



# Shrink Smart

The Governance of Shrinkage within  
a European Context

## **Research Brief No. 1**

Addressing Urban Shrinkage  
Across Europe –

Challenges and Prospects

by Dieter Rink, Annegret Haase,  
Matthias Bernt and Katrin Großmann

## About Shrink Smart

The Governance of Shrinkage within a European Context

FP7 Research Project, May 2009 to April 2012

## Acknowledgements

Shrink Smart is a European Research Project financially supported by the European Commission's 7th Framework Programme, Theme 8 „Social Sciences and Humanities“; contract no. 225193

The authors wish to thank the consortium members Chris Couch, Matthew Cocks, Vlad Mykhnenko, Alberto Violante, Caterina Cortese, Paolo Calza Bini, Bogdan Nadolu, Melinda Dinca, Dan Luches, Larysa Kuzmenko, Dmitri Medwedjew, Petr Rumpel, Iva Tichá, Ondřej Slach, Iwona Kantor-Pietraga, Robert Krzysztofik and Jerzy Runge for contributing to this research brief.

## Layout

Annegret Haase, Anna Kunath, Katrin Barth

## Print

Edition winterwork  
[www.edition-winterwork.de/](http://www.edition-winterwork.de/)

## Photography Credits

© Annegret Haase, Felix Gruber, Dieter Rink, Alberto Violante

## Recommended citation format

Dieter Rink, Annegret Haase, Matthias Bernt and Katrin Großmann (2010):

Addressing Urban Shrinkage Across Europe – Challenges and Prospects

Shrink Smart Research Brief No. 1, November 2010

On behalf of the Shrink Smart consortium.

Helmholtz Centre for Environmental Research – UFZ, Leipzig

(available online at <https://shrinksmart.ufz.de/data/D9%20Research%20Brief%2020214223.pdf>)

## Content

1. Why look at urban shrinkage? 2
2. What is Shrink Smart? 3
3. Why do cities shrink? 8
4. What is the problem with shrinkage? 13
5. How do cities cope with shrinkage? 18
6. What happens next? 23

# 1. Why look at urban shrinkage?

Urban shrinkage has become a **new normality** for a growing number of European cities and urban regions. About 40 per cent of large cities in Europe have lost population during the previous few decades, many of them in the postsocialist countries.

**Shrinking cities struggle** with underused infrastructure, housing vacancies, a decline in labour force, investment and jobs. Furthermore, there is frequently a decline in financial resources that are needed to cope with these consequences. Shrinkage is a **result of different but strongly interconnected processes** such as uneven economic development, demographic change or suburbanisation.

*Globalisation, European enlargement and the postsocialist transition have increased the uneven development of European cities. Although urban shrinkage is a major challenge for the future of urban Europe, it is still under researched, with comparative approaches especially missing.*

In **Shrink Smart**, we aim at a better understanding of local specifics, identifying challenges, and providing **solutions for governance responses to shrinkage**.

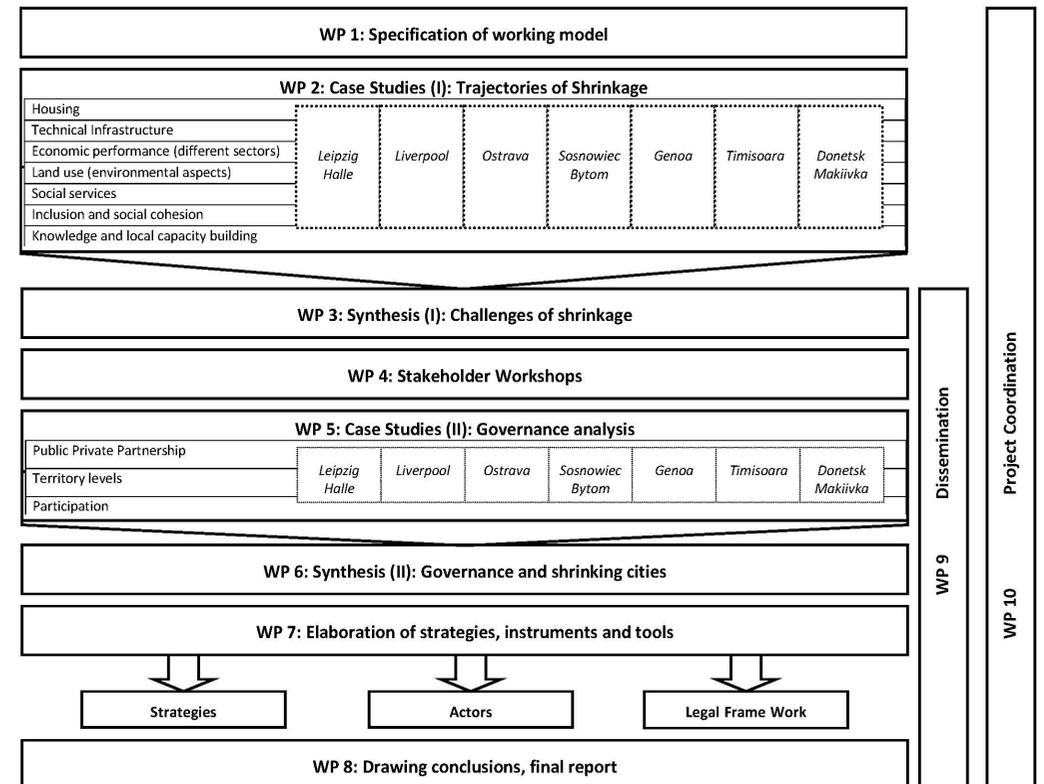
# 2. Who and what is SHRINK SMART?

It is the aim of Shrink Smart to **study the role of policies and governance systems in different types of shrinking urban regions**.

Shrink Smart is based on comparative case studies from seven urban regions throughout Europe with a focus on disadvantaged urban regions in Eastern and Southern Europe.

Case studies provide a background for exploring different trajectories of shrinkage, understanding the main challenges for urban planning and elaborating alternatives for urban governance.

## Shrink Smart's project structure



Source: DOW (2009)



The Shrink Smart team

Shrink Smart's consortium is made up of **8 partners** from **7 European countries**. These are:

- Helmholtz Centre for Environmental Research, Leipzig (Germany)
- John-Moores-University Liverpool (UK)
- Ostrava University (Czech Republic)
- Silesian University Katowice (Poland)
- University of Nottingham, School of Geography (UK)
- University La Sapienza, Roma (Italy)
- West University of Timișoara (Romania)
- Industrial Economics Institute Donetsk, NASU (Ukraine)

Members of the **advisory board** supporting the consortium's work are Anne Power (London), Robert Beaugard (New York), Ivan Turok (Glasgow), Ivan Tosics (Budapest), Uwe Altröck (Kassel), Emmanuele Cunningham-Sabot (Rennes), Sylvie Fol (Paris), Heike Liebmann (Erkner), and Mauro Palumbo (Genoa)

The project is financed by the 7 FP, Theme 8 (Socio-economic Sciences and Humanities).



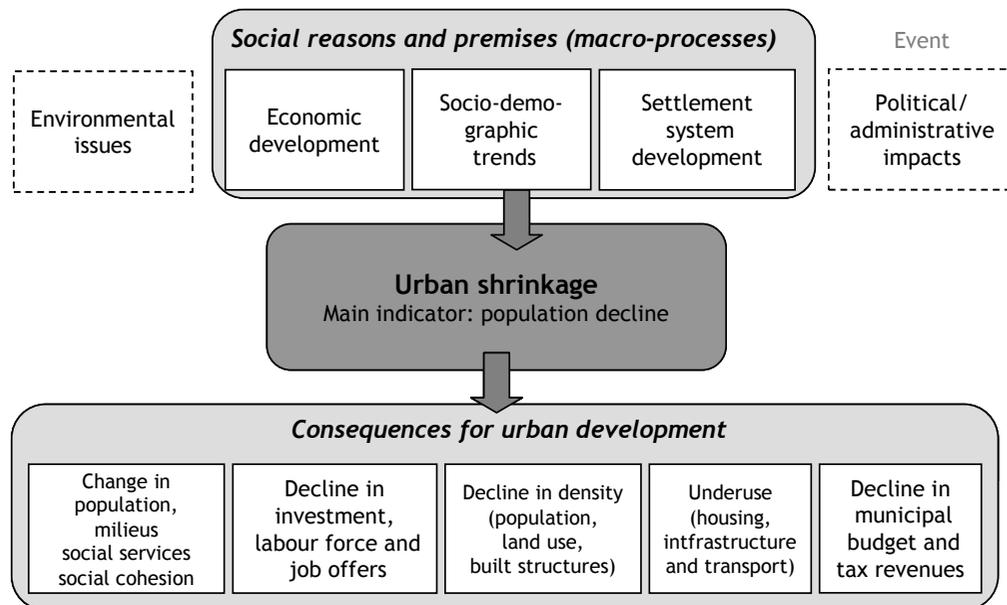
The Shrink Smart case studies

Shrink Smart's research is based upon 7 case studies across Europe within which we carry out in-depth and comparative analyses.

These cases are:

- Leipzig / Halle (Germany)
- Liverpool (UK)
- Ostrava (Czech Republic)
- Sosnowiec / Bytom (Poland)
- Genoa (Italy)
- Timișoara (Romania)
- Donetsk / Makiivka (Ukraine)

## The Shrink Smart conceptual model of urban shrinkage



Source: Großmann, Haase, Rink and Bernt (2009)

**Urban shrinkage** is a pathway of urban development characterized by declining numbers of inhabitants. Population decline is the main indicator for urban shrinkage.

As the model on page 8 shows, declining population numbers are a local consequence of macro-processes in the economy, the social and political systems or even of natural disasters. Population decline is also the starting point for many problems shrinking cities are faced with, such as ageing, a 'brain drain', underused infrastructures or housing vacancies. Urban shrinkage causes problems that are different from the problems of those faced by growing cities.

*The nature, causes and consequences of population decline varies between cities. In this project we explore the diversity of these underlying dynamics, the different impacts on urban development, and the different governance arrangements to deal with these issues in each city.*

**Urban governance** is a term that draws attention to the interplay between a broad range of public and private actors in determining the common affairs of cities. We use a broad definition of governance as it has been applied by UN-Habitat: "Urban governance is the sum of the many ways individuals and institutions, public and private, plan and manage the common affairs of the city. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action can be taken. It includes formal institutions as well as informal arrangements and the social capital of citizens." (UN-HABITAT, [www.unhabitat.org](http://www.unhabitat.org))

### 3. Why do cities shrink?

Shrinkage is not a single process in itself but rather a combination of three macro-developments (economic changes, demographic developments, changing settlement structure) that impact upon cities in a very time- and place-specific manner, leading to population losses.

We have identified the following **three major causes** of urban shrinkage with respect to the case study cities concerned:

- ✓ economic decline and job-related out-migration,
- ✓ suburbanization and a change in the settlement system, and
- ✓ demographic change (natural decrease in population and ageing).

These determining causes are influenced in their dynamics by other intervening factors such as the political system and its impacts at different spatial levels (national, regional, urban, and local), the shape of regeneration policies, the physical structure of the city, ecological conditions or cultural factors.



Steelworks in Donetsk



Suburbanization in Timișoara

Given that **urban shrinkage** depends upon an interplay of local, national and global processes, it **differs in terms of scope and speed as well as in dynamics over time**. Population decline can happen gradually over a long period or cities can loose population rapidly. Additionally, all analyzed cities vary in how their case of shrinkage relates to their national context.

*Shrinking cities can follow different trajectories. Whether shrinkage causes major problems for a city depends upon the scope and speed of population loss.*

Among the Shrink Smart case studies, most cities have been shrinking due to economic decline and/or the systemic change in eastern Europe after 1989. There are examples of long-term shrinking cities, as well as cases which have experienced rapid shrinkage. There are also cities within our sample that managed to stabilize their population during the 2000s. But they are still having to cope with the consequences of shrinkage and the possibility of an approaching fresh period of shrinkage.



Vacant lot after demolition in Leipzig-Grünau

## For example: Liverpool

*Liverpool represents one of the most prominent examples of long-term shrinkage in Europe.*

*The city started losing population already in the 1930s and it has only stabilized in recent years.*

During the 1970s and 1980s the conurbation experienced massive deindustrialisation and economic restructuring. When the remaining population dispersed away from the urban core of the conurbation through suburbanisation and sprawl towards the periphery of the conurbation, Liverpool saw a period of rapid population decline. Due to a combination of housing policies and an outward movement of jobs, population numbers in the core city declined even faster than in the periphery of the conurbation. The population of the core city, Liverpool, fell from 610,000 in 1971 to 435,000 in 2008.

The **main consequences** of population decline concern the **housing system**. From 1971 to 1991, housing shortage turned into supply surplus. The **unemployment rate** stood above 20% in the core city throughout the 1980s and the urban space saw a rising number of **brownfields and areas of abandoned land** across the city's territory.



## For example: Bytom and Halle

Bytom and Halle are examples of rapid short-term shrinkage. Although the two cities had already begun to lose population already in the 1980s, they witnessed the most rapid period of shrinkage only from the beginning of the **postsocialist transition** in 1989/90 onwards. Bytom's population decreased from 240,000 in 1987 to 183,000 in 2009 and Halle's from 330,000 in 1986 to 231,000 in 2008.

*Shrinkage occurred in Bytom and Halle at a time when other problems such as the postsocialist change were top on the agenda.*

Annual rates of population losses in both cities are **the highest in the Shrink Smart sample**. They are also predicted to see further shrinkage in the future.

Both cities were old industrial hubs in Poland and the former German Democratic Republic, and so population losses have been mainly a consequence of job losses due to industrial decline. Both cities have undergone periods of high unemployment and impoverishment of their inhabitants.

They are forced to make cuts in social and transport infrastructures. Furthermore, the **awareness of the challenges brought about by shrinkage** developed only when related problems became highly visible.

## For example: Genoa and Timișoara

Genoa and Timișoara are two examples of urban **shrinkage as a result of demographic ageing and suburbanization**. Between 1971 and 2001, Genoa lost 27 per cent of its population. Timișoara experienced an 14 per cent decline between 1990 and 2008.

In both cases, an extremely low birth rate led to death surpluses and, at the same time, to population decline and rapid ageing of the population.

Simultaneously, younger and well educated inhabitants and families left the inner city for the suburbs. This selective out-migration resulted in changes of the age and educational structure of the remaining population.



Ethnic retail in Genoa

Suburbanization near Timișoara

*Both Genoa and Timișoara have to maintain and finance, for example, the transport infrastructure that is used but not paid for by suburbanites.*

In the case of Genoa, international immigration has become a counter process to out-migration contributing to rejuvenation and filling niches in the labour market.

## 4. What is the problem with shrinkage?

The main problem with shrinkage is that a reduced population size leads to a declining demand for houses, land, water-related networks, public transport, schools and other infrastructure budgets. Cities have to deal with cuts in housing and infrastructure.

At the same time as the social and demographic composition of the urban population changes leading to ageing, 'brain drain', higher rates of immigrants etc., new needs are arising. Often, various parts of a city are affected in a distinct way.

Thus, cities that lose population often need a considerable restructuring of all sorts of urban amenities.

Perforation in Leipzig



## For example: Housing vacancies

In many cities, **housing is the area that is most visibly affected by population losses**. Falling rents and dwelling prices, cuts in real estate investments as well as an already existing oversupply lead to vacancies, a decline of expenditure on maintenance, a devaluation and dilapidation of existing sites and, in some cases, even to an intensified perforation of the urban fabric.

In cities like Liverpool, Halle and Leipzig, state-sponsored demolition of vacant housing stock has taken place.



Demolition in Leipzig



Boarded-up housing waiting for demolition in Liverpool

## For example: Brownfields

Urban population losses often go hand in hand with a crisis in, or even a collapse, of established industries. This is reflected in the expansion of brownfields, i.e. areas and sites that were traditionally used for industrial production, housing and other functions, but subsequently became vacant.

Often, these brownfields contribute to a physical appearance of decay and reinforce a negative image of the affected areas. In some cases, contamination is an issue.



Degraded brownfield in Makiivka

Reused brownfield in Sosnowiec

## For example: Water networks

When population drops, the **demand for water declines**.  
So does the **generation of domestic sewage**.

This leads, on the one hand to a **chance for more sustainable consumption patterns**. On the other hand, it causes **problems for the existing infrastructure**. Underutilization thus leads to longer detention times of piped water, microbial recontamination, an increased corrosion of tube materials, and other technical problems.

Yet, at the same time, the **impact** of reduced consumption on a particular water network is **very much dependent upon its specific construction**, pipe diameter, downward gradients and other technical details. Subsequently, the need to rebuild existing structures always appears in very specific, and often cost-intensive, ways.



## For example: Cuts in social infrastructures

Shrinkage does not only lead to a reduction in the population size, but in most cases it is accompanied by a selective out-migration of younger households and a change in age structures.

For cities, this leads to **two major challenges**:

- ✓ a decrease in the number of children causes a pressure to **downsize, close and adjust existing schools, nurseries, kindergartens and other child-related infrastructure, and, at the same time,**
- ✓ ageing leads to a growing demand for **medical and personal care services for the elderly.**



## 5. How do cities cope with shrinkage?

In a world, where the terms development and growth are used interchangeably, proactively to make shrinkage a subject of discussion is the first step of coping with the problem and its effects.

To provide systematic analysis, forecasts and scenarios are the next step in order to arrive at realistic appraisals.

Given this context, strategies can either accept a future population decline and adapt urban structures to catering for fewer people and demands, or they can focus on the reversal of decline and attempt to foster growth instead.

*Often, cities aim at managing the effects of decline, such as vacancies and brown fields, while, at the same time, looking for ways to return to growth or at least stability.*

Liverpool-Everton regeneration site



**Leipzig** was faced with a housing shortage for more than four decades. At the end of the 1990s, vacancies appeared all over the city due to out migration, demographic change and an ongoing building and rehabilitation boom, supported by tax-incentives in the aftermath of the German reunification.

In order to stabilize the housing market, Leipzig made use of regional restructuring programs fostering the demolition of flats. Since 1997, about 12,000 flats have been demolished. An „urban development plan (STEP)” brought together the strategic planning of different spheres like housing, social infrastructure and urban planning. It aimed at steering demolition activities into strategic areas and preventing spontaneous fragmentation.



Housing vacancies in Leipzig

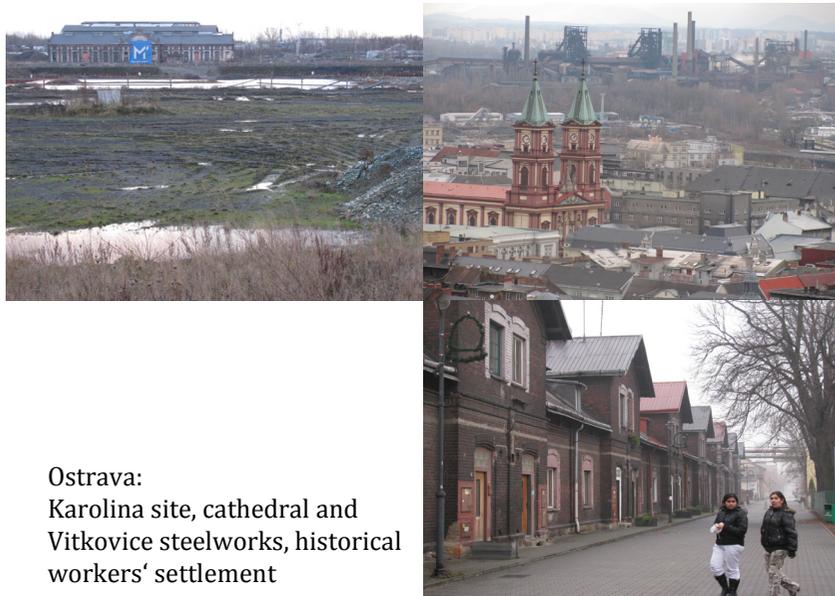
Incentives have been installed to maintain vacant housing stock and reuse it for other purposes. Interim use agreements between the municipality, owners and users brought vacant lots back into use and counteracted further dilapidation and degradation.

*The case of Leipzig shows that a city has to cope with the consequences of shrinkage even after it has stabilized or returned to growth.*

**Ostrava** was the centre of heavy industries in the former Czechoslovakia. While some steel mills are still in operation, others have shut their doors in the early 1990s, leaving behind only the skeletons of industrial production, large areas of vacant lands, mountains of waste and contaminated sites.

Ostrava has different strategies to redevelop brownfields:

- ✓ the conversion of former industrial landscapes into cultural heritage attractions,
- ✓ decontamination of land and reuse for housing purposes, or
- ✓ the use of land for strategic inner city development through 'lighthouse' projects like the Karolina Redevelopment. Here, a combination of shopping malls, leisure facilities and high-level housing replaced a former mine adjacent to the city centre.



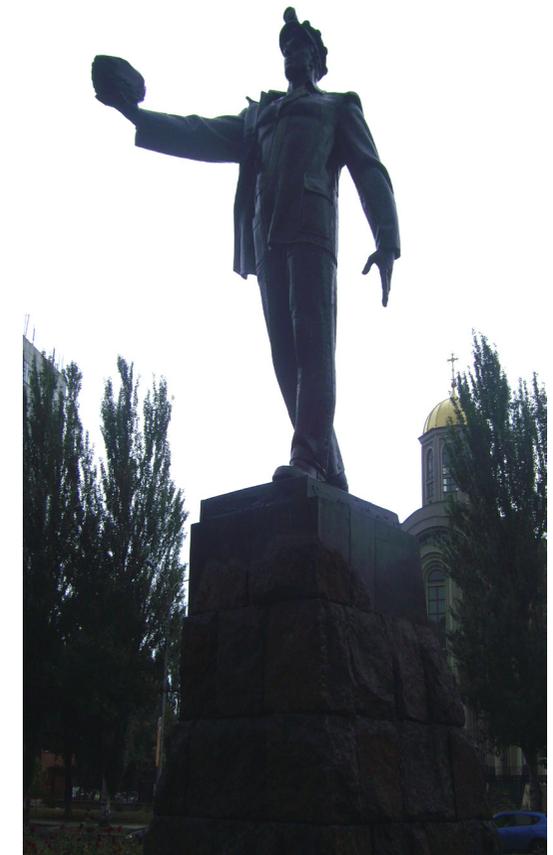
Ostrava:  
Karolina site, cathedral and  
Vitkovice steelworks, historical  
workers' settlement

Urban shrinkage has been an issue for the cities of **Donetsk and Makiivka** in eastern Ukraine since the late 1980s and reached a very high rate in the 1990s.

*One of the main problems of the industrial hub in eastern Ukraine within which the cities of Donetsk and Makiivka form a part of is the imbalance in the national fiscal redistribution system.*

The region represents a major donor in this system and it cannot benefit accordingly from the economic added value it creates. This is despite its population losses and despite the collapse of many industrial enterprises in the region.

The loss of money through the national fiscal redistribution system hinders the cities' efforts to undertake major, urgent investments in public infrastructures and the municipal housing stock. It also leads to a greater dependence upon the interests and benevolence of a few regional big businesses.



Miner's monument  
in Donetsk

**Liverpool** was urged to react to massive population loss at an early stage – with decline beginning during the 1930s. The development of comprehensive policies for urban regeneration (particularly since the 1970s) coupled with powerful restraints on peripheral growth slowed the rate of population loss. A series of regeneration policies and agencies including the Merseyside Development Corporation, City Challenge, the Single Regeneration Budget Challenge Fund, English Partnerships, EU Objective One funding from 1994-2007, and others including Liverpool Vision, have all put resources into the redevelopment of the existing city. Since the 1990s the emerging trend towards economic growth based upon a post-industrial service economy has led to a revival of the core city to the point where it is now on the cusp of reurbanization.

*The study of Liverpool shows the dynamics of urban change and shrinkage but most importantly it demonstrates how with a combination of comprehensive urban regeneration policies complementing a change in economic structure, a city can move from a period of shrinkage towards stabilization.*



Liverpool: Princes dock



Liverpool One Shopping Centre

## 6. What happens next?

*After having identified the paths of urban shrinkage in the single case study cities or urban regions, Shrink Smart analyzes the existing modes of local governance.*

*This will show which paths of urban shrinkage bring about which modes of governance.*

The project's interest lies in studying the relationship between shrinkage and governance in two directions: on the one hand, it asks if certain trajectories of shrinkage privilege certain modes of urban governance. On the other, it analyzes the implications of different governance arrangements for urban strategies that are dealing with the shrinkage of cities.



Studying governance arrangements with respect to shrinkage: outcomes of a stakeholder workshop in Leipzig in September 2010

Based upon the results of the governance analysis, Shrink Smart will organize an international stakeholder workshop in 2011 to discuss and improve the findings through the view of practitioners.

For the final phase of the project, a policy informing workshop with representatives from the EU and the EUROCITIES initiative is planned in Brussels in Spring 2012.



Stakeholder workshop in Leipzig, September 2010.

As a result of the project, different trajectories of shrinkage processes within Europe will be defined and a set of policy recommendations for different typologies of shrinking cities will be developed. Furthermore, with the aim of providing practical knowledge for decision-makers, Shrink Smart will engage in extensive dissemination activities.

Shrink Smart –  
The Governance of Shrinkage  
within a European Context