

# SBWL Supply Networks and Services

**WU**

WIRTSCHAFTS  
UNIVERSITÄT  
WIEN VIENNA  
UNIVERSITY OF  
ECONOMICS  
AND BUSINESS

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Institute for Transport and Logistics  
Management



# Institute for Transport and Logistics Management

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- Complexity in supply chains will increase due to globalization, urbanization and ecological and social challenges.
- The SBWL 'Supply Networks and Services' therefore deals with optimization and simulation models to support decision making within companies and NGOs in the field of sustainable and humanitarian supply chain management.
- In addition to numerous case studies and practical examples, the SBWL 'Supply Networks and Services' attaches great importance to a research- and method-oriented education of its students.

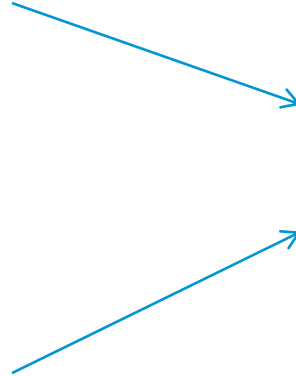
# Example: Location for an energy generation plant



Composting plant



Sewage plant

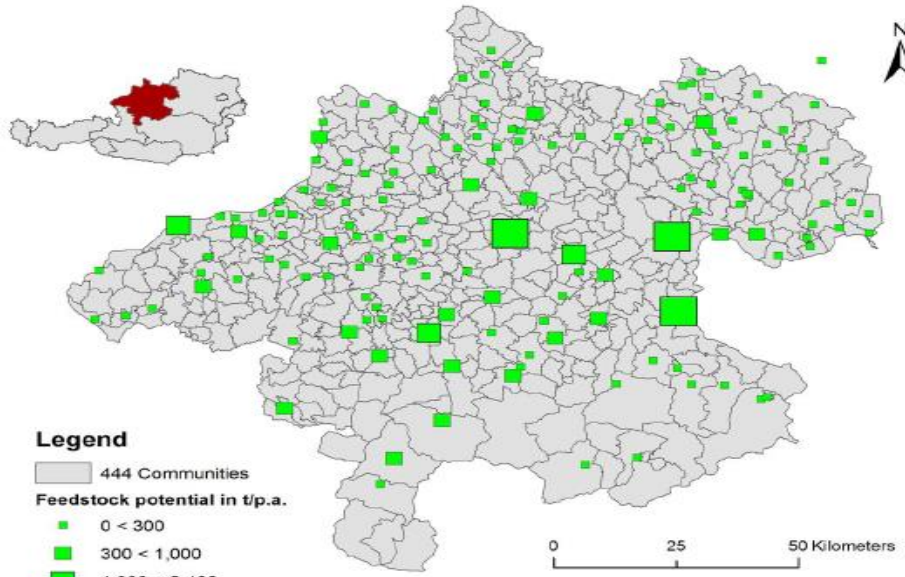


HTC-facility

Stefan Rotter, 2012, A Facility Location and Allocation Model for Biomass-based Energy Carrier Production in Upper Austria, 2012

# Research questions

1. How much feedstock potential in terms of sewage sludge and municipal biowaste is theoretically available and where are those feedstock types located in Upper Austria?
2. Where are potential locations for HTC-facilities?
3. What is the optimal number of HTC-facilities to convert the feedstock potential into biocoal as an energy carrier?
4. Where are optimal locations for those HTC-facilities considering the allocation of feedstock locations?
5. What is the network-wide profit that could be realized by applying this supply chain network design?
6. How does the baseline supply chain network design differ when model parameters are changed?



**Legend**

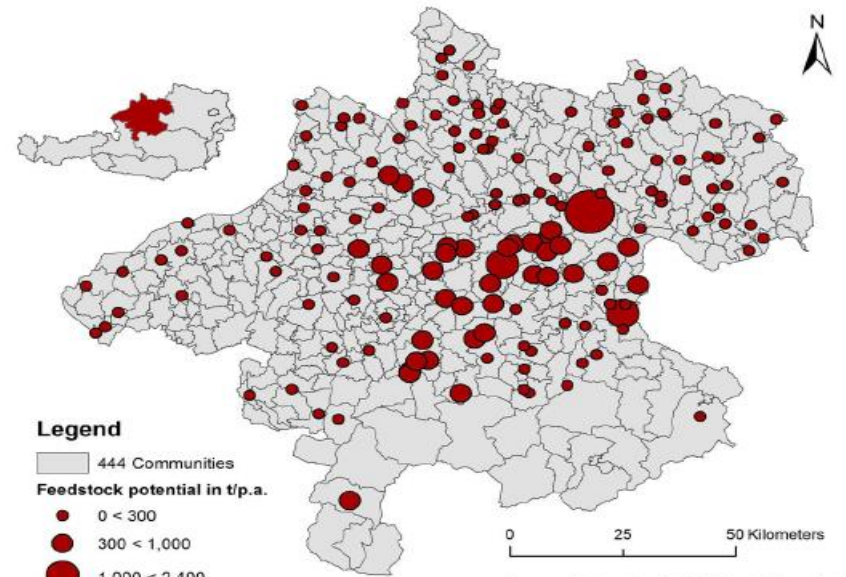
444 Communities

**Feedstock potential in t/p.a.**

- 0 < 300
- 300 < 1,000
- 1,000 < 2,400
- 2,400 < 19,000

0 25 50 Kilometers

Sources: ArcAustria (geodata), Office of the Provincial Government of Upper Austria, Department Environment and Water (thematic data)



**Legend**

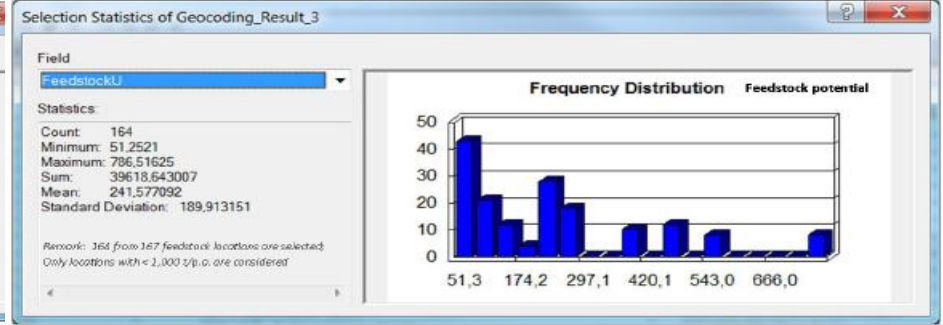
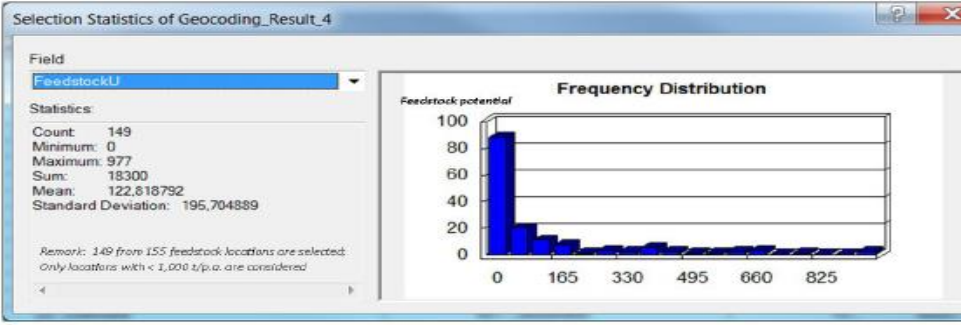
444 Communities

**Feedstock potential in t/p.a.**

- 0 < 300
- 300 < 1,000
- 1,000 < 2,400
- 2,400 < 12,000

0 25 50 Kilometers

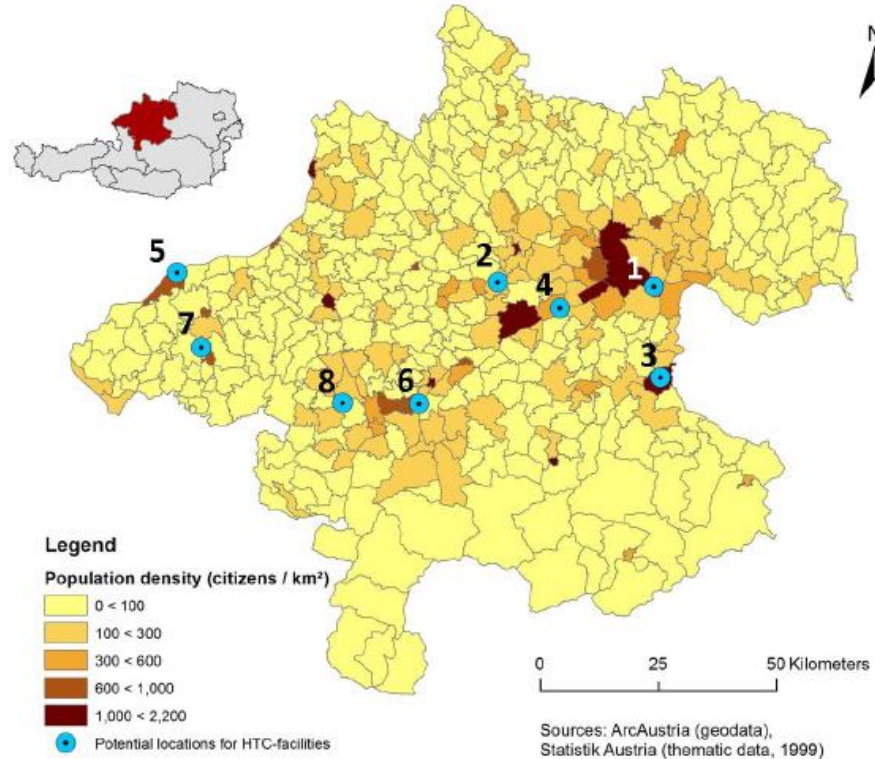
Sources: ArcAustria, Statistik Austria (geodata), Office of the Provincial Government of Upper Austria, Department Environment and Water (thematic data)



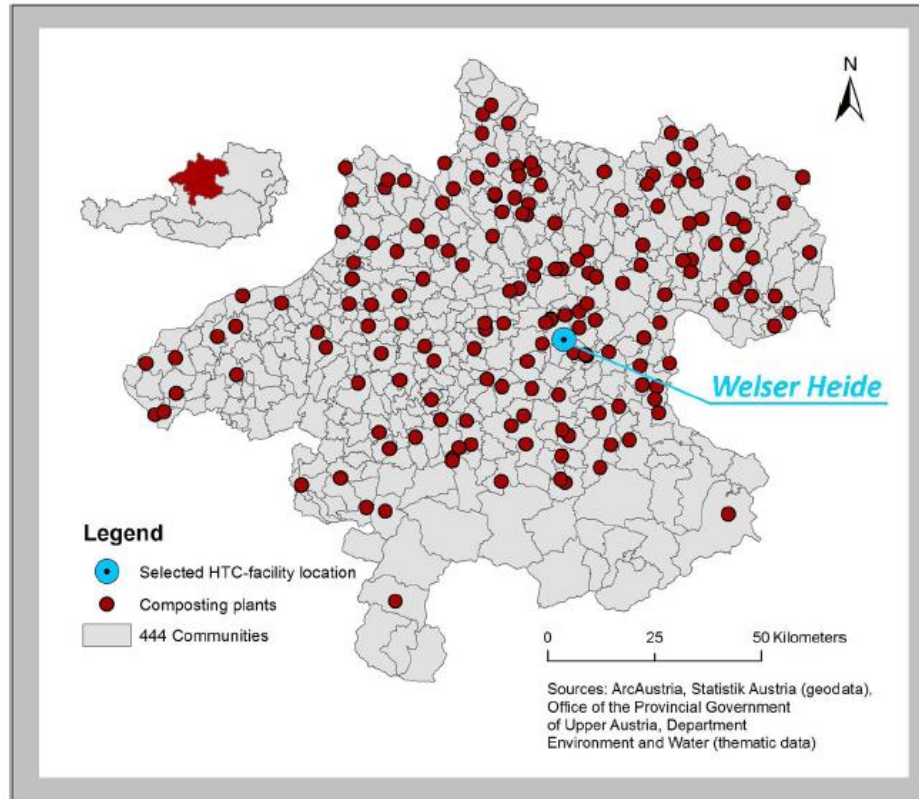
Sewage plant

Composting plant

# Potential locations for HTC facilities



# The optimal location





# Job opportunities

The SBWL offers a very good preparation for the Master SCM.

In the area of Supply Chain Management there is a strong demand for well-trained people:

- Supply chain management in industrial, commercial and service companies
- Logistics companies
- Consulting company in the field of Supply Chain Management

# Our communication channels

## Institute



Mailing list

<http://wu-lists.wu-wien.ac.at/mailman/listinfo/sns>



Website of the institute

<http://wu.ac.at/itl>



Institute for  
Transport and Logistics  
Management

## Courses

Learn@WU



E-Mails regarding specific  
courses

[firstname.lastname@wu.ac.at](mailto:firstname.lastname@wu.ac.at)

# Outline of the SBWL Supply Networks and Services

Course I: Introduction to Supply Chain Management  
Course III: Supply Chain Modeling and Design  
Course II: Analysis and Optimization of Distribution Networks

**Core  
First Semester**

Course IV:  
Humanitarian  
Logistics

or

Course IV:  
Sustainable Logistics

Seminar:  
Humanitarian  
Logistics

Seminar:  
Project  
Management

Seminar:  
Sustainable  
Logistics

**Elective  
Second  
Semester**

- The SBWL starts each semester with up to 40 students.
- The formal requirements for admission to an SBWL at WU must be met.
- Admission to the SBWL is based on an [entry test](#).
- Subject areas: Introduction to Supply Chain Management, Optimization, Graph Theory.
- The date of the entrance test will be announced on the homepage of the Institute for Transport and Logistics Management at least 3 weeks before the start of the semester.
- The current examination material will be available three weeks before the respective examination date at the secretary's office of the Institute for Transport and Logistics Management.

# Enrollment process of the SBWL

## Step 1:

- Admission to the SBWL requires the successful completion of the AG "Access to Specialization in Business Administration: Supply Networks and Services" (see WU Course Catalog).
- Please register for the entrance exam by signing in for the AG **LV Nr. 5166 "Access to Specialization in Business Administration: Supply Networks and Services"**. Registration for the entrance exam is possible from **January 27, 2020 to February 05, 2020 using LPIS**.
- Students who have a "Very Good" on the course "Procurement, Logistics, Production" (BLP) have automatically successfully completed the AG. The grade on BLP is automatically checked by the institute.
- **ATTENTION!!** Without exception, **NO** application documents will be accepted after the deadline!

# Enrollment process of the SBWL

## Step 2:

- The entrance exam takes place on **Thursday, February 06, 2020 from 3 pm to 5 pm in TC.0.01 Audimax.**
- The results of the entrance exam are published on **Friday, February 07, 2020 through LPIS.**
- Post exam review: **Friday, February 07, 2020 between 2pm and 3pm** at Institute for Transport and Logistics Management, Building D1, Room 4.092.

## Step 3:

- Make sure by selecting the SBWL at LPIS that you are enrolled to the basic course. Accepted students have to enroll independently to Courses I, II and III.

# Further information

- Information on SBWL can be found at:  
<https://www.wu.ac.at/itl/lehre/bachelor/sbwl/sbwl-supply-networks-and-services>
- If you have any questions about SBWL Supply Networks and Services, please contact Doris Phiri at  
[sbwl-sns@wu.ac.at](mailto:sbwl-sns@wu.ac.at)