Workshop of Waste Recovery & Recycling

Belgrade
15th June 2010

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.A.S.A. Group Profile
Introduction

- .A.S.A. is a MULTINATIONAL GROUP OF COMPREHENSIVE ENVIRONMENTAL SERVICES COMPANIES

- With over 4 000 employees in 9 countries .A.S.A. plays a key role in meeting increasing demand for healing and preserving the ecology environment in Central & Eastern Europe

- As a member of FCC Group .A.S.A. is part of world-wide group:
  - with over one hundred years of FCC history
  - based on a **solid culture** and **corporate values** which are summarised as:
    - responsibility
    - trust
    - integrity

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.A.S.A. Group Profile
Ownership Structure

FCC Group
General Information

- .A.S.A. officially belongs to FCC Group since march 2006
- Belonging to **the 5 biggest companies** providing environmental services **worldwide**
- One of the largest **Service and Construction** companies in Spain
- 2008 net sales of 14 **billion Euro**
- More than 93.000 employees
- Activities in **Europe, Asia, North and South America**

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.A.S.A. Group Profile
Development

- 1988 Foundation by ÖIAG (Holding and Privatisation Management for Austria)
- 1990 Start-up in Eastern European countries
- 1993 Change in ownership, M&A by EDF (Eléctricité de Francé)
- 1996 First-time exceeding 1.000 head counts
- 2001 Opening .A.S.A. headquarter in Himberg
- 2005 Change of ownership, takeover by FCC
- 2006 Start of first .A.S.A. incineration project in Austria
- 2007 Start-up in Serbia and Lithuania
- 2008 Start-up in Bulgaria

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.A.S.A. Group Technologies
Plants and Equipment

- Trucks and special vehicles: more than 900
- Collection and transport containers: 270 000
- Sorting plants: 10
- Automatic splitting plants: 3
- Mechanical / biological treatment plant: 1
- Chemical / physical treatment plant: 1
- Treatment plants for alternative fuels: 7
- Solidification / contam. clean-up plants: 2
- Landfills: 22 (19 of which are owned)
- Household /commercial-waste-incinerator: 1

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.A.S.A. Group Services

Service Structure

.A.S.A. is technology leader in CEE countries

.A.S.A. Group Services
Service Structure

- **Logistic Services**
  - Collection / Separate Collection
  - Transport
- **Treatment**
  - Sorting / Splitting
  - Biological Treatment / Composting
  - Chemical – Phys. Treatment
  - Residue fuel production (RDF)
- **Disposal**
  - Incineration
  - Landfilling
- **City Services**
  - Street – cleaning
  - Winter – services
  - Greenery
  - Cemetery – operation
  - Other communal services
- **Remediation**
- **Outsourcing**
- **Consulting**

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A.S.A. Group Services
Establishment of a modern Waste Management System

- 1st step – Safe landfill according to EU-Standards
- 2nd Step – Collection and Environmental Awareness of Population
- 3rd Step – Implementation of separate Collection
- 4th Step – Composting, Sorting and Recycling of Waste
- 5th Step – Treatment of Waste (e.g. MBA, incineration)

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Sandwich Approach

Establishment of a modern Waste management system

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Step 1
Safe landfill according to EU-Standards

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Step 2
Collection and Environmental Awareness of Population

- Start of waste collection and transport from trade and industry and municipalities (all waste must be delivered to a SAFE landfill first)
- Improvement of landfill operation (ISO Certification, Gas Utilization, etc.)
- Raise Environmental Awareness
  - Education of the population
  - Programs in kindergarden, schools, …..
  - Cooperation with NGOs, Social Associations
  - Events (e.g. Competition for schools, Events at the WM Center, ...)
  - Common Program with the local authorities

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Step 3
Implementation of separate Collection

- Pilot tests of separate collection (parallel with education program)
- Education and start up events (schools,…) and flyers

Step 4
Composting, Sorting, Recycling

- Construction of composting, sorting plants and/or RDF-plants (according to the results of the pilot tests)
- Utilization of separate collected as RDF (=alternative fuel)
- Improvement of separate collection
- Increased efforts in education of the population
- Improve separate collection of trade and industrial waste

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Step 5
Treatment of Waste

- Construction of composting facilities, sorting plants, RDF-plants or plants for mechanical-biological treatment (MBT)
- Utilization of separate collected as RDF (=alternative fuel)
- Improvement of separate collection
- Increased efforts in education of the population
- Improve separate collection of trade and industrial waste

Further Improvement
Waste Incineration

- .A.S.A. also provides Waste Incineration
- The newest incinerator is located in Zistersdorf/Austria

- Planning
- Engineering
- Construction
- Operating

} performed by .A.S.A.

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.A.S.A. Group Services
Service Overview in pictures

- Collection / Transport

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.A.S.A. Group Services
Service Overview in pictures

- Transfer station

Mezöheyges (Hungary)

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Service Overview in pictures

- Treatment

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Service Overview in pictures

- Landfilling

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Service Overview in pictures

Municipal and Commercial Waste Landfill Tainach (Austria)

Municipal and Commercial Waste Landfill Prague (Czech Republic)

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.A.S.A. Group Services
Service Overview in pictures

- Incineration (Zistersdorf/Austria)

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Service Overview in pictures

- Other Services

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Thank you for your attention

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