



ISWA
International Solid Waste Association



ISWA *Austria*
International Solid Waste Association

Study Tour **WASTE-TO-ENERGY**



September 24 – 28, 2012

Seminar and Technical Tour to 10 Plants in Operation

Vienna (Spittelau, Pfaffenau, Simmering) ⇒ Zwentendorf ⇒ Gmunden ⇒ Linz ⇒ Lenzing

PROGRAMME

INTRODUCTION

Practice Seminar on Sustainable Waste Management in Austria based on Prevention, Recycling, Recovery, Treatment, and Intermediate Storage - without any disposal of organic wastes exceeding 5 % TOC in landfill



Led by

Franz Neubacher

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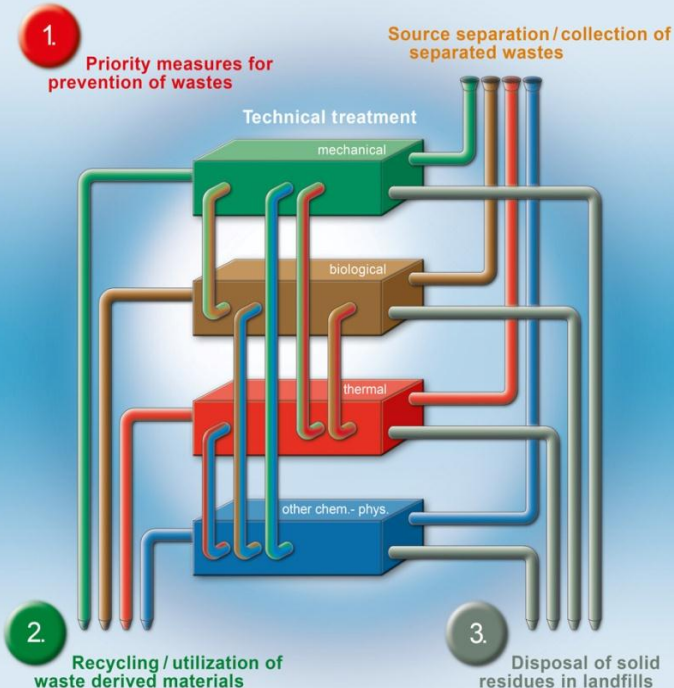


Method for the Practice Seminar

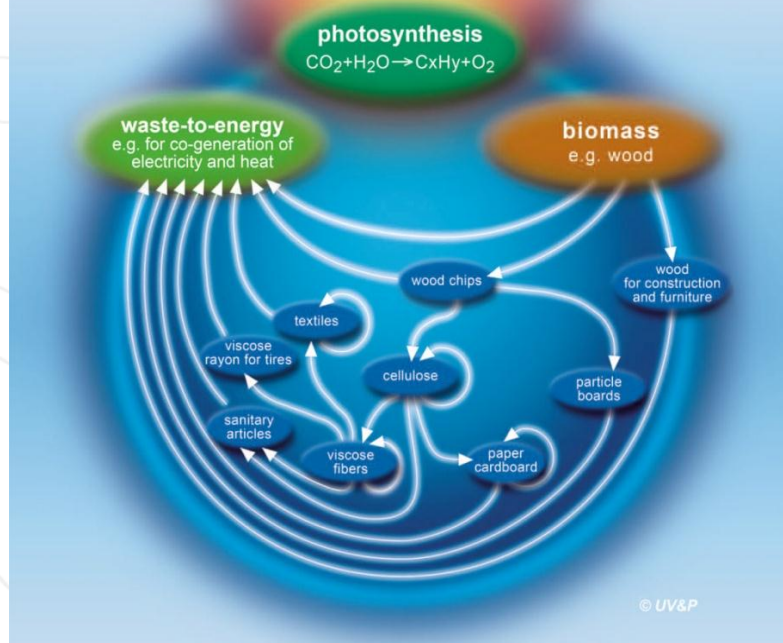
There are 3 pillars of individual benefit and professional learning offered within this unique practice seminar:

1. Quality seminar taught by senior experts in waste management, environmental policy, and engineering
2. Visits to waste treatment facilities representing Best Available Techniques including discussion with operators, government inspectors, and reputable suppliers
3. Discussions with political and environmental experts on control and acceptance of hazardous waste treatment and waste incineration plants (typical “lulu” projects - locally unwanted land use and “NIMBY” – not in my backyard)

Future-oriented Systems for Sustainable Waste Management



Green Technology: Recycling and Recovery for Sustainable Waste Management



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MONDAY, September 24, 2012

08.00 am – 09.50 am

Welcoming Address by ISWA International and by ISWA Austria

Perspectives for Waste-to-Energy in Developing Countries, Introduction by Bettina Kamuk
Chair of the ISWA Working Group on Energy Recovery

09.50 am – 10.20 am

Coffee & Tea break

10.20 am – 12.00 pm

Seminar on “Development of Waste Management in Austria and EU”

Policy and legal framework in Austria: landfill tax and clean-up of contaminated sites, legal ban on hazardous wastes and untreated wastes exceeding 5 % TOC from disposal in landfills, political discussions and development of the most stringent emission standards worldwide

12.00 pm – 1.30 pm

Lunch Buffet

1.30 pm – 2.20 pm

Seminar on “Waste Incineration and Integrated Pollution Prevention and Control”

Fundamentals of drying, pyrolysis, gasification, and combustion – abatement and control of atmospheric emissions – chemicals – liquid and solid residues – recovery of materials

2.20 pm – 2.40 pm

Coffee & Tea break

2.40 pm – 3.30 pm

Seminar on “Systems for Thermal Waste Treatment and Energy Recovery”

Characterisation of wastes as a fuel – sorting and pre-treatment of wastes – fluidised bed systems – rotary kiln with afterburning chamber – grate system – practical experience and limitations for specific wastes in various systems according to state-of-the-art in Austria and EU

3.30 pm – 4.00 pm

Transfer by metro to Waste-to-Energy Plant Spittelau

4.00 pm – 5.30 pm

Technical Tour of the [WtE Plant Spittelau](#)

Historic overview of WtE and district heating in Vienna – technical presentation of the plant (site visit of waste reception – control room – etc.)



5.30 pm – 7.00 pm

Bus tour to the central landfill of Vienna “Rautenweg” with overview on the historic development of waste disposal and the gradual improvement of the landfill site incl. utilisation of landfill gas



7.00 pm Return to hotel - Evening open for individual program



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TUESDAY, September 25, 2012

08.00 am – 08.20 am

Transfer to Pfaffenau

08.20 am – 09.50 am

Seminar on “Analysis of composition and options for material recovery of mixed solid wastes” (special presentation by senior waste management expert Walter Hauer):
General overview - seasonal fluctuations and regional differences in waste composition - development and impact of source separation, sorting and material recovery - statistical methods - practical examples of failures and successes in the development of waste recovery

09.50 am – 10.10 am

Refreshments

10.10 am – 12.00 pm

Technical Tour of the [WtE Plant Pfaffenau](#) and [Biogas Plant Vienna](#)

Technical overview including waste collection, storage, specific treatment of various residues and emission control – site walk of the technical plants



12.00 pm – 01.00 pm

Lunch at the cantina

01.00 pm – 03.00 pm

Technical Tour of the [WtE Plants at Simmering](#)

Historic overview of hazardous waste and sewage sludge treatment at the central site of Vienna Simmering – technical presentation of rotary kilns for hazardous wastes and fluidised bed systems for sewage sludge and specific wastes – emission control – international cooperation and controlled waste imports - site visit of waste reception and control room – questions & answers



03.00 pm – 04.00 pm

Bus transfer to WtE Plant EVN in Dürnrohr/Zwentendorf

04.00 pm – 06.00 pm

Introduction and Technical Tour of the WtE Plant in Lower Austria

Technical overview of the largest waste incineration plant [EVN](#) in Austria and energy efficiency in combination with the adjacent coal-fired power plant - emission control and monitoring - transport logistics for waste and residues - treatment and disposal of slag - site walk

06.00 pm – 09.00 pm

Bus transfer including a refreshment stop and outside look at the famous Austrian “Nuclear Power Plant” Zwentendorf at the Danube (never in operation) , bus trip through the scenic valley of Wachau to Ybbs entering Highway A1 to Upper Austria for stay over at the Seminarhotel Grafengut in Attersee (directly on the Attersee – the largest lake in the historically famous and scenic region of Salzkammergut)



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WEDNESDAY, September 26, 2012

09.00 am – 10.30 am

Seminar on “Alternative systems for treatment of residual municipal wastes with options for energy recovery”

Technical alternatives according to the legal framework in Austria - mechanical sorting - biological treatment - intermediate storage - incineration - energy efficiency - green house gas emission balances - experience and foreseeable future development

10.30 am – 11 am

Coffee & Tea break

11.00 am – 12.30 am

Seminar on “Criteria for site selection for new WtE facilities”

Criteria for project development - demand for energy recovery - transport logistics and infrastructure - economic considerations - public information and acceptance - historic and recent examples in Austria

12.30 am – 2.00 pm

Lunch

2.00 pm – 2.40 pm

Bus transfer to Ohlsdorf / Gmunden

2.40 pm – 3.50 pm

Technical Tour of Recycling and recovery of fuel from tires and rubber

[ART and ERG in Ohlsdorf](#)

3.50 pm - 4.30 pm

Bus transfer to Gmunden

4.30 pm – 5.30 pm

Technical Tour of the Cement Plant in Gmunden

Technical overview of the cement plant and of waste derived fuels for cement clinker production - quality management - emission control - questions & answers - site walk of the technical plant including waste fuel reception, dosing systems, control room, and laboratory for quality control

5.30 pm – 8.00 pm: Bus transfer to Nussdorf incl. dinner at scenic alpine location (optional stop at the manufacture and craft shop Gmundner Ceramics)



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THURSDAY, September 27, 2012

8.00 am – 9.30 am

Seminar on “Prevention and control of fire hazards”

(special presentation by Prof. Harald Raupenstrauch, Chair of Thermal Processing Technology at the Montanuniversität Leoben and by Gerhard Gresslehner, Chief of Professional Fire Fighting Department in Linz and Representative of Austria in the International Firefighters Association CTIF):

Preconditions and causes for fire hazards in waste treatment facilities and storage of (organic) wastes – state-of-the-art requirements in Austria and EU – design, operation and control of large intermediate storage of organic wastes and waste-derived fuels –examples of failures and reference for appropriate intermediate storage of high calorific wastes

9.30 am – 10.00 am

Coffee & Tea break

10.00 am – 12.00 pm

Bus transfer to Kematen / Ybbs

12.00 pm – 2.00 pm

Welcome buffet and **Technical Tour of metal recovery and sorting plant [METRAN](#)** in Kematen / Ybbs

02.00 pm – 03.00 pm

Bus transfer to Linz

03.00 pm – 05.00 pm

Technical Tour of the Waste-to-Energy plant [RHKW](#) in Linz

Technical overview of waste management and treatment of municipal solid waste and residues from sewage treatment, site walk of the new fluidised-bed waste-to-energy plant RHKW

05.00 pm – 07.00 pm

Reception (B2B Meeting) by the [Austrian Chamber of Commerce \(WKO\)](#) in Linz

Welcome address and buffet sponsored by the Austrian Chamber of Commerce with the option for B2B Meeting with reputable suppliers of various machinery and turn key equipment successfully used in WtE facilities in Austria and EU

07.00 pm – 08.00 pm

Return Trip to Seminarhotel Grafengut at Lake Attersee



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8.00 am – 9.30 am

Seminar on “Examples for project development, potential conflicts and public acceptance of new WtE facility in sensitive regions with tourism and organic farming”

Examples for presentation of project alternatives – selection of appropriate sites – public information – option for a control panel with local representatives and critical citizens - management of public hearings – role of media and politicians – positive examples for acceptance of large WtE facilities by Green activists and Green politicians in Austria (discussion with Dr. Johann Wimmer, Environmental State Attorney in Upper Austria 1990 – 2007)

9.30 am – 10.00 am

Coffee & Tea break

10.00 am – 10:30 am

Bus transfer to Lenzing

10.30 pm – 12.30 pm

Technical Tour of the WtE Plant in Lenzing

Technical overview of integrated waste management services provided by [AVE](#) focusing on waste-to-energy facilities including site visit of waste incineration in a large fluidised bed boiler integrated in the industrial production of Lenzing

12.30 pm – 4.00 pm

Bus transfer to Vienna incl. lunch (stop at the airport as needed prior to visiting Lobau)

4.00 pm – 5.00 pm

Option: Technical Tour of the central Composting Plant Lobau / Vienna

17.30 Bus transfer to airport or city center Vienna



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REGISTRATION

The deadline for registration is **September 10, 2012**. Please register with **Ms Julia Schönherr** by using the **Registration Form** (see attachment or [here](#)). Registration will only be accepted in written form (E-Mail or Fax) and will be acknowledged by E-Mail within 7 days after submission.

Early Bird Registration Fee (Registration and Payment latest by July 31, 2012)*:

- 1 person, ISWA Member € 2,400 (approx. US\$ 3,200 / CAN\$ 3,100 / GB£ 2,000)
- 1 person, Non-Member € 2,700 (approx. US\$ 3,600 / CAN\$ 3,500 / GB£ 2,300)

Registration Fee (Registration or Payment after July 31, 2012)*:

- 1 person, ISWA Member € 2,600 (approx. US\$ 3,500 / CAN\$ 3,400 / GB£ 2,200)
- 1 person, Non-Member € 2,900 (approx. US\$ 3,900 / CAN\$ 3,800 / GB£ 2,400)

*A total of 5 Participants from 5 different low- and lower-middle-income economies (according to the current [World Bank list](#)) receive a 50% discount on the registration fee. The discount is awarded on a first-come-first-serve basis.

All stated amounts are free of VAT. Registration fee includes accommodation with breakfast from September 23 to 28 (2 nights at a hotel near the city center of Vienna, 3 nights at [Seminarhotel Grafengut](#) at Lake Attersee), handouts, refreshments, lunch and dinner, transportation and visits to waste treatment plants. On registration seminar participants accept all accommodation arrangements organised by ISWA.

The conference programme is subject to change .

The number of participants will be limited to a maximum of 25 persons due to the nature of the programme.

Cancellation

Any cancellation of registration must be submitted in writing to ISWA, Ms Julia Schönherr

- by E-Mail to jschoenherr@iswa.org or
- by Fax to +43 1 253 6001 99.

Cancellation and refund will be subject to the following conditions:

- | | |
|---|------------|
| • Cancellation until Sept 1, 2012 | 50% Refund |
| • Cancellation between Sept 2 and Sept 22 | 10% Refund |
| • Cancellation on Sept 23, 2012 or "no show" | no refund |

Registration may be transferred to a nominated representative.

In case of cancellation of the event due to unforeseeable events, ISWA will refund the registration fee but no other costs incurred prior to cancellation of the Study Tour.

Certificate of Participation

Participants will receive a certificate for participation in the ISWA Study Tour and Practice Seminar "Waste to Energy".

For further technical Information see ["White Book Waste-to-Energy in Austria"](#)

For organisational matters please contact Ms Julia Schönherr

ISWA – International Solid Waste Association, www.iswa.org

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ISWA Study Tour
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REGISTRATION FORM

Please register with Ms Julia Schönherr

- per Fax **+43 1 253 600 199** or
- per E-Mail: jschoenherr@iswa.org

I hereby register myself for the following event:

*ISWA Study Tour "Waste-to-Energy", September 24 – 28, 2012
(Recommendet arrival: latest September 23, 2012)*

Title, First- and Last Name

Company Name/Organisation

Address (Street/Number, ZIP Code, City, Country)

.....
Address for invoice (if different from the company address)

Telephone/Fax: _____

E-Mail: _____

ISWA Member Number: _____

On payment of registration fee, following receipt of invoice, the bank transfer must clearly state the name of the participant and the name of the seminar.

Date:

Signature:

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