## Feasibility study for a composting center

Civil engineering

Selected participant

Juliette GUERIN/Valentine PENEL

17th annual final year projects forum

Academic supervisor : Xavier BRUNETAUD Industrial supervisor : Michel ROTAT



Company/institution : Sologne Ingénierie

## **OBJECTIVE/MOTIVATION**

Our project consisted in studying the Sologne region to determine if it would be interesting to build a composting center there, and if so, where it would be located. To do this, we had to do some research and a lot of referencing, particularly on wastewater treatment plants, to determine whether the needs of a future composting center could be met. This allowed us to work in a completely different way than we were used to. We are satisfied with this project because we were able





to develop our method of searching for information and we learned a lot about the principle and the needs of a composting center. Furthermore, we succeeded in achieving our main objective, which was to find out if it would be interesting to build a composting center, but especially within what limits and constraints.

## RESULTS

Through our research, we were able to obtain a complete listing of the existing wastewater treatment plants in our study area, as well as the amount of sludge they produce and their destination (composting or agricultural spreading). We found that there were already composting centers in our area, which recovered sludge from some treatment plants. Thanks to these data and the company's requirements (3,500 T of incoming sludge needed per year), we were able to develop several hypotheses and proposals concerning the location of a future composting center and the limits of our different proposals. Our main limit is to convince the composting centers that send their sludge

for agricultural spreading to send it for composting, despite the higher cost that this would generate. This would be the continuation of our work, which we did not have the time to complete.

**KEYWORDS:** composting, research, feasibility, Sologne ingénierie.





## Map leger

Proposition\_2

- Proposition\_1
- Stations\_Epandage\_sup\_1000
- Stations\_Epandage\_inf\_1000
- Stations\_compost\_inf\_1000
- Stations\_compost\_sup\_1000
- Centres\_existants
- Villes
- Coursdeau
- autoroutes

Axes\_secondaires

Contact : julietteguerin99@gmail.com/valentine.penelraymond@gmail.com

of our wor

POLYTECH ORLEANS