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LIFE12 ENV/IT/000411



DELIVERABLE n. 35

Report on information exchange – Action E3

Contents:

- This deliverable contains the report of the visits for exchanging of knowledge and experiences with other LIFE project.

1st visit for information exchanges and networking – LIFE CCHP -
<http://www.life-cchp.eu/accueil.html>

The first visit was held the 15th of June 2015 in Manè (FR) for the LIFE project CCHP Envir. Sfi., project number LIFE 09 ENV/FR/000601. This project concerns integrated actions for improving the environmental sustainability of several activities as sustainable buildings, wastewater treatment and waste management. The beneficiary of the project was the Communauté de Haute Provence which includes 8 rural communities. The area of the activities of this project was represented mainly by the ones of the eight municipalities of the Communauté de Haute Provence. Concerning the waste management the LIFE CCHP introduced innovation mainly in the separate collection for increasing the amount of recyclables and reducing the amount of waste disposed of. These two last aspect resulted in compliance with the goals of the LIFE EMaRES project.

Main innovation introduced by the LIFE CCHP was the implementation of a separate collection for plastics, paper and cardboard, glass and residuals. In particular the previous collection system was upgrade by the introduction of road columns for the collection of these waste, realized in each municipality, and by the construction of a ecologic station serving the whole municipalities. These implementation leads to significant reduction in the costs of the waste management and to an improvement of the quality of the whole collection system.

The visit was split in two parts. A first day was dedicated to the visits of the collection system and of the ecologic station (Figure 1 and 2). A second day was dedicated to the exchange of experiences and future networking (Figure 3).

The visit was very fruitful both for exchanging experiences and future implementation of the innovation demonstrated by the two project both for the networking activity. In particular, concerning this last aspect, the LIFE EMaRES team and LIFE CCHP team are working together for finding future possible integrated collaboration.



Figure 1: Systems for separate collection of the LIFE CCHP.



Figure 2. Ecopoint of the LIFE CCHP.



Figure 3. Sharing experiences between LIFE EMaRES and LIFE CCHP projects.



Figure 4. New paper article of the exchange of experiences between the LIFE EMaRES and LIFE CCHP projects.

2nd visit for information exchanges and networking – LIFE BIOLEAR - <http://biolear.eu/>

The second visit was held on 16th of July 2015 on the site of the LIFE BIOLEAR project, project number LIFE09 ENV/IT/101. LIFE BIOLEAR sites were in Cerro Tanaro close to ASTI in the Piemonte region (IT). The aim of the BIOLEAR project was to enhance the bio-stabilization and the amount of energy recoverable from sanitary landfills during post-closure period. The beneficiary of the project was GAIA s.p.a. that is the company charged of waste management in the considered area. In practice GAIA s.p.a. implemented of the closed portion of the Cerro Tanaro landfill a system for recirculating the leachate. This was performed by the construction of a dedicated pipe network able to pump the leachate from the storage tanks to the reinjection system. This latter was realized by drilling reinjection wells around some of the existing well for the collection of the landfill gas. The whole system was equipped with an automation and control apparatus. In this way the optimization of the levels of humidity inside the mass of the disposed waste enhances the biodegradation process leading to an higher generation of landfill gas, rich in methane a exploitable as renewable fuel, and contemporary leading to a more rapid bio-stabilization of the waste. The improvements in the management of landfills resulted of relevance for the management of the residual waste due to the large use of landfill as disposal methods in many Italian and not Italian regions. Even if the aim of the LIFE EMaRES was to increase the amount of recyclable extracted from the waste both by a door to door separate collection and by the mechanical treatment, the improvement of the environmental sustainability of landfill resulted of particular interest also for the partners and for the area of the LIFE EMaRES project..

During the visit there was an important exchange of technological solutions necessary for the innovative management of the landfill and also an important exchange of information concerning the environmental impact analysis.



Figure 5. Sharing experiences between LIFE EMaRES and LIFE BIOLEAR projects.

3rd visit for information exchanges and networking – CRUCOLI municipality - <http://www.comune.crucoli.kr.it/>

The third visit was held on the month of 2nd of July 2015 in the municipality of Crucoli in the province of Crotone (IT) in the Calabria region. Crucoli is a municipality consisting of about 4,000 inhabitants quite equally shared in the old historic centre, on the top of a hill, and in the recent area of Torrette along the Ionian see. The major of Crucoli was strongly interested in the implementation of the results of the LIFE EMaRES project in its municipality and to start collaboration for the improvement of the whole waste management system. Municipalities near Crucoli showed similar features and a strong will to improve their waste management system mainly by a separate collection of the waste for the maximization of the recyclables.

Currently, on average, the separate collection of waste in these areas is < 30% and for this reason there is room for significant improvements. Furthermore in the whole area the landfill still remain the larger management system currently adopted including also the organic waste.

During the visit different activities concerning the improvement of the global waste management system were discussed. The LIFE EMaRES team and the municipality of Crucoli are currently working for the realization of innovative project able to improve the environmental, economic and social efficiency of the waste management system.



Figure 6. Sharing experiences between LIFE EMaRES and the municipality of Crucoli.

4th visit for information exchanges and networking – LIFE MARSS –
http://www.marss.rwth-aachen.de/cms/front_content.php?idcat=1&lang=2&changelang=2

The fourth visit was held on the 11th of November 2015 in Mentendorf (DE) for networking and exchange of experiences with the LIFE MARSS project, project code LIFE11 ENV/DE/000343. The LIFE MARSS project was centred on the mechanical treatment of waste for the Material Advanced Recovery Sustainable Systems. The beneficiary of the project was the University of Aachen (DE). The area of the project was represented by the waste treatment facility of RegEnt GmbH closed to Mentendorf. The LIFE MARSS project goal was the construction of a 10 t/h plant able to process the residual waste for returning an organic fuel. The pilot facility was realized at the site of a full scale bio-drying plant processing about 100 t/day of residual waste collected in the surrounding area for generating a solid recovered fuel exploited in substitution of fossil fuel in a steel factory. The pilot facility consist of different mechanical treatment, as crushing and milling, integrated with sorting and screen systems based on dimensional, fluidodynamic and inertial principles. The pilot facility process the material returned from the previous treatment of the full scale bio-drying facility and returns a product characterized by an high concentration of organic components.

This activity was in line with the B3 and B4 of the LIFE EMaRES project and for this reason the exchange of experiences was very useful.



Figure 7. Sharing experiences between LIFE EMaRES and LIFE MARSS projects.