Biomass in Sewerage Systems Effective Use of Sewage Sludge

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The growing environmental load caused by the consumption of resources and energy is presumed to be causing global warming. The aggressive use of biomass is counted on to help fight global warming, and although sewage sludge and treated wastewater in sewage systems have potential use as resources or energy, their actual use is limited. The NILIM has surveyed the state of the effective use of sewage sludge, treated wastewater, and energy in sewage treatment plants through Japan and summarized sewage sludge recycling rates etc. in order to study, implement, and follow up on measures to promote their effective use.

The sewage sludge recycling rate is the percentage finally reused in terms of its solid dry weight when it is produced, but is an index which does not reflect the effective use of digestion gas. To promote the aggressive use of sewage sludge as biomass, the "Sewage Biomass Recycling Rate" calculation method, which defined "Quantity of organic material in sludge which is effectively used, as energy for gas powered thermal plants or on green farm land" has been established as a new index for the effective use of sewage sludge including the use of digestion gas, and has been computed.

The results of these surveys will be announced publicly by the Ministry of Land, Infrastructure, Transport and Tourism and are applied as basic material in the inventory of the Intergovernmental Panel on Climate Change.