



kompost  
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verband

 Bundesministerium  
Nachhaltigkeit und  
Tourismus



# Successful Bio-Waste Recycling

**5-Day Study Tour & Training Course \***

**Austria, 15 to 20 September 2019**

**\* PLUS EUROPE'S LARGEST SHOW & EXHIBITION OF COMPOST & BIOMASS PROCESSING MACHINES AS PART OF THE**

**International Practitioner Day & Exhibition**

*Site visits + B2B meeting with operators and authorities*

- ☞ **Compost** (150.000 tpa) and **biogas** (25.000 tpa) plants of the **City of Vienna**
- ☞ The practice of **separate collection of all types of bio-waste**: Organisation, responsibilities, partners, economics, information & education work
- ☞ **Open windrow composting** of food waste, garden & park waste, sewage sludge with and without aeration
- ☞ Innovative **separation techniques for impurities** (plastics, metals, glass, stones)
- ☞ Biogas plant – bio-methane fuel production and CO2 recovery, digestate use
- ☞ Composting: **Quality & process management** and monitoring
- ☞ **Inter-municipal cooperation** for recycling
- ☞ **Europe's biggest show of bio-mass and compost processing machines**

## *Lectures and Seminars*

- ☞ Strategic, economic & **regulatory framework** ☞ **Technical standards** for composting & AD
- ☞ Product **quality standards** ☞ Public relations and **stakeholder involvement**
- ☞ **Agricultural cooperation** in decentralised collection and **on-farm composting**
- ☞ **Biology of composting**: key learnings in HUMUS production
- ☞ **Hygiene & odour management**, documentation, monitoring & reporting
- ☞ Compost / digestate **markets und use** ☞ compost substrate production

## *Cultural program as a surprise*

### **Voices from past study tours:**

★ "This Tour is an excellent combination of theoretical concepts and technical visits, especially knowing the path they have taken in Austria to make the valorisation of organic waste a state policy. Very happy to have done it." **Liz Peralta (Argentina)** ★ "I strongly recommend to anyone wanting to get a proper understanding on composting and organic recycling to learn from Florian – he has so much to offer." **Donavan Farrel, goORGANICSwA, Composting Plant (Australia)** ★ "Your course exceeded my high expectations and I enjoyed every moment. For me it represented excellent value for my time and money." **Angus Johnston, Principal Consultant, Jackson Environment and Planning Pty Ltd, (Australia)** ★ "A very important practitioner course to attend for waste management professionals, don't miss the opportunity to attend this program and enjoy the sights in Austria. Not to mention Florian is an excellent Course Coordinator!" **Paul Selvam Devadoss, CEO Robin Paul Group (Malaysia)** ★



## PROGRAM

Tour language: ENGLISH



### Arrival in Vienna – Sunday, 15 Sep

18:00

Welcome Reception




### Day 1 – Monday, 16 September

08:00-08:30	Registration in Hotel
08:30-09:15	Drive to Waste Management Centre Vienna
09:15-10:00	Welcome by KBVÖ - Tour de Table - Introduction - Forecast
10:00-11:00	Key elements and framework of successful bio-waste management – experience from Europe and Austria – strategic & legal background, key features, quantities, current development (Florian Amlinger, 100NGO, European Compost Network & Ulrich Kremser, Federal Ministry for Sustainability and Tourism)
11:15-12:00	 <b>Biowaste management of the City of Vienna</b> (1.9 mio inhabitants, 780,000 households – separate collection, splitting of garden waste and kitchen waste; current projects; economic instruments, costs and waste charge system (Wojciech Rogalski, <a href="#">City of Vienna - MA48</a> );
12:00-12:45	 <b>Lunch Buffet: Iss mich! – Bio Catering</b> <a href="https://www.issmich.at/">https://www.issmich.at/</a>
	sponsored by: 
12:45-13:30	<ul style="list-style-type: none"> <li>Visit <a href="#">Vienna biogas plant</a> for commercial food waste (25,000 tpa)</li> <li>Visit <a href="#">Vienna composting plant</a> for bio-waste and garden waste (150,000 tpa)</li> </ul>
15:30-16:00	Drive to Bioforschung Austria
16:00-18:00	 <b>LECTURE &amp; DEMONSTRATION: Compost, an important element in ecological soil and humus management</b> (Eva Erhart, <a href="#">Bioforschung Austria</a> )
19:00	<b>Dinner:</b> 
	sponsored by: 





## Day 2 – Tuesday, 17 September

08:15-09:00	Drive to BIOGAS plant Margarethen am Moos
09:00-10:15 	<b>EVM Biogas Energy Supply Margarethen am Moos LTD – (60,000 tpa):</b> liquid fermentation of agricultural by-products, energy crops, manure; upgrading bio-methane & gas station, use of CO <sub>2</sub> for greenhouse production (Fritz Schwarz) <a href="https://evm-bioenergie.jimdo.com/english/">https://evm-bioenergie.jimdo.com/english/</a>
10:15-11:15 	<b>General conditions for successful AD in bio-waste recycling:</b> capacities, green electricity law, feed in tariffs general economics etc. (Alex Luidolt, KBVÖ/Compost & Biogas Association Austria) <a href="http://www.kompost-biogas.info/">http://www.kompost-biogas.info/</a>
11:30-12:15 Technisches Büro <b>HAUER</b> Umweltwirtschaft GmbH	<b>Integrated waste management planning for recycling</b> – Why source separation makes sense – which facility serves which purpose including residual waste processing (Walter Hauer, tbh Hauer, Consulting Engineer Environment Management)
12:30-13:30	Lunch
13:30-14:45	Drive to KVA Ziegler in Herzogenburg
14:45-16:30 	<b>KVA Ziegler – Open Windrow composting of SEWAGE SLUDGE:</b> processes, technique of composting, markets, CO <sub>2</sub> & Temperature measurements <a href="https://www.kva-ziegler.at/">https://www.kva-ziegler.at/</a>




16:30-17:15	Drive to Hotel
17:15	Dinner:







<https://www.weissenkirchen-wachau.at/>



<http://www.hotelrose.co.at/>

19:00-20:30 	<b>LECTURE:</b> National and International Quality Assurance Scheme for Compost – data monitoring and reporting (Sandra Uschnig & Florian Amlinger - Compost & Biogas Association, Austria) + Q & A - round table talks
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## Day 3 – Wednesday, 18 September

08:30-09:00	Drive to Composting Plant Seiringer - Wieselburg
9:00-10:30	 <p><b>Innovative Composting techniques – ~ 20.000 t composting plant:</b></p> <ul style="list-style-type: none"> <li>• Separation and pre-treatment of different organic waste fractions before composting or anaerobic digestion</li> <li>• Efficient forced aeration with and without bio-filter systems</li> <li>• Composting boxes, tunnels and containers</li> </ul> <p>Seiringer Environmental Service &amp; composting plant / Compost Systems Ltd.  <a href="http://www.seiringer.at/">http://www.seiringer.at/</a>; <a href="http://www.compost-systems.com/en/">http://www.compost-systems.com/en/</a></p>
11:00-11:30	Presentation Compost Systems
11:30 – 12:30	 <p><b>LECTURE: Collection schemes for Bio-Waste: combined collection of kitchen and garden waste</b> (Johann Wurzenberger) <a href="#">Waste Management Association Scheibbs</a></p>
12:30-13:30	<p>Lunch</p> <p>sponsored by: </p>
13:30-14:45	Drive to Wels
14:45 – 17:30	 <p>O.Ö. Landes-Abfallverwertungsunternehmen AG (Upper Austria Waste Recycling Enterprise Inc.) – <b>Logistics, performance and economics of an provincial integrated municipal re-use and recycling cooperation</b>  Christian Ehrenguber, CEO</p>
18:00 – 19:30	Dinner
19:30-20:30	Drive to hotel



## Method for the Seminars

This unique series of best practice seminars offers five distinct elements for individual benefit and professional learning:

1. Seminars taught by senior experts of [100NGO](#) and the [Compost & Biogas Association Austria \(KBVOe\)](#), the facility operators and municipal waste managers and invited high level experts
2. Visits to facilities demonstrating state-of-the-art bio-waste collection and recycling
3. B2B first hand forums and exchange considering the various background of the participants
4. Time for discussion and exchange of professional experiences.
5. Explanation of general conditions and how to find solutions suiting the individual framework conditions:
  - from an economic point of view
  - from a technical point of view
  - from an organisational point of view


The technical site visits will provide an opportunity to see diverse biological treatment facilities for organic waste. And to meet also technology suppliers as well as international consultants and advisers. You will experience high level professional composting techniques and quality management from large (100.000 t) in cities to small scale (2000 t) in rural environments



## Day 4 – Thursday, 19 September

09:00 - 09:30	Drive to Practitioner Day
09:30-14:00/15:00	<p><b>6<sup>th</sup> International Practitioner Day – Composting – Austrian Compost &amp; Bio<i>g</i>as Association</b></p> <ul style="list-style-type: none"> <li>• <b>One of the largest exhibitions and machine shows in Europe presenting latest developments in compost and biomass technologies</b> <ul style="list-style-type: none"> <li>• Newest innovations, trends and Visions in bio-waste technologies</li> <li>• Leading companies present their products and services to an international audience</li> <li>• Shredders, choppers, crushers for biomass for all purposes,</li> <li>• Windrow turners at all scales</li> <li>• Screening of compost</li> <li>• Monitoring and controlling compost process and product</li> <li>• Loaders and transport</li> </ul> </li> <li>• <b>CompOscar award of the competition of best performing composts in Austria.</b></li> </ul> <p><a href="https://www.kompost-biogas.info/6-internationaler-praktikertag-kompostierung/">https://www.kompost-biogas.info/6-internationaler-praktikertag-kompostierung/</a>  <a href="http://huemerkompost.at/">http://huemerkompost.at/</a></p>



15:00-16:00	Drive to Rohrbach – Upper Austria
16:30-18:00	<p><b>LECTURE:</b> Towards a deeper understanding of the biology and the technique of composting (Florian Amlinger)</p> 
18:00	Dinner & Open Forum
Open end	<ul style="list-style-type: none"> <li>• Short contributions, experience, challenges in home countries by participants</li> <li>• Q &amp; A Session</li> </ul>

## Day 5 – Friday, 20 September

8:30-9:30	 <ul style="list-style-type: none"> <li>• How to achieve 0,2% impurities in source separated kitchen waste from households and restaurants?</li> <li>• Separate Collection for food waste with compostable plastic and paper bags operated by a local farmer</li> <li>• 100% bring scheme for Garden waste to on-farm composting plant</li> <li>• Public relation work and logistics of municipal waste management association – on the route to Zero Waste in a rural environment</li> </ul> <p><i>Waste Management Association Rohrbach &amp; the On-Farm composting scheme in Upper Austria (Martus Altenhofer &amp; Ursula Salomon)</i>  <a href="http://www.umweltprofis.at/bezirksabfallverband/rohrbach/willkommen.html">http://www.umweltprofis.at/bezirksabfallverband/rohrbach/willkommen.html</a>  <a href="http://www.umweltprofis.at/en/home.html">http://www.umweltprofis.at/en/home.html</a></p>
9:30-10:00	Visit of the <b>Recycling Centre Rohrbach</b> collecting > 60 waste fraction for reuse and recycling
10:30-12:30	 <p>Visit of the On-Farm agricultural compost plant – a full service partner for <u>separate</u> collection and composting; The farmer has been awarded with the COMPOSKAR 2017 for best quality compost and offers different compost substrates <a href="https://www.hofer-natur.at/">https://www.hofer-natur.at/</a></p>
12:30-14:30	<p><b>Lunch</b>  <b>Wrap-up Q&amp;A Session &amp; Certificates</b>  <b>Official closure -Certificates</b></p> <p style="text-align: right;"><i>sponsored by:</i> </p>
  	
14:30-17:30	Drive to Vienna
18:30 - ...	Voluntary post meeting for dinner in Vienna

## Your accompanying team leading the study tour



**Florian Amlinger – Tour Leader** Agronomist, CEO of Compost – Consulting & Development and co-founder of '100NGO' and European Compost Network (ECN e.V). 30 years research and development projects on separate collection and composting, process optimisation, quality testing, humus management, international quality assurance and planning of composting plants.



**Alex Luidolt** CEO of planergy GmbH, <http://www.planergy.at/> and CEO of Kompost & Biogas Verband Steiermark; Consulting engineer planning and building biogas plants, explosion protection and approval planning for business and industry. He is experienced in waste management, energy solutions and technical dimensioning and design for different plants and processes. He also was involved in the development of technical standards for biogas plants in Austria



**Walter Hauer** CEO of Technisches Büro HAUER Umweltwirtschaft GmbH. <http://www.tbhauer.at/> Independent consultant for waste management, resource efficiency, sustainable development and environmental economics since 1992, covering technical, economic and organisational aspects Author of innumerable number of studies for public and private organisations, Member of Scientific committee of international congress, speaker at inter-national congresses





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## Registration

**Register online here**

**The deadline of registration is 31 August 2019**

The registration fee includes accommodation (5 nights from 15 to 20 September), lunch, dinner, refreshments, transportation and lectures.

Registration may be transferred to a nominated representative.

Upon registration, participants accept all accommodation arrangements organised by KBVOe/100NGO.

The Study Tour programme may be subject to change.

Maximum 22 and minimum 12 participants due to the nature of the programme. KBVOe/100NGO has the right to cancel the Study Tour if the minimum number of participants is not achieved.

### Registration fee (exclusive VAT)

Non Members	100NGO / ECN Member	Group discount 3+ (per person)	Students / LICC *
EUR 1 900.-	EUR 1 425,-	EUR 1 200.-	EUR 950.-

\* 3 participants from 3 different low to lower-middle income countries according to the current [World Bank list](#) as well as 3 students may receive 50% discount on the registration fee. The discount is awarded on a first-come-first-serve basis, please request by email: [events@kompost-biogas.info](mailto:events@kompost-biogas.info)

### Accommodation

3\* to 4\* accommodation throughout the Study Tour for 5 nights from Sunday, 15 September will be booked by us. Hotel information will follow soon. Please consult with the hotel directly in case you would like to book additional nights before and/or after the tour.

### Cancellation

Any cancellation of registration must be submitted in writing to by E-Mail: [events@kompost-biogas.info](mailto:events@kompost-biogas.info). In case of cancellation of the Study Tour due to unforeseeable events, KBVOe will refund the registration fee but not other costs incurred prior to cancellation.

Cancellation and refund will be subject to the following conditions:

Before 31 August	75% will be refunded
Between 31 August and 13 September	50% will be refunded
From 14 September and no show	no refund

### Handouts & Certificate

Participants will receive a complete hand-out with all presentations and data sheets of the visited installations together with a certificate of participation.

### Optional City Walk in Vienna on 15 September

Please indicate in the registration form if you are interested in a 1.5 to 2 hrs sightseeing City Walk in the historic centre of Vienna on Saturday 21 September morning. Approximate price: 16.- EUR/person.

#### Sponsors:



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