

## ACTIVITY 4. UTILITIES NETWORK ANALYSIS IN THE PILOT TERRITORIES: WASTE MANAGEMENT, WATER SUPPLY AND DRAINAGE SYSTEMS

## KOSTOMUKSHA CITY AND KALEVALA MUNICIPAL DISTRICT

Compiled by Karelian regional Institute of

management, economics and law at PetrSU (KRIMEL)

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Report for WP 1. Spatial planning of remote regions



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## **INTRODUCTION**

This is an English summary of a report dealing with Utilities network analysis of Kostomuksha City and Kalevala Municipal District, which are located in northern parts of the Republic of Karelia. This report has been compiled as part of "Green cities and settlements" (GREENSETTLE) project, which has been financed by Karelia ENPI CBC programme. The research has been done by specialists of the Karelian Energy Efficiency Center (KAEEC). The original report in Russian is available at project's Russian website at <a href="http://greensettle.krc.karelia.ru/section.php?id=10">http://greensettle.krc.karelia.ru/section.php?id=10</a>

## **1. KALEVALA AND KOSTOMUKSHA WASTE MANAGEMENT, WATER SUPPLY AND DRAINAGE SYSTEMS ANALYSIS**

The analysis of utility systems data on water supply and sanitation, as well as the handling of solid waste in Kostomuksha town and Kalevala district were examined. Kostomuksha is characterized by complete coverage of the public services, i.e. population has a centralized system of water supply and sanitation, as well as using the services of centralized collection and disposal of solid waste.

The main problem for the disposal of solid waste for Kostomuksha is absence of waste sorting, as well as the system of disposal of industrial and hazardous waste.

Water systems of Kostomuksha are in satisfactory condition. Due to the current water treatment system can achieve good water quality. Purification of sewage system cannot cope with the required level of treatment. Therefore, the most important priority at the moment is the modernization Kostomuksha sewage treatment facilities. It is also needed to replace the critical parts of the networks.

Kalevala region is characterized by low coverage of services to the population. Especially for water and sanitation systems. In addition, the intake and discharge of waste water are in the immediate vicinity of each other. The main problem with the waste water removal is the complete lack of any kind of treatment. The waste water is dumped to the lake or to the soil which leads to significant environmental pollution. Also due to poor funding monitoring of water quality supplied to the population is not carried out at all.

To improve the situation of solid waste management is necessary to build or reconstruct a new landfill, as well as provision of waste disposal from all consumers.

**Conclusion:** The most serious problem in the Kalevala settlement is a wastewater treatment system and in the elimination of the effect of sewage on water intake.