

30 Years of Integrated, Ressource-Efficient Urban Development in Graz – Lessons Learned

*IEA Experts Group on R&D Priority-
setting and Evaluation (EGRD) –
WS “Technologies and Innovations for
the Climate-Neutral City”*

12th May 2025, Vienna, Austria

Christian Nussmueller

City of Graz

Executive Office for Urban Planning,
Development and Construction



smart
CITY
graz



Content

- **Graz at a Glance - Current Challenges**
- **30 Years of Integrated Urban Development in Graz**
- **Key Findings from Administrative Perspective**
- **Conclusions for R&D-Policies Supporting Urban Development**

Graz at a Glance

Pop. 306.068

(Primary Residence per 01.01.2025)

City Area: 127,58 km²

68% Green Areas

UNESCO World Heritage

Sites Center (1999)

Eggenberg Castle (2010)

Science and Education

4 Universities, 2 UoASc

(+ 60.000 Students)

Culture & Design

EU Capital of Culture 2003

City of Design (2011)

Facts & Figures

City of Graz: pop. 343.000

(306.000 primary + 37.000 secondary residence per 01/2025)

+ 4.000 new inhabitants per year!

Vienna: 4.900
Graz: 2.250  /km² in average

Non-self-employed workers: 127.000

(02/2025)

Overnight stays : 1.140.000

(year 2022)

Number of local companies: 17.400

(01/2025)

Province of Styria

GRAZ

UNESCO World Heritage
UNESCO City of Design

4 Universities 
2 Universities of Applied Sciences
2 Colleges

+60.000 Students

14 Scientific Centres of Excellence

(Some) Current Challenges

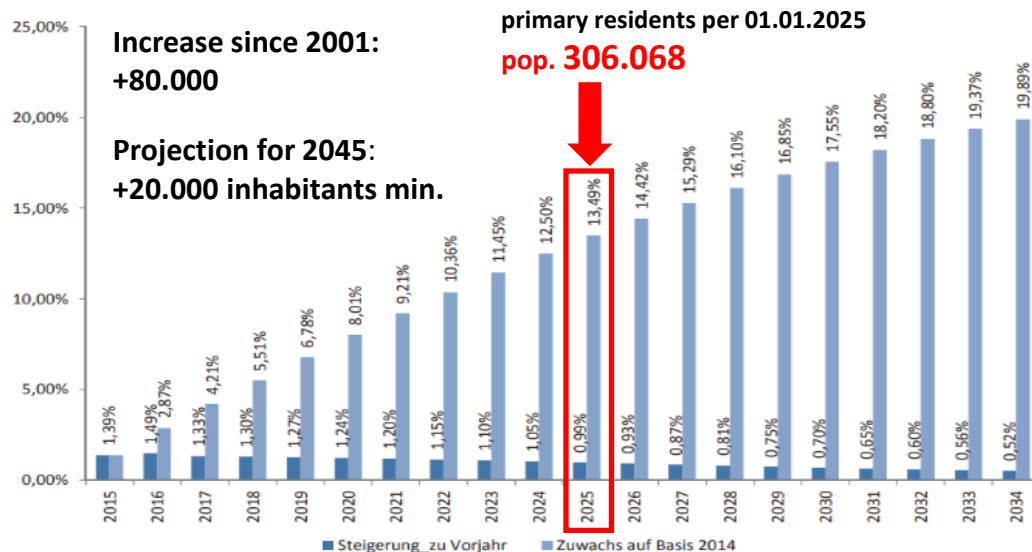
#1

Dynamic Population Growth



#2

Rising Infrastructure Costs, Social Sector Costs, (affordable) Housing, etc.



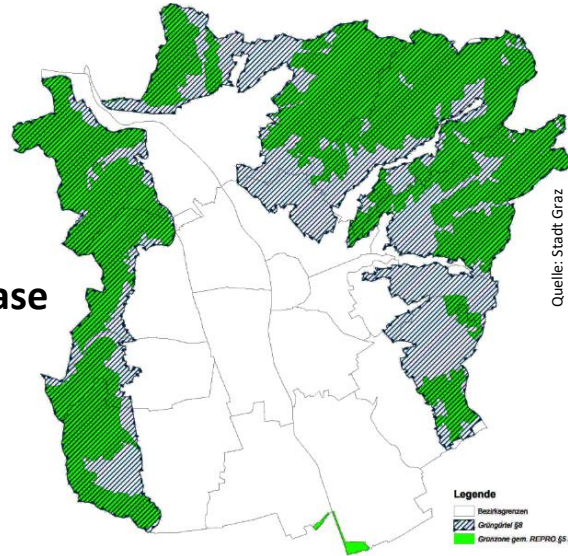
(Some) Current Challenges

#3 Limited Settlement Area

(white area in map)

+ continuous increase in population

Ressource saving inward development
(densification and maintaining the quality of living in parallel)



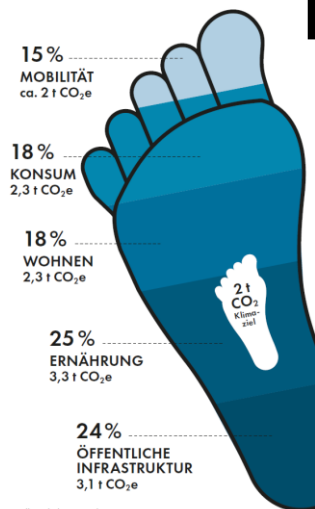
Where/how can the city grow without loss of quality of life?

Total City Area: 127 km²

- thereof Green Belt: 1/2 restricted building potential (grey hatching)
- thereof Green Zone: 1/3 ≠ non buildable area (green)

(Some) Current Challenges

Solution Approaches



#4
Climate Mitigation
 (local GHG-Emissions reduction target: Net Zero until 2040)

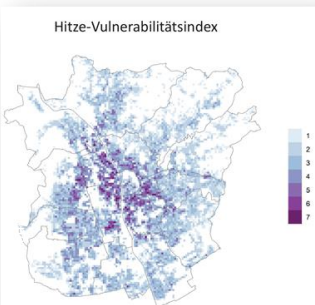
Guiding principles of resource efficient urban development strategies in Graz

#5
Climate Adaption of urban infrastructures



Public Governance Levers:
 Urban Development Concept, Zoning Plan, Green Space Factor, fostering brownfield developments, PPP Urban Development Contracts, etc.

Technical and Processual Innovations (R&D)
 &
Basis: Personnel & Financial Resources



30 Years of Integrated Urban Development in Graz



Österreich in der EU

1995: Austria becomes a Member of the EU

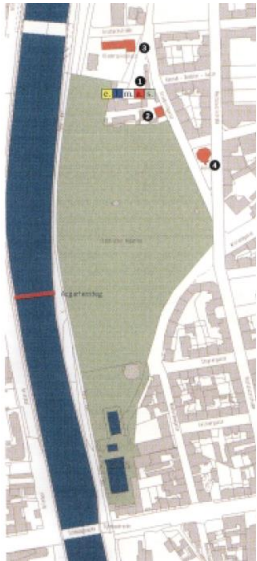
1997-2001: UPP e.l.m.a.s. Graz Jakomini



1st Integrated urban development project based on a master plan; funded by EU/ERDF; Initiation of partnerships between public, semi-private and private initiatives and institutions of the local economy and cultural scene;

Infrastructural upgrading of the public park area “Augarten” and surroundings as an important central recreational area, renovation of historic public buildings and first participatory approaches in urban development processes;

Training and qualification measures to empower underprivileged local residents;



30 Years of Integrated Urban Development in Graz

1996-2001: URBAN I Graz Gries

Improvement of living and working conditions in the deprived district Graz Gries following an integrated urban development masterplan

55 implementation measures: design of public space, green and blue infrastructure, revitalisation of public historic buildings, social soft measures, education and training, participatory approaches, etc.

EU/ERDF-funded



Projektstandorte (Auswahl)

- 1 Offenes Tageszentrum für Senioren / ISG (Errichtung)
- 2 Revitalisierung Bad zur Sonne
- 3 Lufthygienische Sanierung Fa. AGRA Tagger
- 4 Fernwärmsanierung städtischer Wohnhäuser
- 5 Obdachlosenprojekt 'Das vergessene Dorf'
- 6 Augartensteig (Errichtung)
- 7 Neugestaltung Griesplatz Nord
- 8 Oeverseepark (Errichtung)
- 9 Verkehrssicherheit (fußgängerfreundlich, Neugestaltung öffentlicher Flächen)
- 10 Innenhofbegrünung (Modellprojekt Griesgasse 24)
- 11 Unternehmerhaus Steiermark (Revitalisierung/Neuerichtung)
- 12 Einkaufsstraßenmarketing/Modellversuch Annenstraße
- 13 Gründerinnenzentrum Steiermark (Förderung Startinvestition)
- 14 Sozialökonomisches Projekt BAN (Verkaufslokal 'Seinerzeit', 1998)
- 15 Dienstleistungsnetzwerk Gries (Stützpunkt)
- 16 Stadtlei café Palaver
- 17 Sprachbegleitung/Frauenwerkstätte (Second-hand-shop 'Portobella', bis 2000)
- 18 Streetwork (Stützpunkt URBAN-Info-Stand Griesplatz, 1998)
- 19 Bürgerinformation: URBAN-Info-Stand Markthalle Griesplatz, bis 2000)
- 20 Bürgerbeteiligung Planung Oeverseepark

Quelle: Digitaler Kataster, Stand 1998
Kartographie: Alexander Fests (Graz 2000)

30 Years of Integrated Urban Development in Graz



2000-2008: URBAN II Graz-West

Transformation of a formerly heavily industrialized urban area into a living environment of “new, sustainable urbanity”

Innovative mix of measures in the areas of R&D, education, culture, economy and residential, recreational and mobility sectors, citizen participation
(>40 integrated sub-measures)

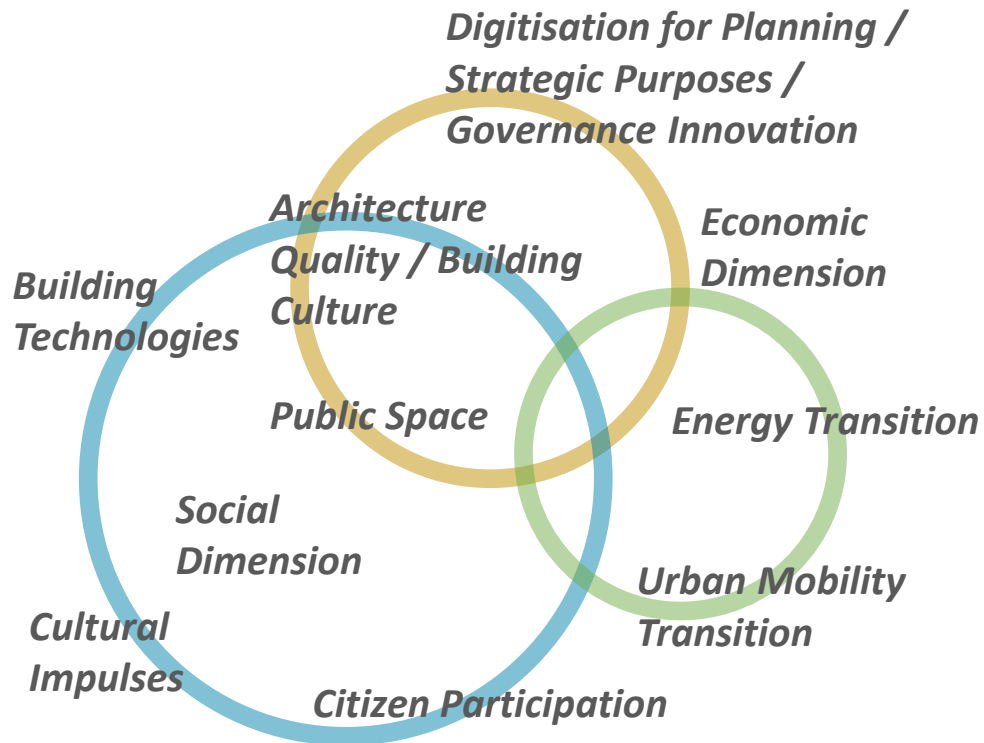
EU/ERDF-funded



30 Years of Integrated Urban Development in Graz

2012: Smart City Graz Strategy as integral part of the official binding Urban Development Concept Graz 4.0

- Overall objective:
“... to become an energy-efficient, resource-conserving and low-emission city of the highest quality of life ...”
- Umbrella strategy integrating various sectors - integrated/holistic development approach
- Quadruple-Helix-Approach (government, academia, industry, community)



30 Years of Integrated Urban Development in Graz

since 2013: District Development Smart City

Austria's 1st Smart City Lighthouse Project

funded by



since 2009: District Development Reininghaus

Smart City Graz Strategy:

Integrated Urban Development Approach

Focus on people and quality of life!
(not only technology-oriented)

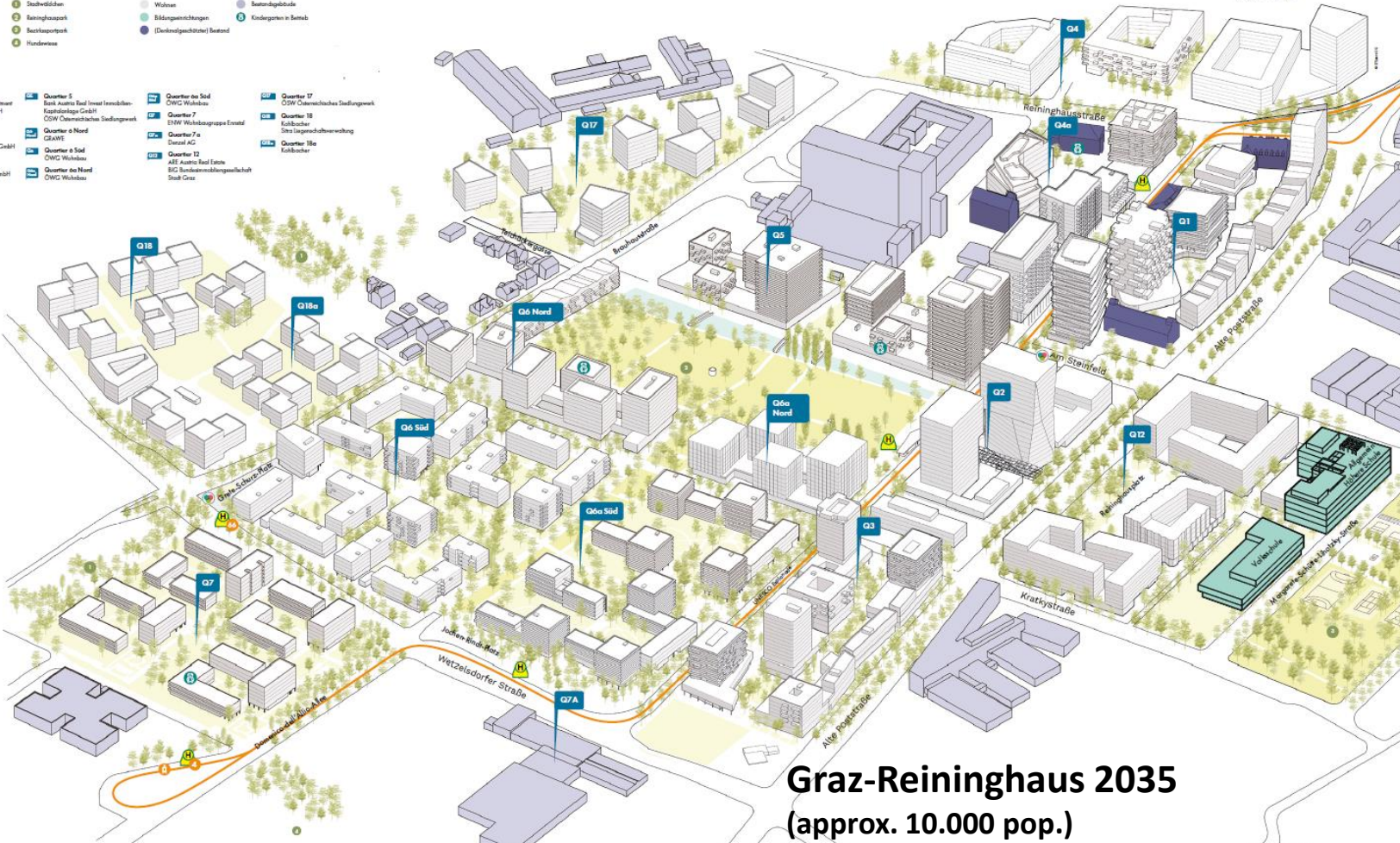
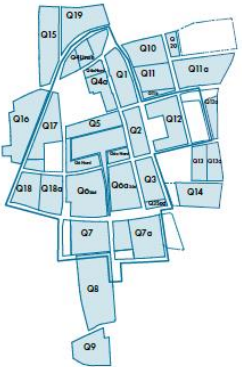


LEGENDE

- | | | | |
|------------------|-----------------------------------|--------------------------------|-----------------------------|
| Allgemein | Öffentliche Verkehrsmittel | Öffentliche Grünflächen | Gebäude |
| ● In-Knotenpunkt | ● Haltestelle | ● Stadtwäldchen | ● Wohnen |
| — Straße | ● Bushaltestelle Linie 00 | ● Rainigspark | ● Bildungseinrichtungen |
| — S-Bahn | ● Straßenbahnlinie 4 | ● Sportplatz | ● (Devot)geschützte Bestand |
| | | ● Hundewiese | ● Bestandsgebäude |
| | | | ● Kindergärten in Bestand |

- | | | | | | |
|--|---|--|--|---|--|
| Q1 Quarter 1
ENW Wohnbaugruppe Event! | Q4 Quarter 4
BNP Paribas Real Estate Investment Management Germany GmbH
K&S GmbH
EWA Unternehmensgruppe | Q5 Quarter 5
Bank Austria Real Invest Immobilien Kapitalanlage GmbH
ÖSW Österreichisches Stadtentwicklung | Q6 Quarter 6 Süd
OWG Wohnbau | Q7 Quarter 7
ENW Wohnbaugruppe Event! | Q17 Quarter 17
ÖSW Österreichisches Stadtentwicklung |
| Q2 Quarter 2
CA Immobilienwirtschafts-Gesellschaft GmbH | Quarter 4a Nord
Schönerl Immobilienbetriebe GmbH | Quarter 6 Nord
G&W | Quarter 6 Süd
OWG Wohnbau | Q7a Quarter 7a
Dental AC | Q18 Quarter 18
K&S
Stes Liegenschaftsverwaltung |
| Q3 Quarter 3
BEI ENW und BEI ZWI
Fockelmann-Gesellschaft mbH, Ca KG
Gesamtsitzungs Wohnungs- und Stadtentwicklungsgesellschaft Naumböhen | Quarter 4a
BWO - besser wohnen
Michael Baumgartner Services GmbH | Quarter 6 Nord
OWG Wohnbau | Quarter 12
A&E Austria Real Estate
BIG Bundesentwicklungs-gesellschaft Stadt Graz | Q18a Quarter 18a
K&S | Q1 Quarter 1
K&S |
| Q3 Süd
Stadt-Care | | | | | |

ÜBERBLICK REININGHAUS-QUARTIERE

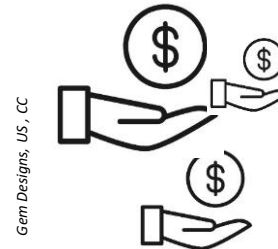
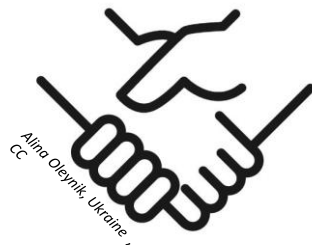
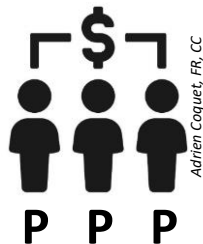


Graz-Reininghaus 2035
(approx. 10.000 pop.)

Key Findings from Administrative Perspective / Lessons Learned

Integrated urban development – no end in itself!

- Quadruple-Helix / PPP-collaboration models shall be seen as a key driver for innovative urban development (co-creation, co-financing)
- general aim:
to create win-win-situations between public and private sector



Key Findings from Administrative Perspective / Lessons Learned

Integrated Urban Development:

- needs systemic changes in basic public governance approaches
- smart horizontal integration of different sectors/players
- as well as vertical collaboration of different governance levels
- focusing of main tasks of local politics and municipal administration:
 - a) balancing interests of different urban stakeholder groups
 - b) prioritization of administrative resources and public investments

Key Findings from Administrative Perspective / Lessons Learned

Integrated Urban Development:

- successful multi stakeholder processes need more personnel resources than simple “one fits all” processes!
- constant fight against the phenomenon of “Intrinsic Reproduction of Bureaucracy”!
(inefficient self-administration, over-regulation, gold-plating, etc.)

Conclusions for R&D-Policies / Funding Schemes Supporting Urban Development

- R&D-projects which strive to include local public administrations need to be application-oriented and have to concretely support municipal strategies (quantifiable results)
- R&D-Community has to get a better, realistic understanding of:
 - a) the complex systems of local urban development processes (different sectors, multi stakeholder, dependencies, sensitivities etc.)
 - b) the „habitat of local public governance“ (priorities, area of operations, possibilities, ressources, limiting factors, dependencies, sensitivities etc.)

Conclusions for R&D-Policies / Funding Schemes Supporting Urban Development

- local public administrations generally need dedicated personnel resources to get empowered to make use of / cooperate in R&D-projects at all (good Austrian practise: Climate Neutral Cities-process – strategic alliance between federal level and cities)
- working for a better acceptance of scientific activities in the broad public (= political decision makers) - better explanation of the seeked benefits for society

Conclusions for R&D-Policies / Funding Schemes Supporting Urban Development

- **Broader innovation concepts in terms of technological, systemic and social innovations that contribute to the progress of climate-neutral and resilient quarters, neighborhoods, and buildings**
- **R&D-funding schemes in general have to be set up attractive for public and private beneficiaries:**
 - **optimal balance between thematic flexibility and thematic focus**
 - **adequate financial incentives (funding rates and shares)**
 - **simplified implementation/administration efforts, etc.**
- **Streamlining and better strategic alignment of public funding (horizontally and vertically/Multi-Level-Governance)**

*Thank you
for your attention!*



Photocredit: OeRÖK / Wiedenig

Christian Nussmueller
City of Graz, Executive Office for Urban
Planning, Development and Construction

christian.nussmueller@stadt.graz.at
www.graz.at



[linkedin.com/in/christiannussmueller](https://www.linkedin.com/in/christiannussmueller)



Photocredit: Stadt Graz / Schiffer