

Logistical analysis of prospected PHA production in Northwestern Europe

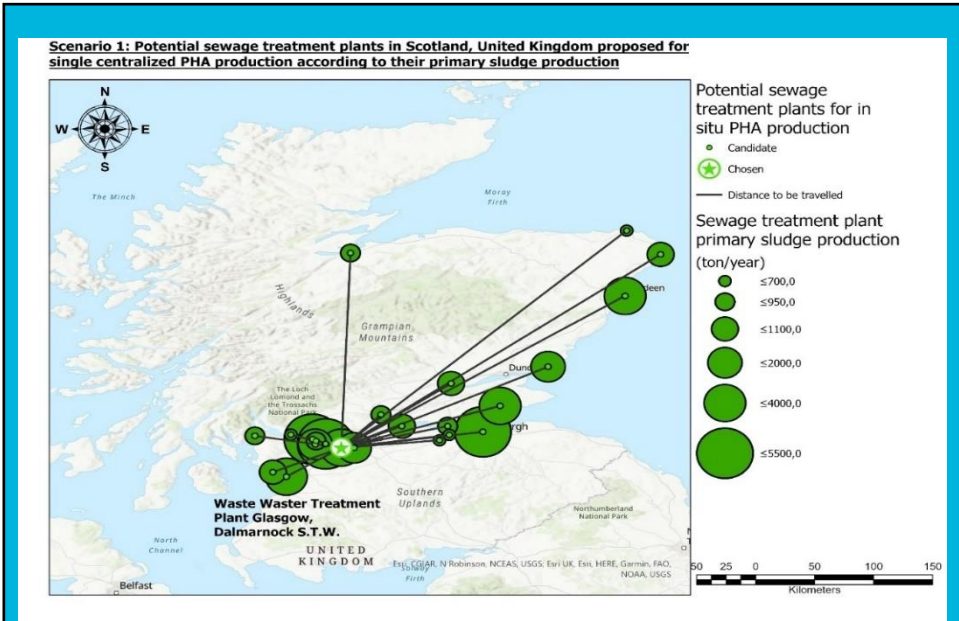
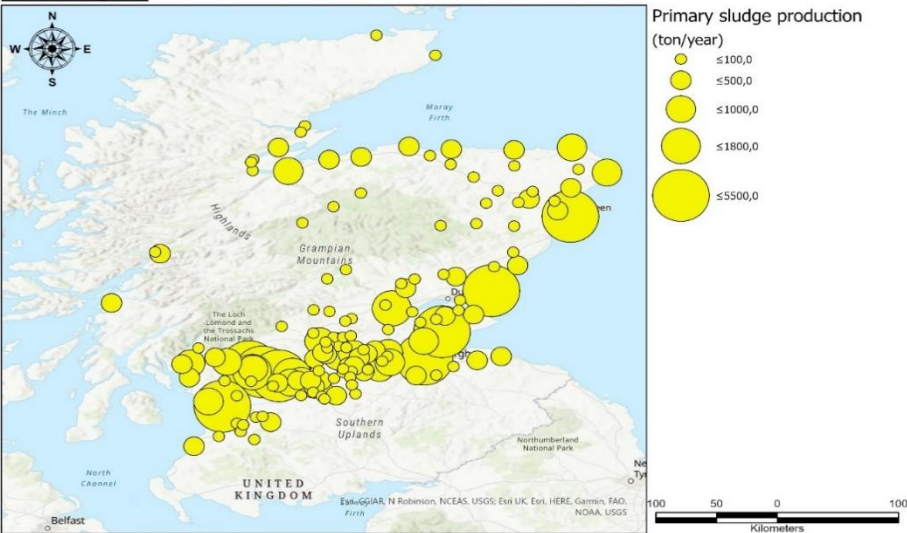
Objective:

Analyze current capacity of contribution for PHA production for sewage treatment plants in Scotland, Ireland and Saarland as well as logistical transport possibilities to PHA production facility.

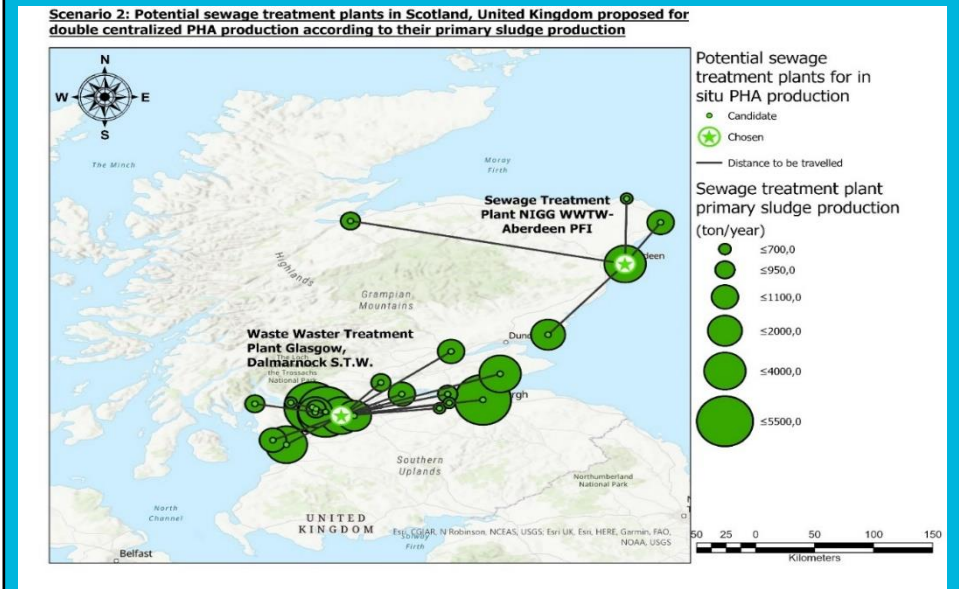
Tools used:

- Decision support tool
- Geographic information systems – Arc GIS Pro

Yearly primary production of all sewage treatment plants in Scotland, United Kingdom



Centralized production



Decentralized production

| Scenario | Number of facilities linked | Total distance to be driven (km) | Total amount of sludge delivered to PHA facility (ton/year) | Total amount of sludge processed by PHA facility (ton/year) |
|----------|-----------------------------|----------------------------------|---|---|
| 1 | 23 | 2015 | 39472 | 42021 |
| 2 | 23 | 1170 | 36412 | 42021 |
| 3 | 150 | 15959 | 55163 | 56167 |
| 4 | 150 | 10733 | 50558 | 56167 |

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