project

Discussion

- The following **recommendations** that are stated by García López et al. (2021:77) could be useful for the city of Göttingen and its network as well:
 - Open data-based approach** for creating comparable data
 - Platforms and forums** to promote and improve the **exchange of knowledge** between cities and communities to a greater extent

Next Steps

- Further **analysis and interpretation** of our data
- Connecting theoretical framework and our own results
 - Integration of our results into the **existing scope of research**
- Adaptions** to new questions arising with the final results
- Reflection of our hypothesis against the backdrop of our final results

References (Pictures)

- <https://www.un.org/sustainabledevelopment/news/communications-material/>
- <https://sdgs.un.org/goals/goal11>
- <https://news.industrial-europe.eu/Article/682>
- GEWOS.2013. Wohnbauflächenbedarfsprognose Göttingen 2025. 40. Accessed 11.01.23. Available at: <https://www.goettingen.de/portal/seiten/gutachten-und-konzepte-zur-wohnraumversorgung-90000233-25480.html>

References (Literature)

European Social Service. 2022. The 'Fit For 55' package at a glance. Accessed 05.02.2023. Available at: <https://europeanclimate.org/stories/the-fit-for-55-package-at-a-glance/>

García López, Javier, Raffaele Sisto, Julio Lumbreras Martin, and Carlos Mataix Aldeanueva. 2021. Smart and Sustainable Planning for Cities and Regions. Cham: Springer.

Koch, Florian and Kerstin Krellenberg. 2021. Nachhaltige Stadtentwicklung. Die Umsetzung der Sustainable Development Goals auf kommunaler Ebene. Wiesbaden: Springer VS.

Timothy Searchinger, Oliver James, Patrice Dumas, Thomas Kastner, Stefan Wirseniens. 2022. [EU climate plan sacrifices carbon storage and biodiversity for bioenergy](https://doi.org/10.1038/s41561-022-01000-0). A Comment published in Nature 612, 27–30.