

## **7<sup>th</sup> Annual Meeting of the European Forum for Disaster Risk Reduction (EFDRR)**

### **Field Trip - 04 October 2016, Helsinki, Finland**

#### **Field trip to Ekokem: <http://www.ekokem.com/en/>**

In the Tuesday afternoon EFDRR-participants had a field trip to Ekokem Group. For the past 35 years, all the companies in the Ekokem Group have been working to conserve natural resources and eliminate hazardous substances from circulation. Now Ekokem is focusing on the circular economy business by developing new ways of utilising waste as raw materials. The goal of Ekokem is to direct twice the amount of materials to reuse by 2017.

The visit was divided in three parts. First presentation was a general presentation on Ekokem. Second part was a presentation about dismantling Syria's chemical weapons programme and the role of Ekokem in that. The third part was a visit to the control room of hazardous waste treatment.

#### **Ekokem Group**

Ekokem's top services are recycled materials, environmental construction, waste management, environmental expertise and hazardous waste treatment. Ekokem has built a Circular Economy Village in Riihimäki. Materials included in municipal waste will be processed further through the Eco Refinery, Finland's first Plastic Refinery and the Bio Refinery. The Circular Economy Village is a unique concept, in which the best possible form of recycling has been developed for every waste stream together with Biotehdas Oy.

The Eco Refinery will take municipal waste and separate about 37% of bio-waste, 10% of plastic and 3% of metal from it. In the Circular Economy Village, the recycling rate of municipal waste will rise to 50 per cent and the utilisation rate to 98 per cent. 100,000 tonnes of municipal waste will be treated at the plants each year.

To be completed in 2016, the Ekokem Circular Economy Village located in Riihimäki, Finland is a big step towards the realization of the circular economy. During the construction phase the Circular Economy Village provides around 100–160 full-time equivalents of employment and, once completed, will have 20–30 employees.

#### **Ekokem's role in Syria's chemical weapons programme**

Finland, along with the rest of the international community, has had a strong role in supporting the OPCW-UN Joint Mission that has been implementing the dismantling of Syria's chemical weapons programme. This has been a unique mission, and a large group of countries has been involved in its various stages.

Finland supported the OPCW's activities right from the start, granting financing for the OPCW trust funds established in support of the mission. In addition, a Finnish CBRN team (chemical, biological radiological and nuclear, CBRN) that ensured the safe transport of the chemicals participated in the maritime transport operation led by Denmark and Norway. The Finnish unit consisted mainly of personnel specialized in CBRN reconnaissance and the safe and secure handling of chemical materials. Ekokem was involved in this central task having won the OPCW tender on the destruction of chemicals by commercial facilities.

#### **Control room**

The control room visit was nicely connected to the process of hazardous waste treatment. The process and its stages were explained at general level. The hazardous waste treatment is done by burning the waste in kiln in high temperature (over 1 100 Celsius).

Even though the kiln was not in use because of maintenance the different stages of the process could be illustrated on the screen.