

# GISWASTE Project. The importance of INSPIRE in a real use of waste management



VIII Jornadas Ibéricas de Infraestruturas de Datos Espaciales Lisboa | 15 - 17 noviembre 2017



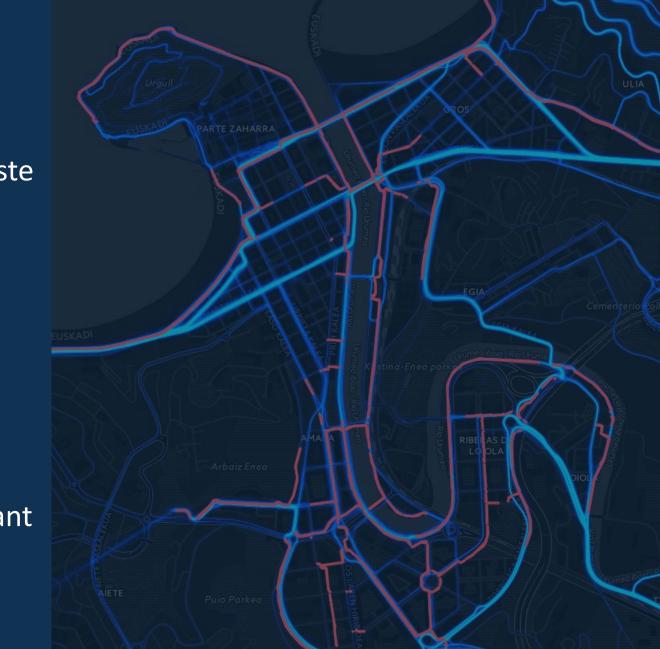


- GISWASTE project
- GIS analysis
- GI need
- Conclusions





- GIS based methodology simulating the technical, economic and environmental feasibility to prioritize food by-products waste alternatives for the Basque Country.
- Budget: 1.419.832 € with 48,77% financing
- Duration: July 2013 → June 2017
- Objectives: Development of a GIS environment for...
  - Decision making Support for waste management
  - Minimize the inherent risk of implementing a new valorisation plant



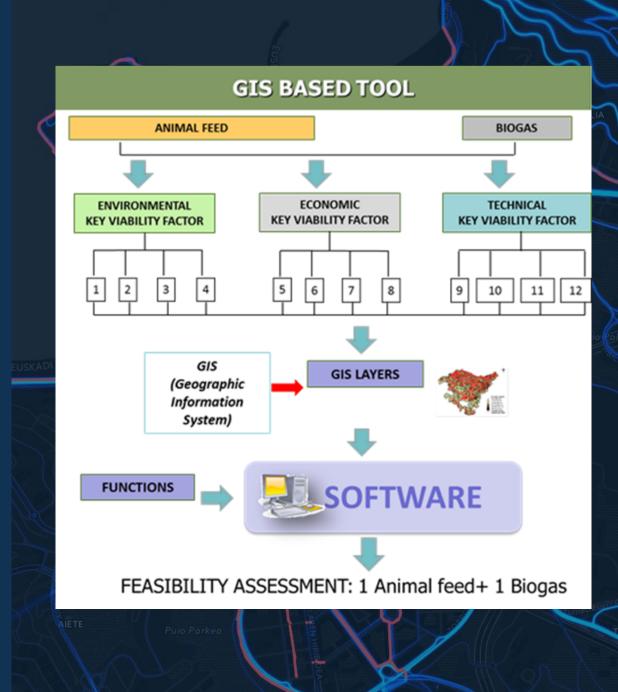




#### Case-study:

- Geographical area: Basque Country, with the possibility to export it to other EU regions.
- Organic waste: vegetable, meat and dairy byproduct from industrial plants and retail
- Valorisation alternatives: production of biogas and animal feed.
- Viability study: 70% of 4M t.



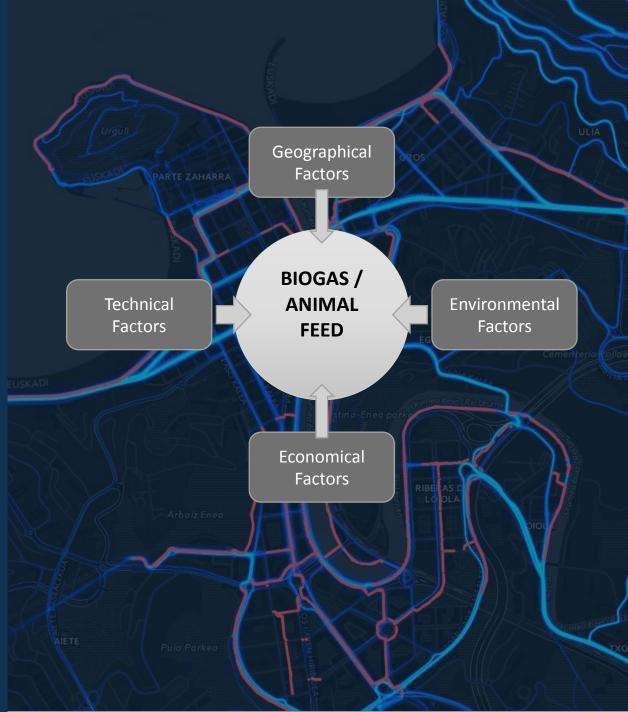






#### Definition of all the factors that impact the feasibility of the different valorization options





#### **Geographic analysis**

**Registration and storage of Generation Points** 

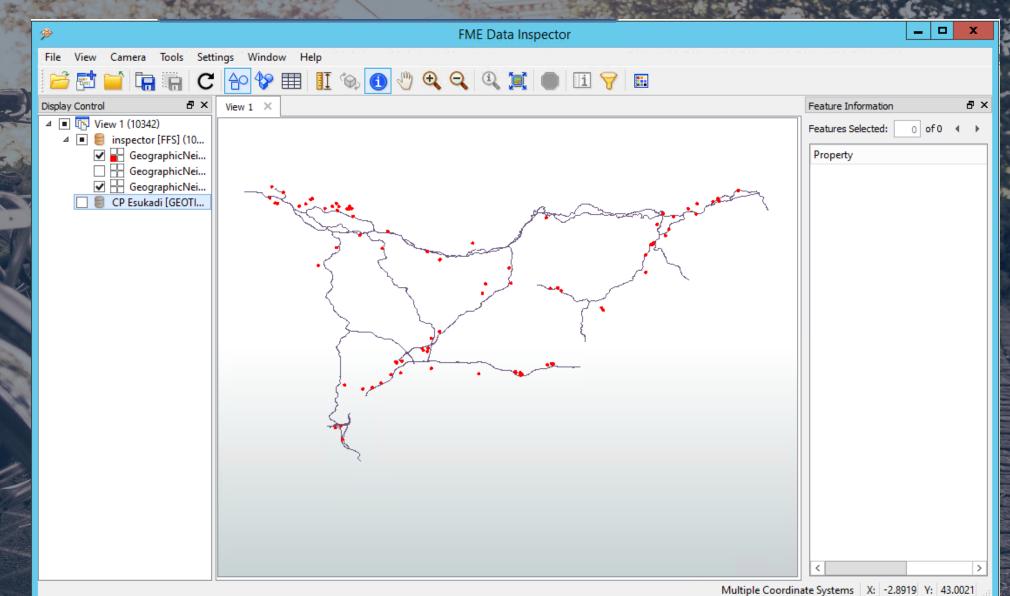
**Export the scenario to be assessed** 

**Initial filtering of possible locations for the plant** 

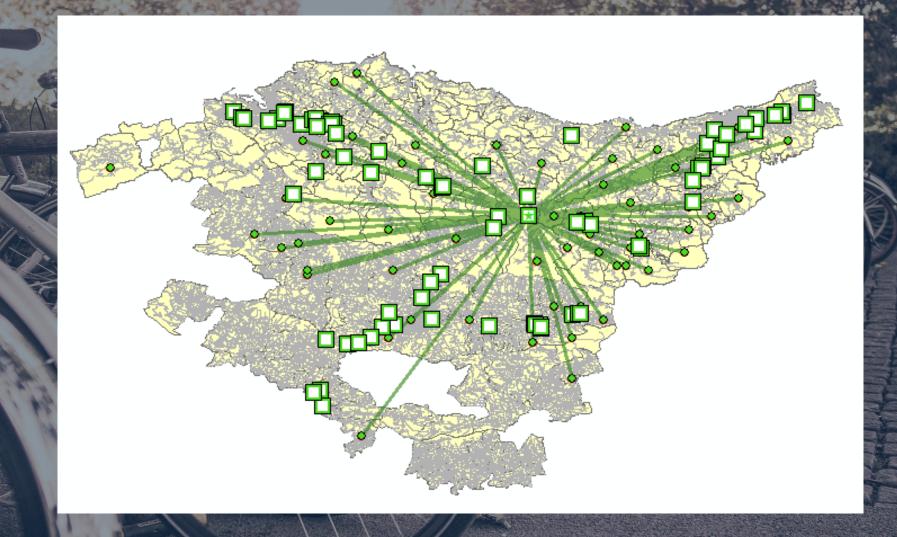
Get the optimal location of the plant

Calculation of logistic routes to collect the waste from the Generation Points

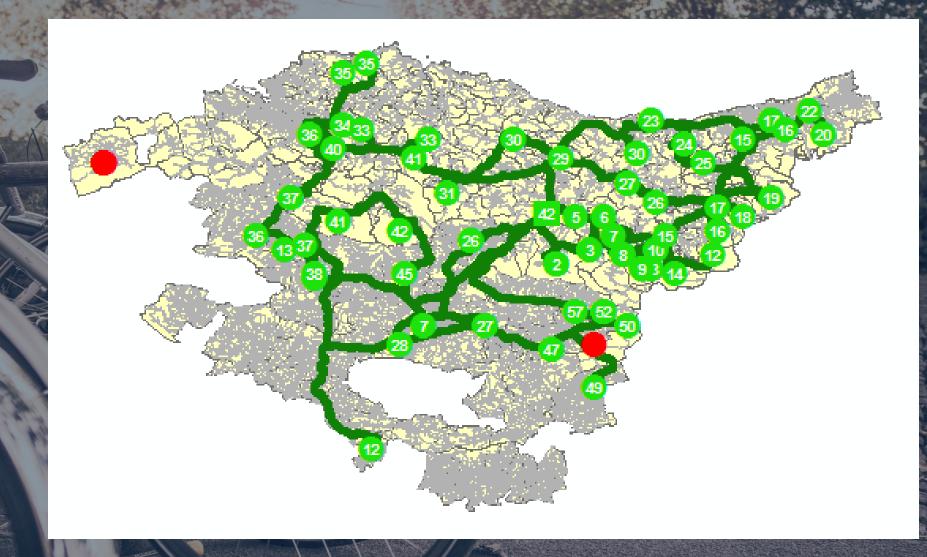
#### Available soil



### **Optimal location**

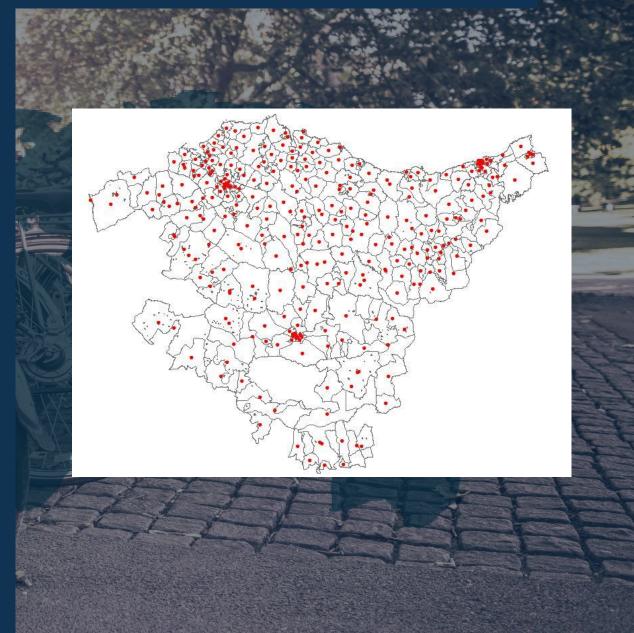


## Logistic analysis



#### **Geographic Information needed**

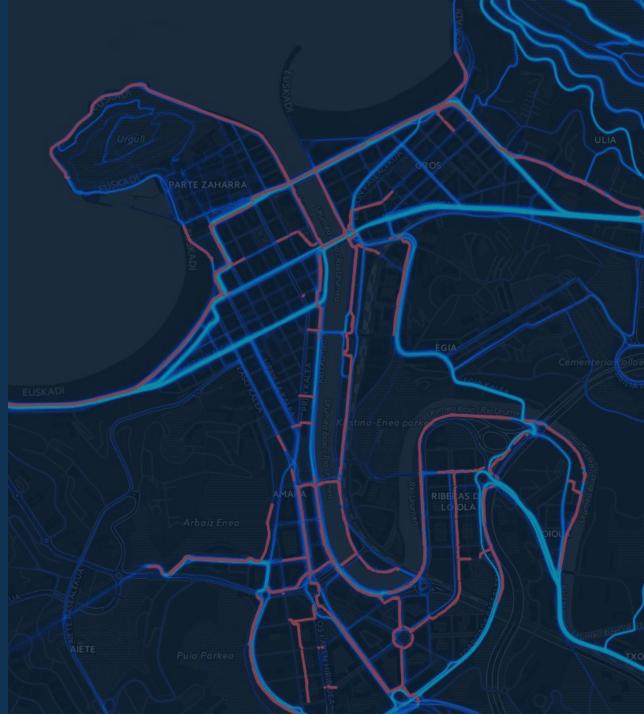
Cities, numbers, streets
 Postal codes
 Roads
 Roads
 Industrial areas
 Protected sites



#### Conclusions

- GI is mandatory for a real viability study
  GI is not accessible yet, it is a barrier for the application, and to re-use the application in different European areas and scenarios
- Basic datasets for geocoding and road network will cover a high percentage of uses
- Large effort spent looking for datasets
- Next phase of INSPIRE will boost these kinds of studies







## Thanks!

Alejandro Guinea de Salas <u>Alejandro.guinea@Geograma.com</u> www.geograma.com

