

---

# **Sustainability check for land development Applications in Germany and the United States**

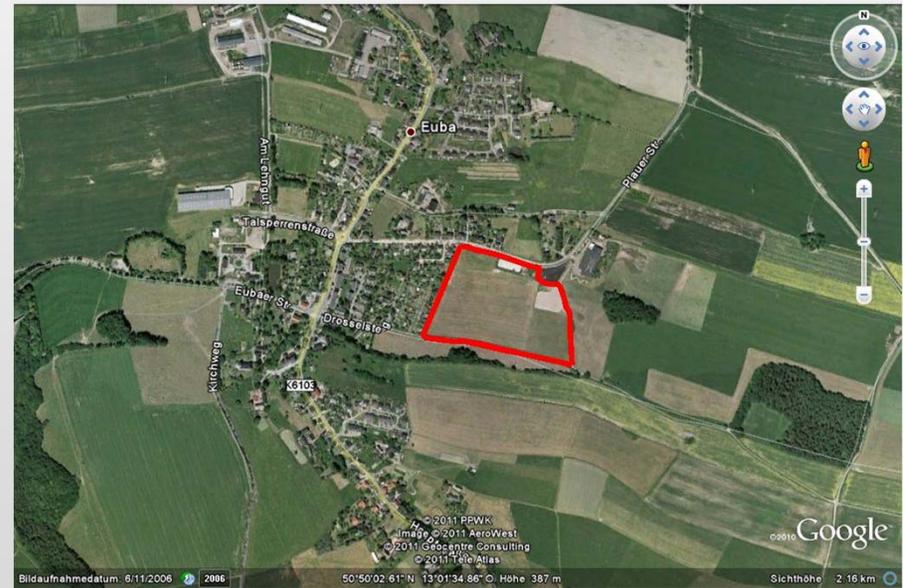
Uwe Ferber – Projektgruppe Stadt+Entwicklung

Börries Butenop – Stadt Chemnitz

Alena Bleicher – Helmholtz Centre for Environmental Research

## Initial Situation

- competition of development in urban zone/  
greenfields



## Outline

---

1. US-EPA Smart-Growth Toolkit
2. The “Project Scorecard” for evaluation of projects
3. Transfer of the Scorecard in the context of an integrated urban development (case study Chemnitz)



# Smart Growth Toolkit

---



- Developed as part of an EPA-funded technical assistance program in order to:
  - Create tools that communities can adapt and use on their own
  - Encourage regulatory changes at the local level that favor reinvestment and redevelopment
- Audience: Local Government Officials, Civic Leaders, Advocates
- Use for: Education/Information, Constituency Building, Specific policy/code revisions

[www.smartgrowthtoolkit.net](http://www.smartgrowthtoolkit.net)

# Smart Growth Toolkit

---

- **Evaluating Regulations**
  - Policy Audit
  - Code and Zoning Audit
  - Audit Summary
  
- **Evaluating Projects**
  - Project Scorecard
  
- **Identifying Resources**
  - Incentives Matrix
  
- **Mobilizing Support**
  - Strategy Builder

## Smart Growth Project Scorecard

---

- Helps to evaluate qualities of proposed development projects with regard to the community's vision for smarter growth.
- Provides a catalogue of 33 questions in 8 categories which are rated by qualities (poor, good, very good, excellent).
- Can be used as a whole or only segments of it.
- Use in negotiation processes or in stakeholder participation.
- Comparison of projects.

## Evaluation Criteria

---

- Location and relevance for public supply
- Density
- Mixture of use
- Diversity in housing sector
- Accessibility, mobility, connectivity
- Environmental protection
- Pedestrian Safety, Streetscapes and Parking
- Civic offerings and contribution to local development

## Application

---

- understand quality standards
- check list for public participation
- direct comparison of projects
- adjustment with municipal developmental targets
- project-oriented moderation process with investor



# The City of Chemnitz – „Stadt der Moderne“

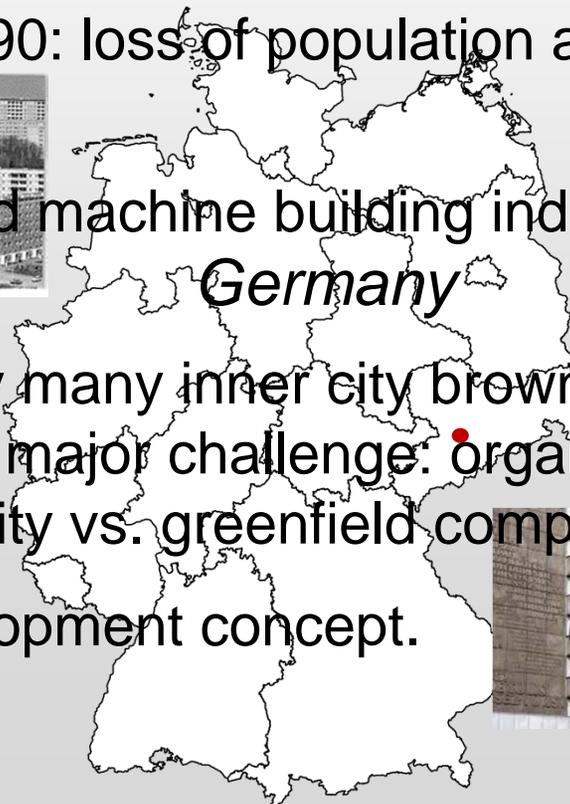
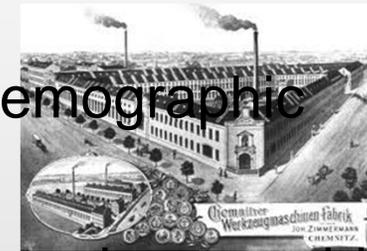
- Important industrial city in Germany since end of 19th century.



- Trends since 1990: loss of population and demographic change (aging).



- Still industrialized machine building industry and automobile industry.



Germany



- Due to its history many inner city brownfields (often contaminated) – major challenge: organize shrinkage and solve the inner city vs. greenfield competition.



- Integrated development concept.



## Goals of integrated Urban Development

---

- Focus on brownfield development
- Protect farm land and open space
- Avoid urban sprawl
- Support „city of short distances“



## Application of the Scorecard in Germany

---

1. Revision of questions and answer categories and adjustment to German circumstances
2. Evaluation of 4 projects in Chemnitz (2 inner city, 2 outskirts)



## Adjustment of the Scorecard

---

- Changes within the categories:
  - Density values adopted to German situation,
  - Aggregation of questions,
  - Elimination of questions,
  - Additional questions.
- Additionally a German set of smart growth development criteria was taken into account.
- German version: 25 questions.
- Quantification of categories.

## Adjustment of the Scorecard

Does the project require an expansion or extension of the water and sewage service in the area?

**5**

zutreffendes ankreuzen

-2

*Es ist am Standort und in unmittelbarer Nähe kein Netz verfügbar.*

-1

*Die Lage des Projektes befindet sich in einem zukünftig für die Erschließung vorgesehenen Gebiet; die Finanzierung ist noch nicht geklärt; ein eigenständiges Erschließungskonzept existiert nicht.*

0

*Die Lage des Projektes befindet sich in einem zukünftig für die Erschließung vorgesehenen Gebiet; die hierfür erforderlichen öffentlichen Mittel stehen bereit; oder das Projekt umfasst ein eigenständiges Erschließungskonzept, z.B. durch die Nutzung von Regenwasser.*

+1

*Das Gebiet ist bereits mit öffentlichen Mitteln erschlossen und die Versorgungskapazität ist ausreichend oder das Projekt sieht Regen- und Grauwassernutzung bzw. eine eigene Entsorgungslösung vor.*

+2

*Das Gebiet ist bereits mit öffentlichen Mitteln erschlossen, die Versorgungskapazität ist ausreichend und die Kapazitäten werden durch biologische Grau- und Abwasserrückgewinnung, z.B. für Bewässerungszwecke bzw. eine eigene Entsorgungslösung durch naturnahe Abwasserreinigungsanlagen erweitert.*

## Evaluation Criteria

---

- Location and relevance for public supply
- Density
- Mixture of use
- Diversity in housing sector
- Accessibility, mobility, connectivity
- Environmental protection
- Pedestrian Safety, Streetscapes and Parking
- Civic offerings and contribution to local development

## Project Example – Inner City

---

- Inner-city areas are brownfields, formerly used by industrial/commercial uses
- Old-building-neighbourhoods
- Goal: diversifying housing (for example townhouses)



Sonnenberg



Gablenz

# Project Example – Brownfields in Inner City

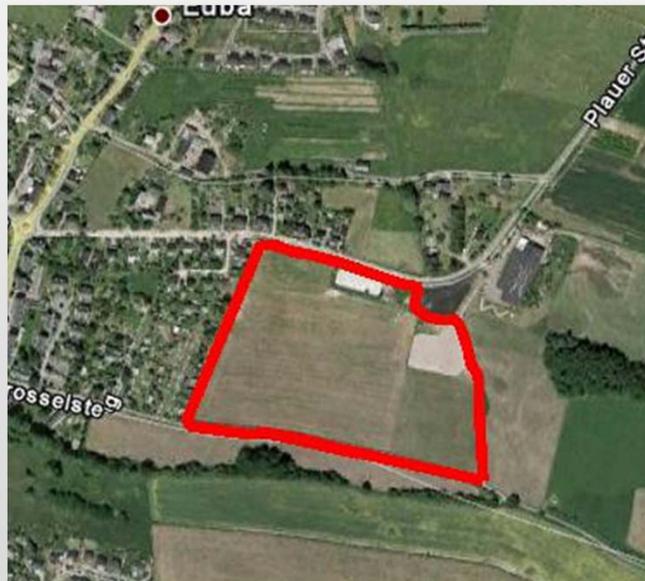
STADTEIL SONNENBERG: STÄDTEBAULICHE PLANUNGSSTUDIE ENTWURF DETAIL



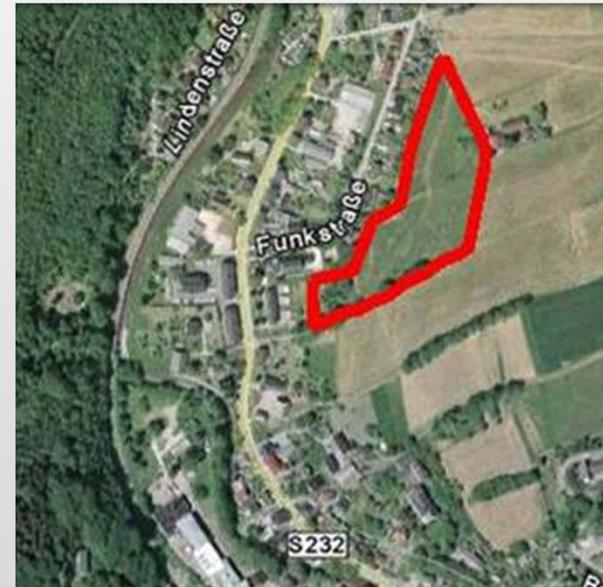
Draft of urban planning  
Project area  
Sonnenberg

## Project Example – Outskirts

- Projects on the outskirts located in rural shaped foreland of the Erzgebirge (Ore Mountains)



Euba



Einsiedel

## Project Example – Outskirts

Early binding site-plan number 93/29  
Housing area upside Funkstraße,  
Chemnitz - Einsiedel



# Evaluation

	Sonnenberg	Gablenz	Einsiedel	Euba
<b>Question</b>	<b>Location and relevance for public supply</b>			
1	2	2	-1	-1
2	2	2	-2	-2
3	2	2	1	1
4	2	2	-2	-2
5	1	1	0	0
6	2	2	2	0
7				
8	2	2	2	2
	<b>Density</b>			
9	2	2	-1	-2
10	2	2	-2	-2
	<b>Diversity of use</b>			
11	1	1	1	-1
12	0	0	-1	-1
	<b>Diversity in housing sector</b>			
13	1	1	0	0
	<b>Accessibility, mobility and connectivity</b>			
14	0	0	0	-2
15	1	1	1	1
	<b>Environmental protection</b>			
16	1	1	1	-2
17	0	0	-1	-1
18	0	0	-1	-1
19	1	1	0	0
20	2	1	k.A.	k.A.
21	1	0	1	1
	<b>Civic offerings and contribution to local development</b>			
22	2	2	-1	-1
23	-1	-1	-1	-1
24	0	0	-1	-2
25	1	1	1	1
<b>SUM</b>	<b>27</b>	<b>25</b>	<b>-10</b>	<b>-17</b>

## Results

---

Project	Score
Sonnenberg (inner city)	+27
Gablenz (inner city)	+25
Einsiedel (outskirts)	-10
Euba (outskirts)	-17

- Both inner-city projects achieved higher scores.
- Differences in outskirts depend on public transport, schools, shopping.

## Conclusion

---

- Method can be transferred to Germany
- Transparency is achieved
- Scorecard suitable for improving existing projects
- Cooperation with citizen and investors
- Use in political discussion
- „Process moderation“ before urban land-use planning

---

# Thank you!

Contact: Dr.-Ing. Uwe Ferber: [uwe\\_ferber@projektstadt.de](mailto:uwe_ferber@projektstadt.de)