

## Gabriella Kaatis, puppet theatre project



### 1. Summary

Country/Geographical Area	Finland, Tampere Region
Level implementation	Regional
Scale	Roll-out
Waste fraction / Specific Waste Type	Biowaste/food waste
Target Audience	6-7 years old children at preschools and schools in Tampere Region, the second target group were the whole families of these children
Objective	To make the children understand what is food waste and that the food waste causes methane production at the land fill site and that we should decrease the amount of organic waste and that the organic waste has to be separated from other waste types.
Initiator/coordinator	Tampere Regional Solid Waste Management Ltd
Duration	years 2001-2002, 2002 - 2006
Number in Mapping report	71
Drafted by	Tampere Regional Solid Waste Management Ltd, 2.3.2011
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## 2. Context

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Tampere Regional Solid Waste Management Ltd. (TRSWM) is a Finnish company established to manage the solid waste of the region on behalf of its owner municipalities.

The activities of the company include collection, processing and disposal of waste, research and development, as well as consumer advice on waste management issues.

The company was established in 1994 and is currently owned by 17 municipalities including the city of Tampere. The number of employees in 2009 was 59 and the turnover of the same year was EUR 29,1 million.

The region covered has almost 412.000 inhabitants and approximately 27.400 companies of varying size.

The company's environmental management system has achieved ISO 14001 certification. The targets of the company's environmental policy are to reduce the amount of waste, to improve waste recovery and to take care of safe final disposal.

Biowaste is all biological, degradable waste. All houses with at least five apartments must have their own biowaste collection bin (in the municipalities of Hämeenkyrö, Ikaalinen, Kangasala, Lempäälä, Mänttä-Vilppula, Nokia, Orivesi, Parkano, Pirkkala, Pälkäne, Tampere and Ylöjärvi). Others can use their own composter for composting biowaste.

Biowaste is transported to Tarastenjärvi solid waste management site, where it is composted in the composting plant. The ready compost is used for landscaping the landfill site at Tarastenjärvi.

In Tampere Region over 300 kg of household waster were produced per inhabitant in 2009.

### 3. Strategy

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#### *Objectives*

- To decrease the amount of biowaste in particular and waste in general going to the landfills
- To make the children understand what biowaste is
- To make the children understand why biowaste cannot be placed in the landfill, that it causes methane production
- To ensure that the households know how the wastes have to be separated in Tampere Region

#### *Preconditions*

The idea of producing a puppet theatre show came from the information personnel of TRSWM. They decided that the focus of the awareness raising should at that point be children and they wanted to try something innovative and something that they had not done before. Two of the people in charge of the puppet theatre project first participated in a puppet theatre training in order to understand what it was all about. At the training they also met puppet theatre actors that were acting in 'Gabriella the Dump on Diet'.

#### *Procedure*

The initiative for the puppet show was taken by TRSWM. During a year from spring 2001 to spring 2002, the puppet show 'Gabriella the Dump on Diet' was played 168 times and the total audience was 6905. The children of preschools and 1<sup>st</sup> grade pupils, ages 6-7 years from Tampere, Hämeenkyrö, Kangasala, Lempäälä, Nokia, Orivesi and Pirkkala municipalities were invited to the show. A group of six people were in charge of the puppets, the music and the play. All six were puppet theatre professionals employed only for this project. Three teachers from the preschools in Tampere were also on the project management board. With the assistance of the teachers the story and the whole play was made specifically for the children at the age of 6-7 years.

The puppet show 'Gabriella the Dump on Diet' was an innovative way to produce waste prevention information for a young target group. The scene of the play is a landfill with some seagulls. The lady of the dump is Gabriella represents the Dump itself. In the beginning of the play, Gabriella finds out that she has gained 500 000 kilos during the last week and she has to start a diet. At the same time there is a methane monster at the landfill. Fortunately, the rats are clever and they know all about biowaste & methane production and recycling. Gabriella gets thinner when people learn to minimize the amount of waste and compost the biowaste. In the end seagulls leave the dump and fly to the open sea.

Before the show some material on methane production and the role of the biowaste together with some exercises and games were sent to the teachers of the children. At the show, biowaste paper bags & waste separation information were given to the children. The information, activity material, the play itself and the music of the play are available via the Internet for free. There is also a video version of the play and totally about 500 copies were sent to schools, kindergartens and public libraries.

Alltogether, there were 168 shows from spring 2001 to spring 2002 (phase 1). Afterwards, the video was sent to public libraries and to all the counties in Tampere Region that the puppet theatre had not visited. The web pages also included some exercises and the video of the puppet show and some pieces of music composed for the play. From spring 2002 to 2006 there were still more than 50 shows. The project ended in 2006 (phase 2).

## ***Instruments***

Information and activity materials for teachers including exercises and games  
Live puppet shows  
Recorded music and video available online or on CDs and DVDs.

## ***4 .Resources***

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### ***Financial Resources***

The direct costs for employing the puppet theatre professionals and for renting the space for the shows were about 10 000 euros/year.

### ***Human Resources***

The external staff needed included 2 actors (free-lance, part time), 1 producer (part time). Some meetings of the management board were needed. The people in the management board worked on a voluntary basis. Mainly two people from TRSW were involved in the project.

### ***Communication Tools***

Information material about waste prevention was sent to the teachers before the show. Waste separation and biowaste material and biowaste paper bags were given to the audience after the show.

### ***Allocation of resources over time***

About 500 copies of the video of the show were sent to the kindergartens, schools and public libraries.

## 5. Evaluation

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### Results

#### **- Participation**

Children aged 6-7 years with their teachers participated the project. The total audience was more than 8000 and the total number of the shows was about 200. Later 500 copies of the video of the show were sent to the kindergartens, schools and public libraries in the region. The material given to the audience after the show was for the families of the children, the second target group.

#### **- Avoided waste quantities (or toxicity)**

No follow-up studies were made on avoided waste quantities.

#### **- Other results - awareness raising**

Before the show, a questionnaire was sent to the parents of five preschool groups in Tampere and Kangasala. The groups included 79 children. In total, 56 households answered the questionnaire. The questions concerned biowaste and waste separation in general and attitudes towards TRSWM. About 10 % of the households did not separate the biowaste before the puppet theatre show. After the show, among the 79 households, only 23 households answered the questionnaire. Half of the households thought that the puppet theatre affected the children in a good way regarding waste and biowaste separation. Many households answered that after the show the children taught their parents how the wastes should be separated. TRSWM was interested in the impact of the show. The teachers were interviewed and the children drew pictures after the show about what they had experienced. Both the children and the teachers liked the show. The waste and biowaste separation is part of the every-day routines of the children and teachers at the kindergarten and at the schools.

### Impacts

#### **- Avoided Costs**

The avoided costs were not counted but they relate to the avoided quantities of organic waste and the avoided misunderstandings with the waste types separation.

#### **- Avoided CO<sub>2</sub> equivalents**

The avoided CO<sub>2</sub> equivalents were not counted but they relate to the avoided quantities of organic waste and the avoided misunderstandings with the waste types separation.

#### **- Social Benefits**

The shows were great experiences for the children and was also good image work for TRSWM. With the material and the questionnaires the families of children got more information about organic waste, the problems it causes, and about the necessity of waste reduction and waste separation.

### Continuation over time

The teachers wanted similar materials about the wastes and waste prevention. Many teachers liked the music of the play. TRSWM later produced a full CD of music about waste prevention and sustainable consumption. The CD was sent to the kindergartens and schools and public libraries in the region.

## ***Difficulties encountered***

The play was not shown on a regular basis and it was depending on the free-lance actors who were also involved in other projects. It would be easier to organize if the shows were played on regular basis and the schedule for the shows could have been planned once for the whole project.

## ***Monitoring System***

The teachers were interviewed after the show and after the children made the drawings. Families of 79 children were sent questionnaires before and after the show. The main focus of the questionnaires was on biowaste minimization and waste separation, not on preventing the biowaste.

## ***6. Lesson learnt & recommendations***

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### ***Opportunities & Challenges***

The puppet show is an innovative way to introduce waste prevention to the children but this type of awareness raising is not the everyday work of the personnel of the waste management company. It needs a lot of other qualifications and people have to be hired outside the main organisation. Organizing this type of action needs a lot of innovative mind from both, the employee and the employer, good relations with the kindergarten and school teachers and know-how how to find and buy the expertise of the puppet show actors, play writers, costume makers etc.

## ***7. Comparison with similar actions***

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### ***In different location/context***

Can be compared to other good practices with school children

Pre waste Factsheets:

- Let's do it with Ferda in Estonian Schools that also makes use of hand puppets (Pre-waste factsheet 9)
- Accompanied waste prevention projects in schools in the Brussels Capital Region, Belgium (Pre-waste Factsheet 22).
- Food waste at Schools in Halmstad, Sweden (Pre-waste factsheet 29)
- LUDOTECA RIU', centre for school children on waste reuse and prevention, in MarcheRegion Italy (Pre-waste factsheet 107)

European Week for Waste Reduction Award finalists of 2009 in the "schools" category:

- "Sei tu che fai la differenza" - You make the difference in Pozzuoli, Italy  
[www.ewwr.eu/sites/default/files/EWWR\\_2009-case-studies\\_Education\\_7-Circolodidattico-Pozzuoli\\_IT.pdf](http://www.ewwr.eu/sites/default/files/EWWR_2009-case-studies_Education_7-Circolodidattico-Pozzuoli_IT.pdf)
- Reduce for a better consumption (Reduzir para melhor consumir) in Lisbon, Portugal  
[www.ewwr.eu/sites/default/files/EWWR\\_2009-case-studies\\_Education\\_Centro-Educativo-Navarro-De-Paiva\\_PT.pdf](http://www.ewwr.eu/sites/default/files/EWWR_2009-case-studies_Education_Centro-Educativo-Navarro-De-Paiva_PT.pdf)