

Newsletter

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November 2009

SUST-RUS – Spatial-economic-ecological model for the assessment of sustainability policies of the Russian Federation – is a sound scientific support for formulating sustainability policies with the focus on a balanced integration between social, economic and environmental policy objectives.



Dear Colleagues,

It has been almost a year since the start of our project.

This is the second issue of the SUST-RUS Newsletter, and it is all about our progress so far and our plans for the future.

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- **SUST-RUS progress**

We have completed WP1 and now we are working on WP2. By April 2010 we hope to have a simple base model functioning and ready for further tests.

- **Dissemination**

VI-th International Expert Forum on Regional Development Strategies in Vladivostok and interregional conference “Economical development in the modern world: sustainable development and ways of after-crises growth” in Ekaterinburg.

- **Programming language**

CEFIR has organized a long-distance training in GAMS modeling. Now there are more Russian specialists who know the main modeling principles!

- **News and events**

SUST-RUS progress

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We have completed **WP1 (Development of methodology)**. After reviewing the literature on the state-of-the-art spatial-economic-environmental models Salavat Gabdrakhmanov from CEFIR has made the report (D1.1) and described the possible methodology of constructing the SUST-RUS modeling tool (D1.2). This theoretical background can be helpful especially for those partners in our consortium (and all others interested in the economic modeling), who have little experience in this field. Both deliverables are published on our website (sust-rus.org/publications). After our IM3, where ZEW representatives made valuable comments on the structure of SUST-RUS model, we have decided to take into account some particular issues that we have to consider in modeling:

- a) be more realistic in terms of design of the economic block (stick to a static model);
- b) study a possibility to introduce specific extraction sector into the model;
- c) change energy nest to a more conventional form.



At present we are working on our **WP2 (Data collection and analysis)**. In order to develop a consistent equilibrium database for the spatial-economic analysis of Russian regions we need not just collect all relevant data, but also to analyze it and create a set of base-year regional social accounting matrices (RSAMs) with a representative regional household. This is not an easy task given the quality of Russian regional data.

Our Russian partners contributed some valuable regional data and CEFIR is doing a hard job of reconciling it into the working format – so that this data is suitable for the modeling. After CEFIR finish this work, our Russian partners will have to analyze the results and provide their feedback on the data quality and its relevance to their regions' realia.

The result of this WP (D2.1: Description of the constructed database and D2.2: The database for the model) are due in March 2010.

We hope to complete the SUST-RUS model database for regional economic analysis by the end of this year, so that our partners from TML can start their part on the **General structure of the model – WP3**. The work of this work package starts from translating the modeling methodology developed in WP1 to a concrete mathematical formulation of the general model structure. According to our plans, after Christophe Heyndrickx from TML makes the model code, we will plug in it the data and send the results to our Russian partners for assessment – they will see if the data is relevant and can be used in the model. Thus, by April 2010 we hope to have a simple base model functioning and ready for further tests.

In 2010 we are also planning to start **WP4 (Sustainability indicators)**. The aim of WP4 is to construct a consistent set of the economic, social and environmental indicators, which can be calculated using the SUST-RUS assessment model. CEFIR has made some preliminary research on this matter, the key points of which are:

- It is very important to be very precise about the definitions to be able to address the policy makers in the most efficient way.
- We shall start with broader list of indicators and then narrow it down.
- We should look up the list of indicators that Russian regional officials are using.

Based on the constructed set of the indicators the work package will develop a clear methodology for the policy assessment. The main problem addressed will be how to use the sustainability indicators produced by the SUST-RUS assessment tool within a consistent assessment approach which considers the different dimensions involved in the analysis.

Dissemination

One of the SUST-RUS key objectives – dissemination of the knowledge developed, such as the methodological advancements and the results of the assessment of sustainability policy packages. More than that, we have to disseminate and exploit the developed modeling tool for policy evaluations. In order to achieve this objective we have set up a project website where we publish all relevant information for a wide public (www.sust-rus.org).

Along with that SUST-RUS partners participate in scientific congresses with a more generic nature to make sure that all interested scientists and policy makers are aware of the SUST-RUS economic modeling tool and do know how they can obtain and work with it.

Scientific congresses



Natalia Tourdyeva with the presentation "Economic-ecological modeling: an overview of the applied models of the general equilibrium"

Natalya Volchkova, Irina Denisova and Natalia Tourdyeva participated in the VI-th International Expert Forum on Regional Development Strategies (**September 2009, Vladivostok**).

Another public event is scheduled for April 2010. SUST-RUS is planning to organize a round table during the interregional conference "Economical development in the modern world: sustainable development and ways of after-crisis growth" (**April 22-23, 2010, Ekaterinburg**).

Programming language

Another essential part of the SUST-RUS project is the dissemination of modelling techniques. Therefore, in May 2009 Natalia Tourdyeva from CEFIR has organized a long-distance training in GAMS for those partners, who do not have prior experience in building general equilibrium model with GAMS. This training course proved to be very useful, and some demonstrated outstanding results! So we hope that now there are more Russian specialists who know the main modeling principles and may share their knowledge with other scientists in various regions of the Russian Federation.



The SUST-RUS will be modelled using the GAMS modelling software (www.gams.com).

Most parts of the model will be in the MCP (mixed complementarity problem) format with the PATH solver. This will allow for use of the MPSGE (*mathematical programming system for general equilibrium analysis*) language if needed.

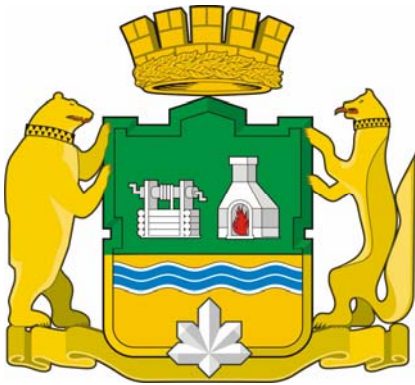
News and events

Scope of work

The detailed Assignments for all participants of the SUST-RUS project are presented in the Minutes of our last Internal Meeting (www.sust-rus.org/events/IM3).

In a few words, by April 2010 we have to consider all issues discussed at the Internal Meeting, make relevant changes to the model structure and prepare the “base model” for tests.

Upcoming events



The city emblem of Ekaterinburg

- IM4 will be held in **Ekaterinburg** on **April 22, 2010**, and on **April 23** the SUST-RUS will organize a public seminar (probably in the form of a round table) during the interregional conference “Economical development in the modern world: sustainable development and ways of after-crisis growth”.
- An important milestone for the SUST-RUS will be in **June 2010** – this will be the end of our first reporting period and the deadline for submitting two deliverables – D3: Description of the general structure of the SUST-RUS model and D4: Description of a set of sustainability indicators for the SUST-RUS. Although the task leader for WP3 and WP4 is TML, all partners will have to make their contributions to the success of all.

SUST-RUS deliverables

We are in the process of building unique products like the database, covering various economic data from seven Federal Districts of the Russian Federation, and a brand new modelling tool for evaluation and planning of sustainable development measures. Our reports on the work progress are published on the SUST-RUS website (www.sust-rus.org/publications) in the form of Draft Deliverables to the EC, and we welcome any comments on our results. Please send them to sust.rus@gmail.com.

We wish you success in your work and will come back to you in our next Newsletter issue!

SUST-RUS Consortium Partners



CEFIR, Russia, Moscow Coordinator of the Consortium

Centre for Economic and Financial Research (CEFIR) was founded in 2000; it is one of the leading Russian independent economic policy think tanks.

Transport & Mobility Leuven NV, Belgium

Transport & Mobility Leuven (TML) clusters the knowledge of both research institutes and applies it to actual policy problems. TML has unique experience with building regional and European general equilibrium models.



Zentrum für Europäische
Wirtschaftsforschung GmbH
Centre for European
Economic Research

Zentrum Fuer Europäische Wirtschaftsforschung GmbH, Germany

The Centre for European Economic Research (ZEW) in Mannheim is one of the leading economic research institutes in Germany. Work in the SUST-RUS project will be undertaken by the Department of Environmental and Resource Economics, Environmental Management at the ZEW. The department has acquired a reputation in expertise in Computable General Equilibrium model building and analysis at the national as well as international (global) level in the field of energy and environmental policies. It has furthermore developed methods for integrating bottom-up technological information into a CGE environment.

Institute For The Economy In Transition, Russia, Moscow

Institute For The Economy In Transition (IET) is an independent non-commercial research organization. The Institute conducts both theoretical and applied studies in the field of economics, consults the agencies of state power of the Russian Federation on issues concerning the problems of economic growth in economies in transition, public finance, monetary and currency exchange policies, privatization policies, corporate finances, restructuring and institutional reform.



Ural State University, Russia, Ekaterinburg

Ural State University (USU) was founded in 1920 in Ekaterinburg, the oldest city in the Middle Ural, situated on the border between Europe and Asia. During its existence more than 50 thousand experts have been prepared; the University is one of the first Russian institutions to prepare a number of holders of a master's degree. Today USU offers an opportunity to get a fundamental education and actively participates in the development of various sectors of the Ural region's economy, using its scientific potential in Natural sciences, social and humanitarian spheres.

Voronezh State University, Russia, Voronezh

Voronezh State University (VSU) has a well-established reputation for excellence in teaching and research and is consistently ranked amongst the top Russian Universities. In the SUST-RUS project the basic attention will be concentrated to problems of regional economy and influence FDI on innovative activity of regions.



Far Easten Center For Economic Development, Russia, Vladivostok

Far Easten Center For Economic Development (FECED) – is a non-government, non-profit organization. The general mission of the FECED is to provide assistance in promoting the effective economic policy on the Russian Far East, deepening of mutually advantageous trade and economic cooperation with the Pacific Rim countries, and developing the domestic and foreign businesses' activities in the region. FECED pays special attention to development of civil society on the regional and municipal levels as an essential condition of social, economical and political development of the Russian Far East.

Statistisk Sentralbyrå – Statistics Norway, Norway

Statistics Norway, as one of the few statistical bureaus in the world, has a substantial research activity. Unit for Petroleum and Environmental Economics primarily study the oil and gas markets, climate change, sustainable development and natural resource management.

