



Kingdom of The
Netherlands

United Nations
Development Programme



Study tour in Austria

September 22 – 26, 2008

Presentation by Bosnia and Herzegovina team



Presentation overview

- Participants;
- Study tour goals;
- Agenda;
- Site by site report – staff we have seen;
- Participants overview;



Participants

Selection of participants has been made in accordance to overall project structure in B&H:

- Representative of the Ministry of foreign Trade and Economic Relations of B&H, Mrs. Vanda Medic;
- Representative of Thermo-power Plant Ugljevik, Mrs. Bosiljka Stojanovic;
- Representative of the Municipality of Tuzla, Mr. Teufik Cackovic.
- Representatives of UNDP BH Hot Spots project, Mr. Djordje Stefanovic and Mr. Sinisa Rodic



Goals

- According to previously agreed plan, for B&H and Serbia the planed **study tour was with focus on “Clean Technology”**;
- See on spot, work of factories and plants with high technology in function of prevention and improvement in environment;
- Communication with an experts in Austria, the way of work – way of establishment of plants – problems – daily activities as well as benefits for local community and environment;
- Recognize possibilities for application of Austrian experiences in B&H



Agenda - overview

September 22, 2008 – Arrival to Vienna

September 23, 2008 - Visit to Dairy, waste water treatment plant nearby Dairy and Center for collection of selected waste;

September 24, 2008 – Visit to Sugar factory, waste water treatment plant in Sugar factory location and visit to waste water treatment plant in Vienna;

September 25, 2008 – Workshop in the premises of Austrian agency for environmental protection – IPPC Presentation and presentation on process of development of waste water treatment plant in Vienna, Visit to Hazardous waste incinerator, Visit to newly opened plant for Communal waste



Diary

- Besides in Austria, the factory is exporting diary products in most of the western European countries;
- Factory produces around 300 different products;
- Sells over 3 millions units per year;
- Milk is collected from farmers in surrounding area and frozen fruits is imported from Germany;
- Packaging is produced within the factory;
- By reducing of the size and weight, therefore reduction of expenses for environmental protection the factory is making additional savings (by reduction of weight of yoghurt package the factory is saving 1 million EUR per year)

Diary





Waste water treatment plant I

- Projected capacity of equivalent to 120 000 inhabitants;
- Dairy was involved in investment of waste water treatment plant;
- Covers the needs of the town and Dairy;
- Plant has the system of selection of dry material and pools for chemical and biological water treatment;
- Constant measurement of waste water quality;
- Part of the dry material is used as land fertilizer;

Waste water treatment plant I





Center for collection of selected waste

- Opened for free of charge collection of communal waste. The precondition is that the waste is pre-selected.
- Center is collecting even some dangerous waste such as engine oil, refrigerators, various machinery, construction waste etc.;
- Common interest;
- Non dangerous waste treatment – used for fertilizer;

Center for collection of selected waste





Sugar factory

- Works only in season;
- Our visit was at the opening of 2008/2009 season and therefore we were not able to visit the production area;
- Sugar factory works in cooperation with row material produces in surrounding area;
- Works fully in accordance to environmental regulations;
- Waste water treatment plant covers the neighboring settlement and the factory itself;
- Common investment of the factory and local community;
- Water treatment plant covers pre-treatment of waste water, washing of row material, selection of earth from row material and bringing it back as fertilizer;

Sugar factory





Waste water treatment plant in Vienna

- The plant is located in neighboring area of waste incinerator;
- Projected capacity is equivalent of 4,2 million citizens;
- Made of two parts – new and old;
- Separation of dry component, precipitator, chemical and biological treatment;
- Water quality after the treatment is of 2nd category;
- Part of dry component is used as humus;
- Precipitator is directly connected to incinerator;

Waste water treatment plant in Vienna





Agency for environmental protection

- IPCC presentation;
- On behalf of Austria, the Agency is negotiating about conditions and new regulations in context of IPPC implementation;
- Efficient IPPC scheme involves all government levels;
- Water protection with high results;
- 99% of households in the system of waste water collection and 92% in the system of waste water treatment;
- Estimated cost of waste water treatment plant construction is approximately 5,000 EUR per household and running cost is approximately 200 EUR per household per year.

Agency for environment





Hazardous waste incinerator

- Located in neighboring area of waste water treatment plant. Also, next to Hazardous waste incinerator is solid waste incinerator;
- Incinerators are managed by special company established by the city of Vienna;
- Hazardous waste incinerator is attested for all types of waste;
- Prior to incineration waste is first pre-selected;
- Special treatment is on testing of medical waste on radioactive components;
- Incinerator runs as commercial basis and serves wider region;
- In cooperation with local policy, incinerates drugs and tobacco products;
- Small part of dry component is exported to Germany for disposal;
- Aero pollution is constantly controlled and data show that it is within 1% of approved limits.

Hazardous waste incinerator





Solid waste incinerator

- Newly build plant;
- Before treatment the technology separates all waste;
- Both incinerators are completely Austrian technology;

Solid waste incinerator





Thank you very much !!!