

Contents

1 Policy Developments and Legal Aspects

- 1.1 The Stuttgart Soil Protection Concept – Methods, Goals, Strategies 11
Gerd Wolff
- 1.3 Towards Integrated Regeneration Policies and Brownfields Advocacy 17
in the Czech Republic
Jirina Jackson, Gabrielle Hermann
- 1.3 Liability and the Long Term: Effects on Sustainable Urban Regenera- 29
tion in the UK and USA
Kris Wernstedt, Peter Meyer, Tim Dixon, Kristen Yount, Poulomee Basu
- 1.4 Brownfield-Recycling in Switzerland: eliminating contaminated sites 41
and re-using derelict land at the same time
Rolf Kettler, Kaarina Schenk
- 1.5 Fiscal Impact Analysis - Results 47
Dirk Löhner
- 1.6 Strategies for Mobilizing Urban Land: Aktionsbündnis Flächen gewin- 55
nen in Baden-Württemberg
Stefan Gloger, Bernd Fahle
- 1.7 Key findings from CABERNET – Europe’s sustainable brownfield re- 59
generation network
Paul Nathanail, Kate Millar, Detlef Grimski, Uwe Ferber

2 Technologies, Tools and Case Studies

- 2.1 The Use of Innovative Remediation Technologies in Brownfield Rede- 67
velopment Projects
Volker Schrenk, Uwe Hiester, Hermann J. Kirchholtes, Manfred Bärlein
- 2.2 ThermoAir – an innovative remediation technology to reduce time + 79
costs
Gerd M. Wiedenbeck
- 2.3 VEGAS – Research and Development for the Protection of Soil and 83
Groundwater
Jürgen Braun
- 2.4 VEGAS – Technologies for Challenging Soil and Groundwater Con- 89
tamination Problems
Hans-Peter Koschitzky
- 2.5 Site Investigation Technologies and Monitoring: R&D Hand in Hand 99
with Industry
Norbert Klaas, Katrin Batereau
- 2.6 EURODEMO – Demonstrating Efficient Soil and Groundwater Reme- 105
diation
Yvonne Spira, John Henstock, Volker Birke, Dietmar Müller

2.7	CL:AIRE – Building Confidence in Remediation Jane Forshaw	111
2.8	Use of Integrated Planning Tools for Revitalization: SMARTe (U.S.) and START-UP Plan (Germany) Ann Vega, Juergen Braun, Dale Medearis	117
2.9	PROMOTE- Verifying the Performance of Environmental technologies Thomas Track	127
2.10	Brownfield sites: Instrument for the Determination of Site Suitability and the Analysis of their Potential Tobias Großmann, Volker Schrenk, Alfred Ruther- Mehlis	131
2.11	Former freight depot Bad Cannstatt - Strategies for clearance of explosive ordnance Hartmut Mezger, Klaus Zimmerer, Eberhard Konig, Günter Gödecke	141
2.12	Transformation of the former French military site “Buckenberg-Kaserne” into a new Pforzheim city quarter Rüdiger Philipps, Oliver Lambrecht	149
2.13	Airfield Böblingen/ Sindelfingen – Transformation of a former military site into a new city quarter Karl Noé	155
2.14	The Value of Open Space: Exploring Ways to Evaluate the Benefits of Well Designed and Maintained Public Open Space Sandy Tomkins, Kate Millar, Paul Nathanail	159
3	Sustainability Context and Citizen Involvement	
3.1	Sustainable Regional Land Resource Management Robert Holländer, Enrico Thomas, Anja Brandl, Oliver Rottmann, Christian Winkler, Sabine Lautenschläger	171
3.2	A Framework for assessing the Sustainability of Brownfield Development Katie Williams, Carol Dair	177
3.3	Smart Economic Growth (SEG) – smart ways of spatial and economic development in metropolitan areas Dagmar Cohrs, Sandra Pennekamp	193
3.4	The Integration of the Brownfield Remediation and Redevelopment Processes: The Relevance of the Information Tiziana Cianflone, Giuseppe Di Marco	201
3.5	Participatory Planning and Attractivity in Tension: The case of Brussels Florence Delmotte, Michel Hubert	211
3.6	Creating Young People Friendly Neighbourhoods Peter Morgan	219
3.7	Effective Community Involvement Tools Sabine Martin	227

3.8	Examination and analysis of economic and social effects of inner-city brownfield redevelopment Frank Burchardi, Birgit Memminger, Susann Schuster, Kilian Bizer, Sven Heilmann, Georg Cichorowski	231
3.9	Public participation in the remediation of the warfare related site Stadtallendorf – conception, principles, experience Christian Weingran	235
3.10	Connecting with local people: a Liverpool perspective Jenny Douglas	247
3.11	Sustainability assessment of brownfield regeneration – a review of different approaches Martin Franz, Aleksandra Koj, Paul Nathanail	255
4 Financing, Funding and Real Estate Market		
4.1	An early assessment of JESSICA: Love at first sight? Nico Groenendijk	271
4.2	Developing a Model of Financing for Brownfield Redevelopment: How to Integrate Contamination Risks and Legal & Political Risks? Lars Holstenkamp	279
4.3	A Revolving Fund for Brownfield Redevelopment Reinier M. Besemer	289
4.4	Brownfields redevelopment by combining bitter and sweet Matthijs H. Nijboer, Reinier M. Besemer, Martine Dielhof, Diederik van Hoogstraten, Armand Orbons, Hetty X. van Rhijn-Stumphius, Wim Roozenboom	299
4.5	Urban Planning versus Urban Management Jürgen Brüggemann	305
4.6	Environmental Exposure, Liability and Risk Transfer in Brownfield Transactions Simon Johnson, Alan Shaw	311
5 Environmental Aspects		
5.1	Innovative revitalisation concept for a former storage area of Petrol Products in Bucharest, with pilot chapter in East-Europe Thomas Meyer-Murlowsky, Gerhard M. Buchholz	319
5.2	Urban soil ecology, scientific perspectives II: Urban wide pollution of soils, an ongoing process and a challenge to sustainable development Stefan Norra	327
5.3	Integrated investigation and management of groundwater contamination - project MAGIC Grzegorz Gzyl, Thomas Ertel	339
5.4	Urban Soil Ecology - Involvement of Diverse Land Use Types Wolfgang Burghardt	345

5.5	Recycling requirements and conditions of degraded grounds in Poland – example of project conducted in Olsztyn (Northern Poland) Barbara Olszewska, Wojciech Irminski	359
5.6	Non-viable brownfield sites and the potentials of urban-industrial woodlands in the Ruhr Martin Franz, Orhan Güleş, Gisela Prey	363
5.7	The “Green Brownfield Approach” – An Example for an interim use René Otparlik, Herbert Klapperich, Erich Fritz, Alexander Eisenblätter, Michael Hanke	375
5.8	(Costs and) Benefits of High Quality Landscape on Commercial Areas on Brownfield Land in the Ruhr area Bernd Mielke	381
6 Integrated Approaches for Land Management		
6.1	Regional Settlement Management as Chance for Sustainable Development Dirk Vallée	391
6.2	Approach to brownfield revitalization for small cities in the Czech Republic Ivan Vaniček, Daniel Jirásko	401
6.3	Online Database on Land Management – an Effective Tool to Support Practitioner in Land Management and Brownfield Recycling Jantje Samtleben, Volker Schrenk	407
6.4	“Rebuilding Suburban Detroit Redevelopment Ready Communities” (RRC): A Model Program Robin Boyle, Melanie Piana	413
6.5	Strategies and instruments to limit excessive land use in Germany - a proposal to the German Council for Sustainable Development Barbara Malburg-Graf, Angelika Jany, Metke Lilienthal, Frank Ulmer	423
6.6	Ineffective and Uncoordinated Urban Land Use management in Developing World: the case of Akure, Nigeria Afolabi Aribigbola	433
6.7	Sustaining Green Space Investment Peter Morgan	445
6.8	Cases of revitalization of urban areas as examples of integrated urban land management Justyna Gorgon, Anna Starzewska-Sikorska	455
7 International Brownfield activities		
7.1	Urban Operation “DIAGONAL SUL” - a São Paulo contemporaneous City Project Manuelito Pereira Magalhães Junior, Pedro Manuel Rivaben de Sales	461
7.2	Contaminated site management and brownfield redevelopment in Latin America Andreas Marker, Andreas Nieters, Detlev Ullrich	467

7.3	Remediation and Revitalization of the former Workshops of the National Railroads of Mexico	481
	Ruiz Saucedo Ulises, Pérez Gallegos Juan Gabriel, León Barrera José Guadalupe, Rodríguez Reza Luis Homero, Javier Llamas Viramontes	
7.4	“TAMANDUATEHY AXIS” PROJECT – Brownfield Revitalization of Contaminated Areas in Santo André - Brazil	483
	Sebastião Ney Vaz Junior	
7.5	CAIXA ECONÔMICA FEDERAL – the Brazilian Federal Loan and Saving Bank Promoting Sustainable Urban Development	487
	André Luiz de Souza Castro, Jean Rodrigues Benevides	
7.6	Experiences of cooperation between European and Latin-American cities in the field of Brownfield revitalisation	491
	Hermann J. Kirchholtes, Nicolas Leyva Douat	
7.7	The U.S.-German Bilateral Working Group: Collaborative Engineering and Scientific Research for a Sustainable Future. Results from Phase 3 (2000-2005) and Beginning Phase 4 (2006-2010).	495
	Maike Hauschild, Dale Medearis, Ann Vega	
7.8	Revitalisation of Brownfields in St. Petersburg – development of a methodology under the aspect of remediation of contaminated sites by the example of the Konjushennaja Square	503
	Daniel Luchterhandt, Thomas Haupt, Irina Tschistowskaja	
7.9	An estimating method for potentially contaminated Brownfield sites: Lessons from Japan	509
	Tetsuo Yasutaka, Hiroyuki Matsuda, Mitsutaku Makino	
7.10	Reactivation of Derelict Industrial Sites in Romania a Project of GTZ for Economic and Employment Promotion	517
	Gabi Schock, Doris Hirschberger	
7.11	Can We Really Compare Brownfield Regulation and Redevelopment in the United States and European Union?	523
	Philip Catney, Kristen Yount, John Henneberry, Peter Meyer	
7.12	Brownfield remediation and redevelopment: valuing the costs and the benefits	533
	Margherita Turvani, Stefania Toni	
7.13	Brownfield Indicators in the Czech Republic	539
	Jan Votoček	
7.14	Impact of Government Initiated Urban Land Management among Informal Labor Forces: A Case Analysis from South Asian Mega city	557
	Saleh Ahmed	
7.15	Brownfiled Sites in the City of Brno	553
	Marian Böhm	

8 The REFINA Programme - Research Funding as a Tool to enhance Sustainable Land Management		
8.1	Research for the Reduction of Land Consumption and for Sustainable Land Management (REFINA) – Status and Outlook Maike Hauschild, Uwe Wittmann, Gina Siegel	563
8.2	Management Development and Vegetation (MDV) Pilot Project for the Regional Park Maintenance Scheme Emscher Landscape Park 2010 Jörg Dettmar, Peter Rohler	569
8.3	Geovirtual Urban Environments as Media for the Communication of Information related to Managing Urban Land Lutz Ross, Birgit Kleinschmit, Jürgen Döllner, Anselm Kegel	577
8.4	Development of a Participative Evaluation and Decision-Making Procedure for Sustainable Land Use Management in Rural Areas Birgit Böhm, Olaf Krawczyk, Tania Meyer-Glubrecht et al.	583
8.5	Land Use Management by Innovative Regional Planning – FLAIR project Dirk Engelke, Wolfgang Jung, Thomas Kiwitt, Torsten Beck, Walter Schönwandt	591
8.6	SMC DEVELOP SMS – Small and medium-sized Companies develop small and medium-sized sites – A REFINA-Project in the city of Stuttgart Volker Schrenk, Jantje Samtleben, Jürgen Braun	599
8.7	Sustainable land management in the city of Hannover - A private sector fund model to mobilise brownfields and reserve building land Silke Kleinhüchelkotten	609
8.8	Komreg - Local-Authority Land Management in a Regional Perspective – the Region of Freiburg Matthias Buchert	613
8.9	E-learning for the Dissemination of Research Results Martin Franz, Nicole Okuniek, Bernhard Butzin, Bettina Schug, Jürgen Braun, Volker Schrenk, Jantje Samtleben	621
9 Best Practice in Interreg		
9.1	The REVIT project	
9.1.1	Objectives for Sustainable Brownfield Revitalization and the Challenges for Community Participation Martin Franz, Kerstin Lange	629
9.1.2	The REVIT-Indicator-Concept of a planning workshop in Stuttgart Nils Krieger	635
9.1.3	A Sustainable Evaluation Process for Brownfield Sites Andrew Gray	639

9.2 The Luda project	
9.2.1 Monitoring Quality of Life in Urban Regeneration Christiane Westphal	647
9.2.2 Selection of Assessment Methods for Evaluating the Sustainable Regeneration of Large Urban Distressed Areas: a Decision Support System Steve Curwell, Jemma Turner, Aleksandra Kazmierczak	657
9.2.3 LUDA Project – A Governance Concept and Management Tool for Urban Redevelopment in Dresden’s Weißeritz Area Carlos Smaniotto Costa, Markus Egermann, Andreas Wurff	671
Author Index / Contact Address	679

Imprint

Published by: SAXONIA Standortentwicklungs- und -verwaltungsgesellschaft mbH
D-09599 Freiberg, Alfred-Lange-Straße 15
Tel.: +49 3731 395010 / Fax: +49 3731 395042
e-mail: saxonia@saxonia-freiberg.de
URL: <http://www.saxonia-freiberg.eu>

and: Land Quality Press, Nottingham, NG9 2ND, UK
Tel.: +44 115 951 8030
URL: <http://www.lqm.co.uk>
e-mail: administrator@lqm.co.uk

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise, without the prior written permission of the publisher.

1. Edition 2007

Editorial Team: Rene Otparlik, Detlef Grimski, Maike Hauschild, Thomas Ertel,
Uwe Ferber, Kate Millar, Paul Nathanail

Layout: R. Otparlik

Cover Page: A. Eisenblätter

Cover Photos: Neckarpark Bad Cannstatt, Stuttgart
Südraum Leipzig, Altes Zechenhaus
L' Ile de Nantes, Nantes, France

Printed by: Wagner Digitaldruck und Medien GmbH, Siebenlehn, Germany

Printed in Germany

ISBN 978-3-934409-33-4

ISBN 0-9547474-4-5

To order the book send an e-mail to

sabine.mahrle@uba.de