

Other goods and services	€ 13,250.00	1,600 EUR of participation fee of the conference in the dissemination phase. 1,000 EUR of book and periodical purchasing and renting for research; 1,000 EUR of consumables and supplies for research 2,800 EUR for English proofreading, 3,350 EUR costs (room rent, catering) of 1 project meeting for project partners 3,500 EUR for organizing the PULL
Total	€ 48,500.00	

6: IGIPZ	Cost (€)	Justification
Travel	€ 29,800.00	Travel (including accommodation and allowance) for 7 project meetings with 2 persons (kick-off: 4 pers.; closing 4 pers.); participation in PULLs in other countries; participation in conferences with 2 people in order to disseminate the project results as WP8 leader.
Equipment	€6,500.00	Smart boards, laptops/tablets and related software licenses specifically configured and used as interactive devices for the PULLs..
Other goods and services	€ 11,000.00	Organizing project meetings, meetings with local stakeholders translations costs attendance in conferences as well as open source publishing
Total	€ 47,300.00	

10: Biokom	Cost (€)	Justification
Travel	€5,500,00	Travel (including accommodation and allowance) for project meetings for 1 person 2 times per year and attendance at selected PULLs.
Equipment	€ 0	
Other goods and services	€ 0	
Total	€ 5,500.00	

15: PHH	Cost (€)	Justification
Travel	€ 6,000.00	Travel (including accommodation and allowance) for project meetings for 1 person 2 times per year and attendance at selected PULLs.
Equipment	€ 0	
Other goods and services	€ 0	
Total	€ 6,000.00	

16: Bauer	Cost (€)	Justification
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Travel	€ 12.000,00	Travel (including accommodation and allowance) for project meetings for 2 persons 2 times per year and attendance at selected PULLs.
Equipment	€ 10.000,00	Estimated compensation for pilot treatments at Laboratories and Soil Treatment Centres – no new infrastructure is purchased.
Other goods and services	€ 15.000,00	4000 €: waste analysis 7000 €: waste consulting 2000 €: collection and validation of data 2000 €: additional storage capacity
Total	€ 37.000,00	

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4 Members of the consortium

4.1 Participants (applicants)

Participant 1 - Delft University of Technology (TUDelft) – The Netherlands.



Delft University of Technology, (Dutch: *Technische Universiteit Delft* or *TUD*) is the largest and oldest Dutch public technical university, located in Delft, Netherlands. It established in 1636, has a long history with a rich tradition, and has developed into a large and multifaceted international knowledge centre of academic and scientific excellence. The University aims to sustain its position as a research institution of the highest international quality, and to provide clear research focus areas with a particularly interdisciplinary approach. The University collaborates with other international educational establishments and research institutes and has partnerships with governments, branch organizations,

numerous consultancies, the industry, and companies from the small and medium business sectors. TU Delft ranks 42nd on the 2014 The World Reputation Rankings list. With eight faculties and numerous research institutes it hosts over 19,000 students, more than 3,300 scientists and more than 2,200 people in the support and management staff. According to the University Ranking by Academic Performance (URAP) Research Laboratory (2014) TU Delft is the most influential scientific Institution in the field of the Built Environment and Design globally.

Within REPAiR two TU Delft institutions are involved: The **Faculty of Architecture and the Built Environment** as well as the **Valorisation Center** with the responsibility of project management. Additionally the AMS will be involved in dissemination activities.

The **Faculty of Architecture and the Built Environment (AR)** at TU Delft, established in 1904, has a leading role in the area of education and research for the development of a more sustainable built environment. As one of the largest architecture faculties in Europe and leading design academy, the Faculty of Architecture and the Built Environment plays a key role in design-oriented research. On the latest QS World University Rankings by Subject 2015 (Architecture / Built Environment) TUD's faculty of Architecture ranks third. Three different departments of the faculty collaborate within REPAiR, The Department of Urbanism, the Department of Architectural Engineering & Technology and the Department of Management in the Built Environment (formerly Real Estate & Housing).

The **Valorisation Centre (VC)** at TU Delft supports, stimulates and facilitates scientists and supporting staff of the TU Delft in transforming results of research and technology development to practical and commercially viable applications. Within the VC European project management team, professional project managers provide non-scientific project management for international collaborative projects, including FP7 and H2020 projects. They support the scientific coordinators in a proactive, efficient and quality way, on financial, legal, administrative and organizational matters.

The **AMS Institute** is the joint initiative by TU Delft (TUD), Massachusetts Institute of Technology (MIT) and Wageningen University (WUR) in Amsterdam, the Netherlands, together with government, business partners and societal organizations. TU Delft has 50% say in the institute. AMS aims to become an internationally leading research institute where talent is educated and engineers, designers, digital engineers and natural/social scientist jointly develop and valorise interdisciplinary metropolitan solutions. In this role it endorses the REPAiR research.

Key personnel being involved in REPAiR

Arjan van Timmeren (male) TUD Faculty of Architecture, Dep. of Urbanism, Chair Environmental Technology & Design (ETD). AT is supervising 12 PhD theses in the field of ETD. Has published 5 PRP, 110 articles, 5 books, 3 book chapters and realized many projects in practice. Reviewer for two international journals and several international conferences. AT is member of several (inter)national expert teams and committees (among others: Int. expert group on decentralized water systems) and responsible for several (inter)national research projects (NWO, EU FP7), conferences and academic and post-academic education programs. AT is involved in many academic projects with building industry, governmental and non-governmental organizations. Prof. van Timmeren will act as project leader and principle investigator of REPAiR.

Alexander Wandl (male) holds a master degree in landscape architecture and planning (BOKU Vienna) as well as a Post master's degree in Urbanism (EMU at TUD/IUAV). He is a researcher at the Department of Urbanism, Chair of Environmental Technology and Design with a rich experience in national (BAR, NWO) and international research projects (FP7: RUFUS, NODES; ESPON: TANGO). His expertise lies in the integration of spatial decision and design support via geographic information systems. His research specifically focuses on the integration of urban form, its performance and related spatial policies through the concept of Urban metabolism with a spatial focus on Peri-urban areas. He teaches spatial decision support systems to urbanism as well as geomatics students. AW will contribute specifically to the development of the GDSE tool as well as to making the concept of UM applicable to support the development of a more circular economy.

Hilde Remøy (female) has a PhD in Real Estate Management and is assistant professor at TUD Faculty of Architecture, Dep. of Management in the Built Environment (MBE). She has published more than 50 articles, 3 books, and 8 book chapters, and is a reviewer for 2 international journals and several international conferences. HR is a member of the editorial board of 1 international journal, and a board member of the European Real Estate Society (ERES). HR has a rich experience in research for national and local governments and research for the building industry. She teaches redesign of products and processes to postgraduate students at TUD and other institutes, and supervises thesis students. Her research and teaching focuses on adaptive reuse of areas and buildings, with specific focus on managing and reducing material use, related to adaptability and value development. HR will contribute specifically to the management of the PULLs and development of design for a more circular economy, and to the development of decision support models.

Marcin Dąbrowski (male) is a research fellow at the Chair of Spatial Planning and Strategy in the Department of Urbanism, Faculty of Architecture and the Built Environment at TUD. He holds a master degree in political science (Sciences Po Paris), while his PhD thesis (University of the West of Scotland) focused on regional development and stakeholder participation. In the past, he worked as a researcher at the University of Strathclyde and at the University of Vienna and, conducting research on regional and urban development policies in Europe, with a focus on governance issues. His current research focuses on climate change adaptation in urban regions (Urban Studies Foundation Postdoctoral Fellowship) and on social acceptance of renewable energy infrastructure (international project funded by The French National Research Agency). Beyond academia, he has repeatedly worked for the OECD contributing to research on multi-level governance and territorial administration. Within REPAiR MD will focus on knowledge transfer as well as research on behavioural and governance aspects of urban metabolism.

Bob Geldermans (male) is a researcher at the TUD, Department of Architectural Engineering + Technology, Chair of Climate Design & Sustainability. He holds a master's degree in Industrial Ecology. In his PhD research BG studies the potentially synergetic relation between resource cycles and sustainability in neighborhoods. His expertise particularly centers on circular economy concepts in building technology, architectural design and urbanism. BG is coordinator of the transdisciplinary Cradle to Cradle Lab at the TUD, and member of the Dutch Circular Economy Science Lab. He has worked on various national and international projects relevant to the REPAiR theme, such as Rotterdam Energy Approach and Planning + (REAP+, 2012) and Better Airport Regions (BAR, NWO, 2011-2014). Within REPAiR BG's specific focus will be on analyzing spatial layout, consumption patterns, waste flows and interlinks between them.

Loriane Icbaci (female) a PhD candidate in Sustainable urban Metabolism at TUD Faculty of Architecture, Dep. of Urbanism and TUD Faculty of Industrial Design, Dep. of Design Engineering. Her research focus is on building material waste prevention, concentrated in analyses of material content and the evolving dynamics regarding new construction and demolition in the housing stock in the Netherlands and its effects on resource consumption and waste production. Waste prevention policy and material accounting in the Netherlands has also been parallel concern of her research at TUDelft. She has worked as consultant in Haiti for Cordaid and lead study groups at TUDelft investigating waste material flows as secondary resources during reconstruction phase in Haiti, Indonesia, Bangladesh and the Phillipines. Besides has been co-author of conference articles and books. She completed Master in Japan in urban design and worked for architecture architectural firms. LI current

focus is to further investigate the knowledge of symbiotic relationships in material management (from waste to resource) and material consumption attributed to spatial design.

List of relevant publications:

Geldermans, RJ , Wandl, A , Dobbelsesteen, AAJF van den (2014). Better airport regions: Schiphol., *S+RO (Stedenbouw en Ruimtelijke Ordening*, 95 (5), 26-29.

Wandl, A , Nadin, V , Zonneveld, WAM , Rooij, RM (2014). Beyond urban–rural classifications: Characterising and mapping territories-in-between across Europe., *Landscape and Urban Planning*, 130 (October), 50-63.

Timmeren, A van (2013). ReciproCities : a dynamic equilibrium. Delft: Delft University of Technology, Faculty of Architecture and the Built Environment.

Hara, Y, Hooimeijer, FL, Nijhuis, S, Ryu, M & Timmeren, A van (2014). The impact of historical geography and agricultural land development processes on wetland restoration methods used to create ecological networks : A comparison of Japan and the Netherlands. *Journal of Environmental Design and Planning* (Nakhara), 10, 127-138.

Timmeren, A van (2013). ReciproCities : a dynamic equilibrium. Delft: Delft University of Technology, *Faculty of Architecture and the Built Environment*.

Wilkinson, S.J., H. Remøy and C. Langston (2014) *Sustainable Building Adaptations*. Oxford, Wiley-Blackwell.

List of relevant previous projects:

SUME – Sustainable Urban Metabolism for Europe (2008-2011) Commissioning body: European Commission (EU 6th Framework)

ESPON TANGO - Territorial Approaches for New Governance (2011-2014) Commissioning body: ESPON.

BAR – Better Airport Regions (2012 -2014) Commissioning body: NWO (Urban Regions in the Delta).

REAP, REAP+ and REAP2 - The Rotterdam Energy Approach & Planning (REAP) (Tillie et al., 2009) method, developed for the Hart van Zuid area in Rotterdam, the Netherlands, is based on the premise that urban areas can be transformed into energy-neutrality by aligning local energy supply and demand patterns of different urban functions. The REAP2 (Dobbelsesteen et al., 2011) and REAP+ (Geldermans et al., 2012) projects explored linkages with social dynamics on the one hand and materials, water and waste-flows on the other. REAP was commissioned by Rotterdam Climate Initiative, REAP2 by Programmabureau Stadshavens Rotterdam and REAP+ by Municipality Rotterdam (funded by programme Pieken in the Delta of the Ministry of Economic Affairs)

Participant 2 - Ghent University (UGhent)

Ghent University is one of the leading institutions of higher education and research in the Low Countries. Today Ghent University attracts over 41,000 students, with a foreign student population of about 4,000. In 2012, the university invested about 250 million Euros in research projects on behalf of public and private partners, and appointed about 5,500 scientific staff members. It now occupies the 85th position in the Times Higher Education World University Ranking.

The **ENVOC research group** is a part of the Department of Sustainable Organic Chemistry and Technology (Faculty of Bioscience engineering of Ghent University), and focuses its research, educational and service activities on clean technology and environmental sustainability, i.e. searching for preventive actions within production processes. For this purpose, Jo Dewulf and his team make analyses at the process, plant and overall industrial system level, based on process engineering and life cycle assessment with a specific focus on resource efficiency assessments. Apart from methodological improvements such as in the FP7 project PROSUITE (Prospective Sustainability Assessment of Technologies), implementations and collaborations with industrial partners have been put in practice, e.g. with Johnson&Johnson - Janssen Pharmaceutica, Taminco, Organic Waste Systems, Marine Harvest, Tate&Lyle, Indaver, Umicore, BASF, Solvay, Galloo and others. Also activities in this field with essenscia (federation of the Belgian chemical Industry) have been set up, funded by the Flemish IWT and by EU-EFRD. ENVOC is also partner of the Flemish Policy Research Center on Sustainable Materials Management to give sustainability

support to policy and is partner in the SPIRE project MEASURE to develop a roadmap for sustainability assessment methods for the European Commission and industry. The work of the ENVOC department is visible on the international scene, especially for its work on sustainability analysis at process, plant and cradle-to-gate level lead by Prof. Jo Dewulf, who obtained the prize of the laureate of the Royal Academy of Sciences and Arts of Belgium in 2008.

Ghent University has participated in more than 200 research projects in the EU's Sixth Framework Programme (2002-2006) and in 259 projects in the Seventh Framework Programme, of which 25 ERC grants and 25 Marie Curie Fellowships. Ghent University coordinated 42 collaborative projects in FP7. The University provides excellent training opportunities to both young and experienced researchers, and awarded around 640 PhD degrees in 2012 of which over 20% go to international young researchers. The university is one of the fastest growing European universities in terms of research capacity and productivity (e.g., in 2010 Ghent University researchers published about 4025 research papers in ISI-listed journals, a 200% increase in ten years' time), and its commitment to European research excellence is reflected by the recent extension of the 'European Office' in its Research Office, i.e. the department overseeing, steering and administering research projects. Research group EnVOC has been active in several European projects such as FP7 PROSUITE, EFRD Eco2chem, SPIRE - Measure and EU INTERREG Enalgae.

Key personnel being involved in REPAiR

Prof. Jo Dewulf (male) is leading together with **Dr. Steven De Meester** (male), the EnVOC research group in which currently about 15 researchers are working on resource efficiency and life cycle assessment. They have been active in several projects aimed at basic research on, and at the implementation in policy and industry of resource efficiency and sustainable development. They have a large network of industrial actors and was already involved in several regional and European projects. They collaborated amongst others on the business plan for sustainable chemistry in Flanders (FISCH), they were case study leader in the FP7 PROSUITE project, responsible for the EFRD project Eco2chem and have a leading role in the implementation of resource efficiency indicators in the Flemish sustainable material management (Summa).

Infrastructure

All required infrastructure (such as conference venues, meeting rooms, offices, etc.) and software (such as Simapro and OpenLCA) for the Repair project are available at Ghent University

Relevant Publications

Dewulf, J, Van Langenhove, H (2006) Renewables-based technology sustainability assessment. Wiley Series in renewable resources, Chichester: John Wiley & Sons. 384p.

Dewulf, J, Bösch, ME, De Meester, B, Van Der Vorst, G, Van Langenhove, H, Hellweg, S, Huijbregts, MAJ (2007) Cumulative Exergy Extraction from the Natural Environment (CEENE): a comprehensive Life Cycle Impact Assessment method for resource accounting. Environmental Science and Technology 41, 8477-8483.

Dewulf, J., Van Langenhove, H., Muys, B., Bruers, S., Bakshi, B.R., Grubb, G.F., Paulus, D.M., Sciubba, E. (2008) Exergy: its potential and limitations in Environmental Science and Technology. Environmental Science and Technology 42, 2221-2232.

Alvarenga, RAF, Dewulf, J, De Meester, S, Wathelet, A, Villers, J, Thommeret, R, Hruska, Z (2013) Life cycle assessment of bioethanol-based PVC, part 1: attributional approach. Biofuels, Bioproducts and Biorefining 7, 386-395. + part 2: consequential approach. Biofuels, Bioproducts and Biorefining 7, 396-405

Swart, P, Dewulf, J (2013) Quantifying the impacts of primary metal resource use in life cycle assessment based on recent mining data. Resources, Conservation and Recycling 73, 180-187.

List of relevant previous projects:

Prosuite FP7: Prospective sustainability assessment and technologies, 4 years (2009-2013)

Summa: Sustainable Materials Management, 4 years (2012-2016), Flemish government

Measure: Metrics for Sustainability Assessment in European Process Industries, 2015-2016, Horizon 2020

Man-nature relationships in environmental sustainability assessment of forest-based production systems, 2011-2015, FWO-Flanders

Development of a tool for the environmental evaluation of the resource and energy consumption in the pharmaceutical industry at the process, plant and system level, 2006-2010, IWT-Flanders

Participant 3 - DiARC UNINA - University of Naples Federico II (UNINA)

The **University of Naples Federico II** was established in 1224 through an Imperial Charter of Frederick II Hohenstaufen, King of Sicily and Holy Roman Emperor. It was the first publicly funded university in Europe. Nowadays the university offers courses in essentially all academic disciplines, leading to one hundred fiftyfive graduate level degrees. Research facilities provide support to all these courses. Students are given the opportunity to pursue intellectual development as well as the acquisition of professional skills. Current student enrollment nears 86,000 and the academic personnel, at this time, is 2532.

The university is made up of three Schools - the Polytechnical and Basic Sciences School, the School of Medicine and the School of Human and Social Sciences - and 26 Departments which operate as semi-independent bodies for the teaching and research management being anyway part of a School. The University Federico II has a tradition of promoting and supporting student associations. There are more than fifty student associations currently active, which bring together students, of widely varied cultural and social background. These associations give rise to initiatives and activities of different nature, including sporting events, arts, social and political forums. The University Federico II is striving to become a world university and, to this end, places the highest priority in nurturing relationships, both within Italy and internationally. Our students are relentlessly encouraged in the pursuit of excellence, at home and abroad. Our staff and students take part in a variety of exchange programmes, within Europe, the Americas and Asia. Cognizant of the changing needs of education and research, the Federico II University of Naples is making every effort to raise its international standings and to become more attractive for international students. Its educational network is being geared towards the establishment of life-long, high level professional training programmes, while maintaining excellence in all fields of education and research.

Within REPAiR the Department of Architecture is involved with the main responsibilities to coordinate the Peri-Urban Labs across the 6 case studies and to develop the WP5.

The Department of Architecture - DiARC was born on a strong tradition of architectural and urban planning research and learning, preserving the integration among fields of knowledge: architecture, drawing, history, urban planning, engineering and technologies, mathematics, etc. DiARC has articulated post-graduate opportunities: PhD, Master Programmes, the Cultural Heritage and Landscape Specialization School, etc. It developed, by years, several international relationships, through a specific tool, the Internationalization Office, aimed to compete in the preparation of research proposals and courses, in order to improve trans-national partnerships. It created research agreements with other cultural institutions (e.g. bilateral agreements with other countries, the participation to European Framework Program FP7-ICT in partnership with international public bodies). The international perspective is a consolidated framework for the proposed research, guaranteeing cooperation among researchers during the program.

Currently an interesting research for the DiARC is the PRIN "RE-CYCLE Italy. New Life Cycles for Architecture and Infrastructure of City and Landscape". Its topic is perfectly in accordance with the objectives of the proposal: they both refer to Horizon 2020 aims, in conformity with the indications from the European Landscape Convention. The PRIN research unit of Naples focuses on the pair *drosscape/recycle*, thus constituting an important local reference for the proposed research program. In addition, the connection with the other Italian units of the PRIN, is a starting point to investigate the question of waste cycle and illegal practices, through common workshops and seminars. The Department has also created various third party agreements with public entities and SMEs. This guarantees to the proposed research unit, an easy access to local and specific testing grounds.

The Department has classrooms, workrooms and study halls, a computerized departmental centre (CeDIPAT), three libraries, in addition to administrative offices and assembly rooms.

Key personnel being involved in REPAiR

Michelangelo Russo (Team leader) (male) is full Professor of Urban Planning and is the head of the Laboratory of Urban Design at the Department of Architecture, University of Naples Federico II, where he is currently the Coordinator of the PhD

Program in Architecture. He was a member of several national and international research groups, currently in the unit of Naples Programma Prin 2012 "Re-cycle Italy. Nuovi cicli di vita per architetture e infrastrutture di città e paesaggio" and Programma Faro "Cilento Labscape". He is the president of the national executive of the SIU - Società Italiana degli Urbanisti, and in 2013 he was in the scientific coordination of the XVI Conferenza Nazionale Siu, "Urbanistica per una diversa crescita". His research deals with the themes, the knowledge and the phenomena of contemporary urban design in relation to the mutations of the city, urbanized areas, landscapes, interaction space / country.

Libera Amenta (female) holds a Master Degree (cum laude) in Architecture (DiARC-UNINA) and a Ph.D. in Urban Design and Planning (DiARC-UNINA and PhD Guest at TUD 1 year) about the recycling of Wasted Landscapes as a resource for contemporary cities. Nowadays she is Guest Researcher at TU Delft where she is carrying out studies about the regeneration of Wasted Landscapes through a metabolism approach and towards circular economies. Since the graduation, she was a member of several research groups, currently she is researcher in the unit of Naples Programma Prin 2012 "Re-cycle Italy. Nuovi cicli di vita per architetture e infrastrutture di città e paesaggio" about finding new life-cycles for 'drosscapes' in the metropolitan area of Naples, with a specific focus on Peri-Urban areas. At DiARC, she is also involved in the City Plan for Casaluce (CE - Italy) in which she contributes in developing strategies for the regeneration of degraded Peri-urban areas. Within Repair Libera Amenta will coordinate the Peri-Urban Lab of Naples and co-coordinate the other Peri-Urban Labs. She will be the expert about the topic "Wasted Landscapes".

Annie Attademo (female) is a Senior Architect and holds a PhD in Urban and Spatial Planning. She did part of her studies in the UK (Department of Civic Design of Liverpool, School of Architecture and Built Environment of London), focusing on urban regeneration and contemporary wastelands and drosscapes. Starting from the recycle project for London 2012 Olympic Park, she has worked through published articles and papers, on the extension of her PhD research, analyzing the interaction between land consumption, recycle, landscape interpreted as a place for uncommon integrations. She developed a project of creative recycle for the countryside between the towns of Naples and Caserta, awarded at the national competition organized in 2011 by Agrorinasce and at a national competition organized in 2013 by Campania Region. The core of the transformation was the recovery of dumping grounds, all along the cultivated countryside, turning the current 'Terra dei Fuochi' into the ancient 'Campania Felix'. She worked for public sector and agencies as a facilitator of projects, involving local communities and stakeholders. Building on these experiences, she will help coordinating the Peri-Urban Lab of Naples and co-coordinate the other Peri-Urban Labs, as an expert in participatory planning and urban re-design of fragile territories.

Both Dr. Amenta and Dr. Attademo are going to have an employment contract with UNINA from the beginning of the project on.

List of relevant publications:

RUSSO M., Città-Mosaico. Il progetto contemporaneo oltre la settorialità, Clean Edizioni, Naples, 2011

Russo M., Formato E., (2014). Re-Use/Re-Cycle Territories: A Retroactive Conceptualisation for East Naples, TeMA Journal of Land Use, Mobility and Environment, INPUT 2014, Eighth International Conference INPUT - Naples, 4-6 June 2014 Smart City - Planning for Energy, Transportation and Sustainability of the Urban System, ISSN 1970-9889, e- ISSN 1970-9870, p.431-440 (Working Team: AMENTA L., ATTADEMO A., Castiello S., Di Marco C., Prisco M.).

RUSSO M., "R.E.D.S. Rome Ecological Design Symposium", Journal of Landscape Architecture, 1-2014 (88-89), 2014;

AMENTA L., Castiello S., Di Marco C., Formato E. (2014), Napoli est. Naturartificiale, verso nuovi metabolismi ibridi, Il territorio degli scarti e dei rifiuti, a cura di Carlo Gasparri, Rosario Antonio Pavia, Roberto Secchi, Aracne, pagine 163-169.

ATTADEMO A., "Riciclare i margini della città contemporanea. Il caso studio di Hackney Wick e Fish Islands", Atti della XVI Conferenza Nazionale Società Italiana degli Urbanisti, Urbanistica per una diversa crescita, Napoli, 9-10 maggio 2013, Planum. The Journal of Urbanism, no. 27, vol.2, 2013.

List of relevant previous projects:

2002 La explosión de la ciudad (local coord. Attilio Belli, Michelangelo Russo, international coord. Antonio Font, University of Catalunya), Transformaciones territoriales recientes en las regiones urbanas de la Europa Meridional

PRIN 2005 (local coord. C. Gasparrini, national coord. P. Di Biagi, University of Trieste), The “public city” as a design laboratory. The production of Guidelines for the sustainable renewal of urban suburbs, The case of the metropolitan periphery of Naples

FARO 2010 Programme - (coord. M. F. Palestino), Urban open spaces resilient to storm-water system in climate change

FARO 2011 Programme - (coord. M. Cerreta), Cilento Labscape, A Living Lab in the national park of Cilento e Vallo di Diano

PRIN 2012 – (local coord. C. Gasparrini, national coord. A. Bocchi, University of Venice), RE-CYCLE. New life cycles for buildings and infrastructure of the city and landscape, Re-landscaping drosscapes in Campania Region

Participant 4 - HafenCity University (HCU) - Institute of Urban Planning and Regional Development

HafenCity University Hamburg - University of the Built Environment and Metropolitan Development is the only Europe-wide University which is solely focused on architecture and metropolitan development. For this reason, the entire range of disciplines of HCU is oriented towards understanding and designing the urban environment:

The **Institute of Urban Planning and Regional Development** at HCU promotes innovative, interdisciplinary and internationally oriented studies and research. Both the institute's research and study courses are dedicated to finding innovative solutions for the main challenges facing urban and regional development such as climate change, competitiveness, cohesion, integration and resource scarcity with a focus in two main areas:

Metropolises and regions: The institute conducts research related to the identification of new approaches for improved competitiveness and balanced territorial development of metropolitan areas. It elaborates visions for metropolitan regions studying the potentials of urban-rural cooperation, identifying perspectives for suburban development and testing ways to address the challenges of socio-economic, administrative and morphological fragmentation. Furthermore, research is dedicated to analysing different forms of large-scale partnerships and their contribution to territorial cohesion in Europe. Particular attention is paid to investigating new forms of territorial governance, the emergence of soft spaces and the manifestation of these in different planning contexts. Comparative planning studies about the different planning systems and traditions as well as the broader cultural context of spatial planning and development round the profile of the Department.

Sustainable development: The institute's main research interest lies in the area of climate change adaptation and mitigation, environmental protection and energy transition. The research is primarily focused on policy and stakeholder analysis, land use planning, evaluation and application of planning instruments, development and testing of innovative methods and tools to support policy and planning, to avoid land use conflicts and to promote utilization of renewable energies.

A defining characteristic of the institute is the multidisciplinary approach and the combination of expertise from the planning domain with knowledge from the fields of geography, policy and sociology.

Key personnel being involved in REPAiR

Jörg Knieling holds the Chair of Urban Planning and Regional Development at HCU and is dean of the urban planning program at HCU. From 2006 to 2012 he was HCU's vice-president for research affairs.

He graduated in urban, regional and environmental planning, holds a master's degree in political sciences and sociology and a Ph.D. from the University of Hanover. He is member of the German Academy for Spatial Research and Planning (ARL), of the advisory board for spatial development of the German Ministry of Transport and digital Infrastructure, and of the World Future Council's expert commission on Cities and Climate Change. In 2008/09 he was 'Directeur d'Etudes Associé' of the Institute of Advanced Studies (IEA) in Paris.

His main research fields are sustainable urban and regional development, spatial development and climate change, and related aspects of territorial governance and planning theory. He has conducted several international and national research projects in recent year, current publications have been on Soft Spaces in Europe (2015), Climate Adaptation Governance (2013), and Planning Cultures in Europe (2009). He has been referee for European Commission (DG Research), the European Institute of Technology (EIT), and a number of national research councils.

Andreas Obersteg graduated in economic and social geography with minor subjects in spatial planning, regional development and business administration at Technical University Munich and University Tours (France). He worked in a consultancy and planning office and in research institutions in Vienna, Munich and Hamburg (ISR, TUM, LMU and TUHH). Currently he is a research associate at HafenCity University Hamburg, where his research is comprised of several projects on city-regional development and governance and on urban-rural partnerships (INTERREG projects SURF, NEW BRIDGES, URMA).

List of selected publications:

Knieling, J.; Jacuniak-Suda, M.; Obersteg, A.: Urban-rural partnerships and governance of peri-urban areas in European perspective. In: Colucci, A.; Magoni, M.; Menoni, S. (eds.) (2015): Peri-urban areas and Food-Energy-Water Nexus. Sustainability and Resilience Strategies in the Age of Climate Change, N.P., Springer. Forthcoming.

Allmendinger, P.; Haughton, G.; Knieling, J.; Othengrafen, F. (eds.) (2015): Soft Spaces in Europe. Re-negotiating governance, boundaries and borders, Series Regions and Cities, London: Routledge. 248 p.

Termeer, C.; Buuren, A.v.; Knieling, J.; Gottschick, M. (2015): Reconciling collaborative action research with existing institutions: insights from Dutch and German climate knowledge programmes, Journal of Water and Climate Change, Vol. 6, No 1, pp. 89-103.

Knieling, J.; Müller, B. (eds.) (2015): Klimaanpassung in der Stadt- und Regionalentwicklung, Ansätze, Instrumente, Maßnahmen und Beispiele, Reihe Klimawandel in Regionen zukunftsfähig gestalten, Vol. 7, München: oekom-Verlag.

Jacuniak-Suda, M., Knieling, J., Obersteg, A.: Urban-rural partnerships as a tool of territorial cohesion. A conceptual approach derived from INTERREG IV C URMA "Urban-Rural Partnerships in Metropolitan Areas". In: Dej, M.; Janas, K.; Wolski, O. (eds.) (2014): Towards Urban-Rural Partnerships in Poland. Preconditions and Potential. pp. 15-31. Krakow

List of relevant Projects

URMA Urban-rural partnerships in metropolitan areas. Interreg IVC (2012-2014)

KLIMZUG-NORD Regional strategies concerning climate changes in the metropolitan area of Hamburg. German Federal Ministry of Education and Research (BMBF Bundesministerium für Bildung und Forschung). (2009-2014)

CLUE Climate Neutral Urban Districts in Europe. Interreg IVC (2012-2014)

SURF Sustainable Urban Fringes. Interreg IVB North Sea Programme. (2010-2013)

Commission of Cities and Climate Change. Cooperation with the World Future Council (2008-2012)

Participant 5 - Institute for Regional Studies, CERS of HAS, Pécs, Hungary -RKI

The Centre for Economic and Regional Studies consists of the Institute for Regional Studies (IRS), the Institute of Economics and the Institute of World Economics. CERS is an independent research institute belonging to the Hungarian Academy of Sciences. The IRS is a network of several departments in the country having opportunity for empirical researches on the spot. The mission of the IRS is conducting basic theoretical and empirical researches in regional science. The Institute supports also regional policy decisions at local, regional, and national levels by its applied researches. The Institute's scientific results contributed the formulation of the European Union's cohesion strategy in ECC countries.

The researchers of the IRS are participating in teaching master and doctoral programmes on regional science at different universities. Serving as the forum for the dissemination of regional development innovations, it maintains some scientific periodicals: Space and Society scientific journal, Discussion Papers series in English language, the Great Plain Studies yearbook, Studia Regionum (Regional and urban research), "Regions of the Carpathian Basin" and "Europe of the Regions" series.

More information can be found: www.rkk.hu

Key personnel being involved in REPAiR

VARJÚ, Viktor (Team leader) (male) (PhD – Earth sciences) research fellow, dealing with environmental policy in general in Europe and Hungary, environmental policy integration into planning and development procedures and analysis of social and geographical aspects of renewable energy use. Experiences related to the proposal: 1) Project leader of the Hungarian team in the 'REGPHOSYS – Regional Actuators of Photovoltaic Systems' international IPA project; 2) participant member in 'Governance for Sustainability' (FP6) project responsible for the elaboration and analysis of the Hungarian case; 3) participant member in 'Ex-post Evaluation of the Cohesion Fund (including former ISPA) – Work Package D: Management and Implementation, responsible for the Hungarian country report.

BODOR, Ákos (male) (PhD – political science) research fellow, dealing with the role and importance of social norms, values, attitudes, and rules as contextual elements for public policy implementation. Experiences related to the proposal: 1) participant member in a FP7 project 'Bordering, Political Landscapes and Social Arenas' (EUBorderScapes) responsible for tasks on Europeanization and the role of formal and informal institutions; 2) participant member in one ongoing and two finalized OTKA researches focusing on interplays between socio-cultural context and (a) decentralization; (b) innovation policy; and (c) agglomeration policy.

GRÜNHUT, Zoltán (male) (PhD – political science) research fellow, dealing with social capital, the issue of trust and interplays between socio-cultural specificities and public policy efficiency especially in East Europe and Israel. Experiences related to the proposal: 1) participant member in an ESPON research project called 'Territorial Approaches for New Governance' (TANGO); 2) participant member in a FP7 project 'Bordering, Political Landscapes and Social Arenas' (EUBorderScapes) responsible for tasks on Europeanization and the role of formal and informal institutions.

PÁLNÉ KOVÁCS, Ilona (female) (PhD, DSc), director of Centre for Economic and Regional Studies of Hungarian Academy of Science, and full time professor at the Department for Political Science and International Studies of University of Pécs. She is graduated as a lawyer (1978), PhD (1988), doctor of Hungarian Academy of Sciences (2000), habilitation (University of Pécs, 2003). She was elected as a corresponding member of Hungarian Academy of Sciences in 2013. She deals with the management of regional policy, regional governance and local governments, leader of doctoral programme for political studies at University of Pécs.

SUVÁK, Andrea (female) junior research fellow. Her main field of interest is environmental ethics and its implications on environmentally sustainable spatial development, along with issues concerning local economic development and short food supply chains. Experience related to the proposal: participant in a row of projects dealing local waste management issues, modelling of micro-regional energy and material flow; participant in IPA REGPHOSYS project modelling solar energy production and consumption on regional field.

Judit Tímár (female) is a senior research fellow at MTA KRTK, Institute for Regional Studies, Békéscsaba Department. She holds master degrees on mathematics and geography and PhD equivalent CSc in Geography. Her main research field is production of geographical thoughts, critical geography and feminist geography. She wrote several articles in the topic of Gender geography of post-socialist urban and rural spaces and places. She was and is member of several international journal and editorial or editorial advisory boards (e.g. European Urban and Regional Studies, International E-Journal for Critical Geographies, Gender, Place & Culture: A Journal of Feminist Geography). She was a full member of the Gender and Geography Committee of the International Geographical Union and the member of the Steering Committee of the International Group of Critical Geographers. She was also a board member of the Foundation for the Women of Hungary/MONA. She has led and worked on various national and international projects (e.g. RegPol² – Marie Curie Action, ESPON SEMIGRA) not only relevant to REPAiR theme but on gender topic as well.

Project Manager, Administrator

SÜLE, Katalin (Project Manager, Administrator) (female) (dr). jurist, linguist, cultural and science manager, has a 23 years of experience in managing and administering international research projects, including Tempus, FP5, FP6, FP7, INTERREG, ESPON, IPA, etc.

List of relevant publications:

Pelin, D., Šljivac, D., Topić, D., Varjú, V. (szerk.) 2014: Regional impacts of different photovoltaic systems = Utjecaj fotonaponskih sustava na regiju = Különböző fotovillamos rendszerek regionális hatásai. Pécs: IDResearch Kft. - Publikon, 302p.

Varjú, V., Suvák, A., Dombi P.: Geographic information systems in the service of alternative tourism – methods with landscape evaluation and target group preference weighting. *INTERNATIONAL JOURNAL OF TOURISM RESEARCH* 16:(5) pp. 496-512. (2014).

Pálné Kovács, I. (2015): Regional elites, networks and the beauty of regionalism in Hungary. In: Buček J, Ryder A (eds.) *Governance in Transition*. 270 p. Dordrecht: Springer Netherlands, 2015. pp. 109-131.

Pálné Kovács, I., Kutsar D (eds.) (2010): *Internationalisation of Social Sciences in Central and Eastern Europe: The „Catching Up” – a Myth or a Strategy?* London; New York: Routledge, 2010. 234 p.

Bodor, Á., Grünhut, Z: Theoretical Comments on the Concept of Territorial Capital
In: Bodor, Á, Grünhut, Z (eds.) *Cohesion and Development Policy in Europe*. 131 p.
Budapest; Pécs: Institute for Regional Studies, Centre for Economic and Regional Studies, Hungarian Academy of Sciences, 2015. pp. 119-131.

Timár J, Velkey G (2016): The relevance of the political economic approach: The interpretations of the rural in the migration decision of young women and men in an economically backward region. *Journal of Rural Studies*, 43: 311-322, doi:10.1016/j.jrurstud.2015.11.012

Timár J, Fabula Sz. (2013): Whose identity politics? – Lessons for emerging critical disability geography in Hungary *Geographica Helvetica* 68:(3) pp. 171-179. doi:10.5194/gh-68-171-2013

Tímár, J., G. Fekete, É. (2010): Fighting for Recognition: Feminist geography in East-Central Europe. *Gender Place and Culture, The Journal of Feminist Geography*. 17(6): 775–790.

List of relevant Projects:

Local Dimensions of a Wider European Neighbourhood: Developing Political Community through Practices and Discourses of Cross-Border Co-operation: EUDIMENSIONS (2006-2008) Commissioning body: European Commission (EU 6th Framework).

Governance for Sustainability:G-FORS (EU 6.FP) (2006-2008) Commissioning body: European Commission (EU 6th Framework).

ET 2050 - Territorial Scenarios and Visions for Europe Luxembourg: ESPON (European Spatial Planning Observation Network), (2011-2015) Commissioning body: ESPON.

Bordering, Political Landscapes and Social Arenas: Potentials and Challenges of Evolving Border Concepts in a post-Cold War World. European Union 7th Framework Programme, (2012-2016) Brussels.

ESPO TANGO - Territorial Approaches for New Governance (2011-2014) Commissioning body: ESPON.

Participant 6 Institute of Geography and Spatial Organization Polish Academy of Sciences (IGiPZ)

Stanisław Leszczycki Institute of Geography and Spatial Organization Polish Academy of Sciences (*Instytut Geografii i Przestrzennego Zagospodarowania Polskiej Akademii Nauk*) was founded in 1953 (initially as the Institute of Geography PAS). The Institute is a leading research centre in Poland in the fields of socio-economic geography, physical geography as well as land use, spatial planning and organization. The rich collection of books, serial publications, scientific journals and electronic

resources is gathered and regularly updated by the Central Library of Geography and Environmental Protection (one of the IGiPZ's units), being one of the largest geographical sciences libraries in the world.

The IGiPZ PAN's special asset is an active involvement in international scientific collaboration that, in recent years, have resulted in participation in more than 100 scientific projects and applied research. In addition, in the last decade there have been ca. 300 national research and applied studies, expert evaluations, etc., carried out by the IGiPZ PAN. Our staff's annual publishing output comes to a total of 400 published items (e.g. peer-reviewed articles, monographs, notes, etc.), including our own journals and publication series.

The IGiPZ PAN's tasks include, in particular:

- carrying out research studies in the field of: physical geography (geomorphology, the Quaternary paleogeography, hydrology, climatology, geoecology and environmental protection), socio-economic geography (urban and population geography, geography of agriculture and rural areas, geography of industry, transport and services), political geography, cartography, spatial organization, local and regional development,
- training of scientific staff and researchers as well as specialists with high qualifications in geographical sciences and spatial analyses,
- supporting young researchers and early career scholars,
- dissemination of the findings of studies among governmental institutions and local authorities in order to apply theoretical knowledge in practice for the benefit of the economic, social and spatial development,
- promotion of an international scientific cooperation through bilateral and international research projects and participation in scientific consortia,
- dissemination of the knowledge gained in a wide range of scientific activities undertaken in the IGiPZ PAN,
- publishing activities.

Key personnel being involved in REPAiR

Dr. Konrad Czapiewski (male) currently works for the Institute of Geography and Spatial Organisation, Polish Academy of Sciences. Konrad's research interests are in areas of rural geography – successful rural areas, rural development, functions of rural areas, local development – and human geography – education, human capital, intraregional differences, knowledge transfer and endogenous growth. Konrad has held a number of scientific posts, including on the board of the Polish Geographical Society, the Scientific Council of the Institute of Geography and Spatial Organization, member of the Main Board of Commission on Rural Areas of Polish Geographical Society, an associate member of the Local and regional Development Commission IGU and the Task Force for Development of Rural Areas Committee for Spatial Economy and Regional Planning. He is an Editor-in-Chief of journal "Studia Obszarów Wiejskich / Rural Studies". He has authored more than sixty scientific publications in areas of rurality, locality, regional periphery and spatial analysis and participated in ca. 40 international and domestic research and application projects including among others scientific projects for Polish National Centre of Science, ESPON Projects, other international projects and applied projects for Ministry of Agriculture and Rural Development, Ministry of Infrastructure and Development and Regional and Local Self-Governments.

Prof. Jerzy Bański (male) is a full professor of human geography in the Institute of Geography and Spatial Organization, Polish Academy of Sciences (IGSO PAS) and a professor of Maria Curie-Skłodowska University in Lublin, Poland. He earned his Ph.D in 1996 and habilitation in 1999. His main research interests include: rural and agricultural geography, land use, regional policy, spatial organization and local development. From 2008 is the head of Department of Rural Geography and Local Development at the IGSO PAS and in the period 2006-2012 was the President of the Polish Geographical Society. Jerzy Bański is author of 320 publications, including 20 books and more than 150 papers with review processes. He was co-ordinator of 35 research projects and the member of 30 other projects.

Prof. Marcin Wójcik (male) is researcher and teacher at the University of Łódź (Poland). Graduated geography in 2002, specialising in human and regional geography. PhD thesis (2006) entitled "Social and economic transformations in suburban villages in the Łódź metropolitan area" concerned the impact of the big city (Łódź) on the transformations of rural structures in a time of rapid transformation during the post-socialist transition (1990-2004). His research interests are focused on the social and cultural dimension of transformations in Polish rural areas, the problems of history of Polish human and social geography. His scientific output includes approx. 100 works such as books, collections of articles he edited, maps and high

school textbooks. Since 2013, he has been the chairman of the Rural Study Group at the Polish Geographical Society, as well as a member of The Task Force for Development of Rural Areas at the Committee for Spatial Economy and Regional Planning (Polish Academy of Sciences). Winner of the awards of the Rector of the University of Łódź, the Mayor of Łódź and the Foundation of the University of Łódź.

Dr. Magdalena Górczyńska (female) is a researcher at the Institute of Geography and Spatial Organization, Polish Academy of Sciences and currently conducts the study on segregation and social mix policy in France as an invited research fellow in the CNRS in Paris (laboratory Géographie-Cités). Her research interests cover the comparison of socio-spatial changes in the Western and Central European metropolitan areas (social segregation, exclusion, gentrification), including analysis of local urban policies (mainly housing policy and urban renewal) as drivers of these evolutions. Her researches conducted both in Warsaw and in Paris were supported by Polish National Science Centre, Polish Ministry of Science and Higher Education and French Embassy in Poland. She published her findings in English, French and Polish peer-reviewed journals and books and won several awards from the Mazovia Voivodeship (Poland) as well as from the University of Paris 1 and Foundation for Social Sciences in France. In addition, she participated in several ESPON and INTERREG projects as well as in applied studies financed by the Polish Ministry of Infrastructure and Development.

Professor Wójcik is going to have an employment contract with IGIPZ during the project duration.

Relevant publications:

Bański J., Wesołowska M., 2012, Architectural Transformations of Residential Buildings in Rural Areas of the Lublin Region, *Architectoni.ca*, 2, 174-186.

Bański J., 2011, Changes in agricultural land ownership in Poland in the period of the market economy, *Agricultural Economics*, 57, 2, 93-101.

Czapiewski K., Wójcik M., 2014, Towards a post-structuralist and cultural turn in researching rurality in Poland: a geographical perspective. (in): *Rural cooperation in Europe. In search of the 'relational rurals'*. Ed. Edward Kasabov. Houndmills: Palgrave Macmillan, 231-265.

Czapiewski K., 2012, Intraregional peripheries of economic development - a case study of Mazovia Region in Poland, *Studia Obszarów Wiejskich*, 27, 33-45.

Górczyńska M., 2014, Unique or universal? Mechanisms and processes of social change in post-socialist Warsaw. - *Hungarian Geographical Bulletin* 2014, 63, 3, 255-277.

Górczyńska M., Ferenc M., Konopski M., Essig S., Kaucic J., Schuh B., Lange Scherbenske S., Dymen C., 2014, Accessible ESPON knowledge and its application in local and regional context. - *EUROPA XXI*, 25, 51-68.

Wójcik M., 2014, Territorial identity of countryside residents in the suburban areas of Łódź, Poland, *Quaestiones Geographicae* 32 (2), 69-79.

Relevant Projects:

European Land Use Patterns (EU-LUPA) – ESPON 2013 Detecting Territorial Potentials and Challenges (DeTeC) – ESPON 2013

Indicators and Perspectives for Services of General Interests in Territorial Cohesion and Development (SeGI) - ESPON 2013
Best Development Conditions in European Metropolises: Paris, Berlin and Warsaw (Best Metropolises) - ESPON 2013
Peri-urban Land Use Relationships - Strategies and Sustainability Assessments Tools for Urban-Rural Linkages (PLUREL) – FP6

Participant 7 - Joint Research Centre (JRC)

R688920 EPAiR -

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The **Joint Research Centre (JRC)** is the European Commission's in-house science service which employs scientists to carry out research in order to provide independent scientific advice and support to EU policy. The mission of the JRC's Institute for Environment and Sustainability (JRC-IES) is to provide scientific and technical support to EU policies for the protection of the environment, and the more efficient and sustainable management of natural resources at global and continental scales. IES carries out research to understand, monitor and anticipate the complex interactions between human activity and the natural environment, in order to support the development and implementation of policies that protect the global environment and ensure that strategic resources (water, land, forests, food, minerals) are managed in a more sustainable manner for the benefit of present and future generations. The following experts from the Sustainability Assessment Unit of the JRC-IES will be involved in the supervision of the work under REPAIR:

Key personnel being involved in REPAIR

Simone Manfredi holds a Master Degree in Environmental engineering and a PhD in environmental assessment of waste management systems. He is author / co-author of about 20 papers in peer-reviewed scientific journals. His expertise includes analysis and environmental assessment of waste management systems and technologies, life cycle assessment, development of environmental indicators, and environmental footprinting of products and organisations. He will act as the JRC-IES contact person for REPAIR and provide his contribution to REPAIR mainly with respect to the foreseen environmental and sustainability assessment work.

Fabrice Mathieux holds a Master Degree in Mechanical engineering and another in Solid waste Management Life Cycle Analysis and a PhD in Industrial Engineering on design for recycling of electr(on)ic Equipment. He is author / co-author of more than 20 papers in peer-reviewed scientific journals. His current activities concern the development of policy relevant methods (and underlying data) to assess environmental performances of products and systems, in particular in the context of the Circular Economy. He has recurrent contacts with several policy DGs (including DG ENV, DG GROW and DG ENER). Moreover, the recruitment of a dedicated research staff (i.e. post-doctoral fellow type) to carry out the work is planned.

List of relevant publications:

EC - European Commission (2010c) - JRC (Joint Research Centre) - Institute for Environment and Sustainability (IES): International Reference Life Cycle Data System (ILCD) Handbook – General guide for Life Cycle Assessment – Detailed guidance, First edition March 2010, EUR 24708 EN, Luxembourg, Publications Office of the European Union. Available online at <http://ict.jrc.ec.europa.eu/assessment/projects>

EC – European Commission (2012c): Life cycle indicators for waste management: development of life cycle based macro-level monitoring indicators for resources, products and waste for the eu-27. European Commission, Joint Research Centre, Institute for Environment and Sustainability. Available online at <http://ict.jrc.ec.europa.eu/assessment/publications>

EC - European Commission (2011b): Supporting environmentally sound decisions for waste management - Technical guidelines (3 reports). Available online at http://sa.jrc.ec.europa.eu/?page_id=777

Manfredi, S., Allacker, K., Pelletier, N., Schau, E., Pant, R., Chomkhamsri, K., and Pennington, D. (2015): Comparing the European Commission product environmental footprint method with other environmental accounting methods. *The International Journal of Life Cycle Assessment* 20, 389-404

Allacker K., Mathieux F., Manfredi S., Pelletier N., de Camillis C., Ardente F., and Pant R. (2014): Allocation solutions for secondary material production and end of life recovery: proposals for policy initiatives. *Resources, Conservation & Recycling*, 88, 1-12

Manfredi, S., Goralczyk, M. (2013): Life cycle indicators for monitoring the environmental performance of European waste management. *Resources, Conservation & Recycling* 81, 8-16.

Manfredi, S., Pant, R., Pennington, D. & Versmann, A. (2011): Supporting environmentally sound decisions for waste management with LCT & LCA. *The International Journal of Life Cycle Assessment* 16(9), 937-939

Huysman, S., Sala, S., Mancini, L., Ardente, F., Alvarenga, R.A.F. De Meester, S., Mathieux, F., Dewulf, J. Toward a systematized framework for resource efficiency indicators. *Resources, Conservation and Recycling* 95 (2015) 68–76.

Fulvio Ardente, Maria Calero Pastor, Fabrice Mathieux, Laura Talens Peiró. Analysis of end-of-life treatments of commercial refrigerating appliances: Bridging product and waste policies. *Resources, Conservation and Recycling* 101 (2015) 42–52.

List of relevant projects:

Harvesting solar energy with multifunctional glass-polymer Windows: HarWin (2012-2015). Commissioning body: European Commission (EU 7th Framework Programme).

Recovered Fuels combined with Biomass: RECOMBIO (2010-2013). Commissioning body: European Commission (EU 7th Framework Programme).

Environmental Footprint and Material Efficiency: EFME (2012-2015). Commissioning body: European Commission (Contract with DG ENVIRONMENT).

Support to selection methods for critical raw materials (2015-2016). Commissioning body: European Commission (Contract with DG GROW).

Geographic Information Systems Regional layers (2012-2015). Commissioning body: European Commission (Contract with DG REGIO).

Participant 8 - Geo-Col GIS and Collaborative Planning (Geo-Col)

Geo-Col specializes in researching, developing, testing, and implementing GIS-based spatial decision support systems (SDSS) and planning support systems (PSS) that are used in collaborative workshop-based settings for Geodesign, participatory planning and sustainable development. These GIS solutions are typically used in combination with interactive hardware instruments, such as the MapTable. In particular, with many years of successful project experience, Geo-Col has grown as a certified consultant with proven in-depth knowledge and training capabilities regarding the ArcGIS-based CommunityViz software and applications.

Key personnel being involved in REPAiR

Gustavo Arciniegas (male) is the owner and lead consultant at Geo-Col. He received in 2012 a Ph.D. in 'Map-based decision support tools for collaborative land use planning' from IVM, VU University Amsterdam, the Netherlands. He also holds an M.Sc. degree in Geoinformatics from the University of Twente, ITC faculty, the Netherlands, (2005) and a B.Sc. degree in civil engineering from the UIS, Colombia (2000). He specializes in the integration of GIS, SDSS, PSS and geo-instruments for collaborative spatial decision-making and geodesign, focusing on sustainable and environmental planning. Gustavo is a certified CommunityViz authorized GOLD consultant. His profile can be summarized as:

- Advisor on the use of GIS and Spatial Decision Support Systems for multidisciplinary collaborative and sustainable planning
- Experienced in training and capacity building about GIS, PSS and SDSS
- GIS expert and environmental scientist with strong analytical and statistical skills
- Experienced in setting up geospatial data models for customers and projects
- Experienced in remote sensing: image processing and analysis
- Familiar with user communities, multi-disciplinary teams, and different clients
- Oriented towards problem-solving and timely delivery of results of high quality and accuracy
- Strong interest in bridging scientific knowledge and real planning practice

Dr. Arciniegas would like to declare his personal costs as an SME owner without salary.

List of relevant publications

Alexander, K.A., Janssen, R., Arciniegas, G.A., O'Higgins, T.G., Eikelboom, T., Wilding, T.A., 2012. Interactive Marine Spatial Planning: Siting tidal energy arrays around the Mull of Kintyre. PLoS ONE, 7(1): e30031. doi:10.1371/journal.pone.0030031.

Arciniegas, G.A., 2012. Map-based decision support tools for collaborative land use planning. PhD thesis. VU University Amsterdam. 148 pp. Available online at: <http://dare.ubvu.vu.nl/handle/1871/39296>

Arciniegas, G.A., Janssen, R., 2012. Spatial decision support for collaborative land use planning workshops. *Landscape and Urban Planning* 107(2012), 332-342.

Arciniegas, G.A., Janssen, R., Rietveld, P., 2013. Effectiveness of collaborative map-based decision support tools: results of an experiment, *Environmental Modelling & Software*. *Environmental modelling & Software*, 39(2013), 159-175.

Arciniegas, G.A., Janssen, R., Omtzigt, N., 2011. Map-based multicriteria analysis to support interactive land use allocation. *International Journal of Geographical Information Science* 25(12), 1931-1947.

List of relevant projects:

KnowSeas FP7

FOODMETRES FP7

Participant 9 - Delta Development Group (DELTA)

Delta is an independent, privately owned real estate development and investment company. We were founded in the Netherlands in 1988 and since then have expanded internationally with offices in Germany, France and Italy. We have a strong backbone in commercial real estate with a proven track record in the field of high quality project development and value-adding asset management.

Commitment: At Delta, real estate development is not about producing more, it is about making more of what we create and making more of what already exists whilst maintaining a good balance between function and profitability. We adhere to the principles of Cradle to Cradle™ Design for Disassembly in able to ensure a transition towards a circular Economy. Our commitment is therefore to create sustainable buildings of quality that will retain their value indefinitely whether a new development, a redevelopment or an upgrade of an existing object. By our focus on projects that improve and give positive spin off to their surroundings we give something back to our society and environment, while remaining a successful, viable and visionary company.

Organisation: Delta is led by its Director/owner Coert Zachariasse. Each country has its own director and local management team. Within the company there is a separate asset management division. Via means of a regular international meeting strategy we are able to structure our business and meet our challenges from a European perspective while at the same time manage our cross border growth ambitions.

Partners: Our compact organisation of highly skilled and experienced professionals is complemented by a network of excellent long-term and reliable partners giving flexibility and strong added value. At Delta, we know that good partnerships and good collaboration come from transparency and sharing information. Clear, open communication that involves and engages people which in turn leads to motivation and impetus. From this open and frank approach as well as our drive to improve and innovate, stems our competitive edge.

Key personnel being involved in REPAiR

Dr. O.J. (Olaf) Blaauw (male), Senior Strategic Consultant. Olaf has an extensive background in Systems Thinking and is working with Delta specifically to conceptualise and implement the CE Hotbed Project in Haarlemmermeer, ensuring the proper transformation of data into information on behalf of the REPAiR program

Participant 10 - BLOKOM Nonprofit Ltd (BLOKOM)

BLOKOM is a municipality owned city service company. This is the biggest waste management company in the Sout-West part of Hungary: with more than 60 years of operational experience, it serves 460.000 inhabitants and 4.800 companies in 233 cities and villages. We are certified of ISO 9001:2009, ISO 14001:2005, and ISO/IEC 27001:2006. The company is also responsible

for several city operation activities: road maintenance, winter services, car parking, public park and forest maintenance, waterway and drainage maintenance.

It is also involved in:

- applied research projects,
- strategic planning of the city,
- higher education (BIOKOM is an industrial partner of the local university in dual education).

Key personnel being involved in REPAiR

Mr. **Tibor KISS** (male), managing director of BIOKOM since 1995. PhD at the Faculty of Earth Sciences of the University of Miskolc, in 2008. He is the leader of the **SMART CITY Technologies research team** of the University of Pécs (2012 onward). Senior Research Fellow at the Faculty of Engineering and Information Technology of the University of Pécs, responsible for lectures on waste management, environmental economics, and city operations (2009 onward). He was Commissioner of Ministry of Environment and Water (2008-2009).

Relevant Publications

Kiss, T., – Drescher, L.: Effects of the landfill tax on waste management. Pollack Periodica An International Journal for Engineering and Information Sciences. (DOI: 10.1556/Pollack.9.2014.S.4) Vol. 9, Suppl., pp. 31-42, 2014, Akadémia Kiadó, Budapest (ISSN: 1788-1994) Editors: Amalia Ivanyi and Peter Ivanyi

Kiss, T.: Systemic approach in city operation – Possible synergies between waste management systems and energetics. Pollack Periodica An International Journal for Engineering and Information Sciences. (DOI: 10.1556/Pollack.7.2012.3.6) Vol. 7, No. 3, pp. 55–63, 2012, Akadémia Kiadó, Budapest (ISSN: 1788-1994) Editors: Amalia Ivanyi and Miklos Ivanyi

Kiss, T.: Coordination and ecomarketing: market conform harmonization of the interests of economy and state. Abstract. Proceedings of the International Innovation Conference for Co-operation Development (InCoDe), Published by Faculty of Business and Economics at University of Pécs (ISBN: 978-963-642-248-6) Pécs, 2008. október 16-18. pp.349-350 Editor: Fojtik János

Kiss, T. – Girán, J.: Local Resources, Local Values; The Pécs ECOCITY – Mecsek-Dráva ECOREGION Program In: Sustainable Triangle 1.; Pécs – Graz – Maribor; Sciences, Municipalities, Companies for the Sustainable Future, Pécs, 2006 pp. 99-109. (ISBN-10: 963-642-122-6; ISBN-13:978-963-642-122-9) Published by University of Pécs, Faculty of Sciences Institute of Geography, editor: Ronczyk Levente, dr. Tóth József, dr. Wilhelm Zoltán. B&D Stúdió, Pécs

List of relevant Projects:

- Planning of regional waste management programs in Hungary ("South-Balaton Sio-valley" and "Mecsek-Drava", 2000-2014). Operation of the latter one since 2014.
- Reorganization and rationalization of Pécs city management public services (2011-2012)
- Creation of the environment strategy of Pécs, based on the Ecocity - Ecoregion concept (2005).
- Introduction of the selective waste collection in Pécs (1998), kerbside collection of packaging material and garden waste (2003)
- Construction of the first Material Recovery Facility in Hungary (1998)

Infrastructure

- 2 Material Recovery Facilities
- Several civic amenity sites
- Mechanical-Biological Treatment plant
- Composting plant
- Transfer stations

- 30+ waste trucks

Participant 11 - Gertz Gutsche Rümenapp Stadtentwicklung und Mobilität GbR (GGR)

Gertz Gutsche Rümenapp (GGR) was founded in 2003 as a spin-off of Hamburg University of Technology. Today, 5 managing partners and 7 employees are working on a variety of projects for clients in municipalities, counties, state and federal ministries and other public bodies in four interrelated fields:

- transport and mobility
- regional development and infrastructure
- urban development and public finances
- simulation of regional development processes

GGR applies a methodology that links the close participation of the relevant stakeholders with a sound GIS- and model based analysis of the problems and the impact assessment of the possible solutions and strategies.

Key personnel being involved in REPAiR

Dr.-Ing. Jens-Martin Gutsche studied transport planning in Berlin, Lyon und Dresden und was researcher at Hamburg University of Technology from 1998 to 2005. He also was Visiting Scholar at Center for Urban Policy Research (CUPR) at Rutgers University, USA. His scientific focus is the link between travel behaviour and urban structure, the impact of new housing projects and its long term financial impact for the public bodies and the private households budgets. His special focus lies upon the "costs of sprawl". Dipl.-Ing. Max Bohnet studied spatial planning in Dortmund and Madrid. He worked in consultancies in Brussels and Dortmund until 2005. From 2005 to 2014 he worked as researcher at Hamburg University of Technology on various research projects in the field of spatial development, transport and mobility. Since 2010 he is one of the partners at GGR.

Dr. **Gutsche** would like to declare his personal costs as an SME owner without salary.

List of relevant publications

Bohnet, Max; Gutsche, Jens-Martin; Menze, Axel; Stul, Dmitry; Weiner, Thomas (2006): GIS-Werkzeuge zur Aufbereitung von Strukturdaten für Verkehrsmodelle ECTL Working Paper 34, Hrsg.: Technische Universität Hamburg-Harburg, Institut für Verkehrsplanung und Logistik, Hamburg 2006.

Bohnet, Max; Gutsche, Jens-Martin; Menze, Axel (2006): Verkehrswirkungen der Regionalplanung. Ein Leitfaden zur Nutzung von Verkehrsmodellen durch die Regionalplanung zur Abschätzung der verkehrlichen Auswirkungen ihrer Leitbilder und Einzelentscheidungen. Bundesministerium für Verkehr, Bau und Stadtentwicklung (BMVBS) (Hrsg.): Werkstatt Praxis

BBR (2006): Siedlungsentwicklung und Infrastrukturfolgekosten. Bilanzierung und Strategieentwicklung. Bonn.

BMVBS/BBSR (2010): Regionale Daseinsvorsorgeplanung. Ein Leitfaden zur Anpassung der öffentlichen Daseinsvorsorge an den demographischen Wandel. Bonn.

BMVBS (2011): Regionalstrategie Daseinsvorsorge. Denkanstöße für die Praxis. Berlin.

Gertz, Carsten; Maaß, Jacqueline; Guimarães, Thiago; Bohnet, Max et al.(2015): Auswirkungen von steigenden Energiepreisen auf die Mobilität und Landnutzung in der Metropolregion Hamburg - Ergebnisse des Projekts

EUROLAN – Energiepreisentwicklung und Landnutzung. Harburger Berichte zur Verkehrsplanung und Logistik, Schriftenreihe des Instituts für Verkehrsplanung und Logistik, Band 13, herausgegeben von Heike Flämig und Carsten Gertz, Technische Universität Hamburg-Harburg, ISBN 978-3-95645-507-0

List of relevant Projects: