

## Key facts

Project start: **1 July 2012**

Duration: **3 years**

Funding Scheme:

**Seventh Framework Programme**

EU Contribution: 2 400 000 €

Consortium: 10 partners  
from 7 different countries

**Project Coordinator**

Prof. Eugenijus Butkus

Research Council of Lithuania

**Project Manager**

Ms. Yael Marom

The Jerusalem Institute  
for Israel Studies

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# SPREE Newsletter No.2

Servicizing Policy for Resource Efficient Economy

[www.spreeproject.com](http://www.spreeproject.com)



# SPREE

The SPREE project aims at bringing the European community closer to achieving a truly sustainable economy characterized by decoupling of economic growth and social prosperity from inefficient use of resources. Servicizing systems, which facilitate the transition from selling products to providing services, can potentially face this challenge and therefore comprise the core of SPREE research. Experts in environmental and social sciences, industrial ecology, complex system engineering, innovation, business management and public policy are working together in order to identify specific servicizing opportunities that advance sustainable performances and to enhance the systems' creation and evolution in practice.

**What is servicizing?** Servicizing is a transaction where value is provided through combination of products and services and where satisfaction of customer needs is achieved by selling the product's function rather than the product per se and/or by increasing the service component of the offer. Servicizing can take place both on supply and on demand sides: it can focus on systems of provision such as production processes as well as on consumption systems. Take a look at the entire definition in the [Wikipedia page](#) created by us.

**What we do?** Servicizing can lead both to increased and decreased environmental, economic and social impacts. Hence it becomes necessary to study the conditions under which servicizing can actually live up to its potential by establishing profitable but resource efficient business activities, enhancing consumer satisfaction and promoting high quality of life. We apply Agent-Based Modelling (ABM), on the basis of evidence-based data derived from a variety of case studies, in order to evaluate the impacts of servicizing systems together with the effects of policies designed to support these systems. The key outcome of the research will be the design of "Servicizing Policy Packages".

## Research progress

### PAST

- Development of data collection methods
- Generic ABM demonstration of the effects of policy measures on facilitating servicizing systems
- Conceptualization of "Policy Packages" and their applicability to servicizing

### PRESENT

- Completion of sector-specific "behavioural methodologies" (consumers and business' decision making processes)
- Data collection in SPREE consortium's countries
- Sector-specific ABM's configuration
- Creation of sector-specific inventory of policies to promote servicizing

### FUTURE

- First estimations of data collection's results
- Sector-specific ABM's calibration
- Creation of the basic sector-specific Policy Packages

Services for Sustainability Conference and Workshop in Brussels

3<sup>rd</sup> of April, 2014

## SPREE Sectors

Water, Mobility and Agri-food were chosen as they have been long identified as sectors with significant environmental impacts. Within the three different sectors, existing and potential servicizing opportunities were mapped and reviewed and one system in each sector was selected for further assessment. Each sector-specific servicizing system is modelled through the ABM, on the basis of case studies in the consortium countries, in order to evaluate the systems' environmental, economic and social impacts in different country settings. The selected systems are: Household Water Management (with a specific focus on grey-water recycling and rainwater harvesting services); Car and Bike Sharing (in particular moving from owning to sharing) and; Crop Protection Management Solutions. Take a look at the systems' description in [SPREE website](#).

- In 2012, car-sharing organizations were operating in 27 countries on five continents, with an estimated 1,788,000 members sharing more than 43,550 vehicles. (Source: Modo Car Co-op, Canada)
- According to Liftshare.org, traveling with others enables you to save up to £1,000 (€1,200) a year in travel costs.
- In 2001, there were just a handful of bike sharing schemes, by 2012 there were over 400 globally. (European Cyclist's Federation)



- Household water using appliances like toilets and washing machines have become much more water efficient over the last couple of decades, meaning that in some countries household water use per person has gone down.
- Approximately one-third of household water use is for bathing and showering while a quarter of water use is for toilet flushing. Reusing shower water for toilet flushing is an effective way of saving freshwater.



- Nowadays, 10,000 million tons of agri-food products are grown worldwide thanks to the work of a third of the global population. (Source: Biobee.com)
- In the region of Galicia, fungi are responsible for up to 50% of grape crops losses per year, hence application of pest control techniques are necessary. (vinasatlanticas.depo.es)
- IPM (Integrated Pest Management) Bio control enables reduction of 80% in pesticides' use for crops such as peppers and strawberries. (Source: Biobee.com)



## SPREE sectors' research teams



**The University of Surrey team** leads the water sector work package and consists of Prof. Stephen Morse, Dr. Angela Druckman, Dr. Jonathan Chenoweth and Dr. Alma Lopez-Aviles. With water already serviced in most countries to varying extents, we are looking at "second level" servicing – how water can be further serviced through service contracts for managing schemes such as in-house water recycling. As part of this analysis, we examine the link between household water consumption and well-being so that the welfare dimensions of decoupling resource use and economic growth can also be understood. We are currently finalising a household survey through which we will collect the needed data. Additionally, we carry out research on households' perception of "second level" water servicing. For this the questionnaire outlines in-house greywater and rainwater reuse and garden watering servicing systems. Questions related to the same systems will also be put to the businesses with the capacity of further servicing in the water sector so that the whole picture can be understood.

Prof. Stephen Morse, Dr. Alma Lopez-Aviles,  
Dr. Angela Druckman and Dr. Jonathan Chenoweth (from left)

**The University of Oxford team** leads the mobility sector work package and consists of Prof. David Banister, Dr. Nihan Akyelken, Dr. Karen Anderton and Mr. Andre Neves. The system chosen for study within the mobility sector is the potential to move along the servicing continuum between vehicle ownership, through the currently available methods of sharing to passenger transport in particular city contexts. Specifically, our empirical work will focus on moving away from private car ownership towards serviced vehicle use mainly concentrating on car sharing, bike sharing and carpooling. Currently we are working closely with many of the SPREE project partners, particularly the modelling team at the Delft University of Technology, as we feed our initial research inputs from our chosen UK case study cities London and Bristol into the ABM, and the Jerusalem Institute to Israeli Studies together with Tel Aviv University, who are leading on the policy packaging work within the project.



Mr. Andre Neves, Dr. Karen Anderton  
and Dr. Nihan Akyelken (from left)



**The University of Santiago de Compostela team** leads the agri-food sector work package and consists of Prof. Dr. Xavier Vence, Dr. Manuel González, Dr. Adolfo Carballo and Ms. Ángeles Pereira (predoctoral researcher). We are responsible for identifying servicing opportunities in the agri-food sector and formulating potential policy packages to promote them. Our work also includes the analysis of the role of eco-innovation in facilitating servicing systems as well as developing and adapting specific methodologies for data collection in the sector. The provision of an integral service of crop protection against pests will be further evaluated in order to determine the environmental, economic and social impacts derived from the shift to servicing. In particular, the case will focus on grape growers in the Galician denomination of origin Rías Baixas. Based on a series of indicators we will evaluate the differences between contracting an advanced service of pest control and the conventional practice of applying pesticides. Additionally, we are in charge of collecting data for the water sector case study.

Ms. Ángeles Pereira, Prof. Dr. Xavier Vence,  
Dr. Adolfo Carballo and Dr. Manuel González (from left)

## Project partners



The Jerusalem Institute  
for Israel Studies



Research  
Council of  
Lithuania

The Research Council of  
Lithuania



School for Geography and  
Environment, Transport  
Studies Unit, Oxford University



Centre for Environmental  
Strategy,  
Surrey University



S Y K E The Finnish Environment Institute



Faculty of Technology,  
Policy and Management,  
Delft University of Technology



The International Institute  
for Industrial Environmental Economics,  
Lund University



The Faculty of Management,  
Tel Aviv University



ICEDE Research Group,  
University of Santiago de Compostela



The department of Business Management,  
Ben-Gurion University of the Negev