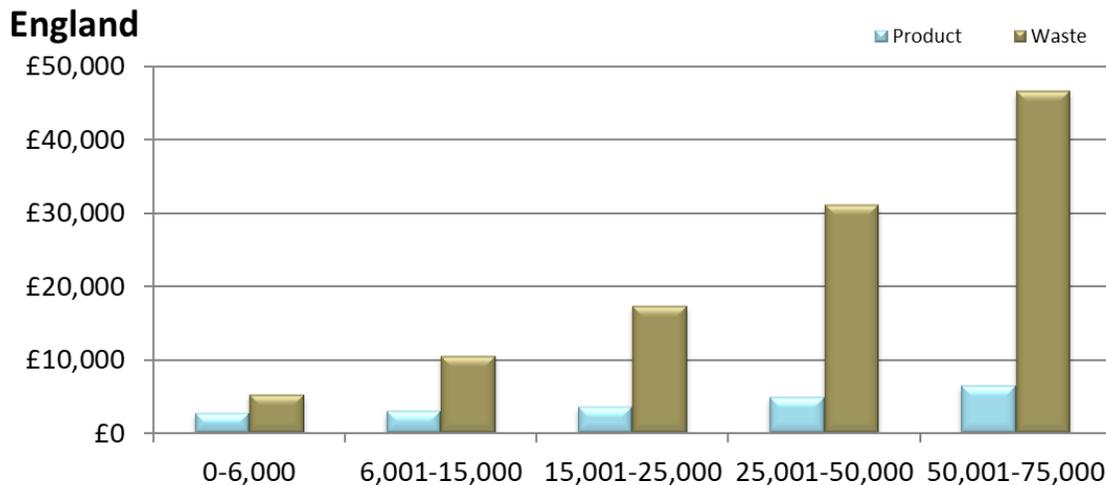


## Application of digestate to land as certified biofertiliser vs. waste

### Cost Comparison - England

The Environment Agency updated its charging scheme applicable in England in 2018. The graph below presents an indication of the annual costs associated with certification of digestates to renew product status and average costs of deployment of waste digestates under waste management regulations.



#### Throughput tonnage per annum

Digestate producers were assigned to categories based on their annual throughput as per the pricing structure of certification bodies. Costs for certification and land spreading as waste were calculated using the highest throughput value in each category. The largest portion of certified producers falls in the category of operators processing between 25,001 and 50,000 tonnes of organic waste per annum.

An operator processing 25,001-50,000 tpa would incur an annual cost of approximately £5,000 for independent certification against the end of waste criteria to renew their certification. The spreading of waste digestate under waste regulations in England would cost approximately £30,000.

*Please note that the costs associated with certification and deployment depends on lots of different factors and are site / operation specific. These calculations were based on a number of assumptions and therefore should only be used as an indication.*

## **Assumptions and supplementary information**

**Price for certification:** Annual charge for renewal of certification by certification bodies + laboratory testing for the full PAS 110 suite.

The graph presents average costs for each throughput category. The price for laboratory testing was calculated based on the testing requirements in PAS 110 and at the average price rate from quotations obtained from analytical laboratories in England. The calculations did not assume failing batches, where specific or all mandatory tests would need to be repeated. The amount of digestate output (t) was assumed to be 85% of the throughput (15% loss).

The revenue associated with sales of certified digestate has not been taken into account and should be considered a cost incentive for Biofertiliser Certification Scheme applicants. One other widely recognised benefit for certified producers is they can spread their certified digestate straight to land, avoiding time consuming spreading deployments.

**Price for waste deployments:** Annual environmental permit subsistence charge + deployment charge for each deployment + 2 samples and analysis of waste digestate per year.

Price for waste analysis was considered to be the same as laboratory testing for the full PAS 110 suite. The number of deployment applications was calculated from the amount of digestate output, spreading rate and maximum area for deployments. The spreading rate of waste digestate was assumed to be 50 t/ha and the maximum area of land for deployment was assumed to be 50 ha. This is a best-case scenario so higher costs might be incurred if spreading less than 2,500t / 50ha per deployment.

The calculations did not take into account additional costs for consultancy and the price of soil sampling and testing.