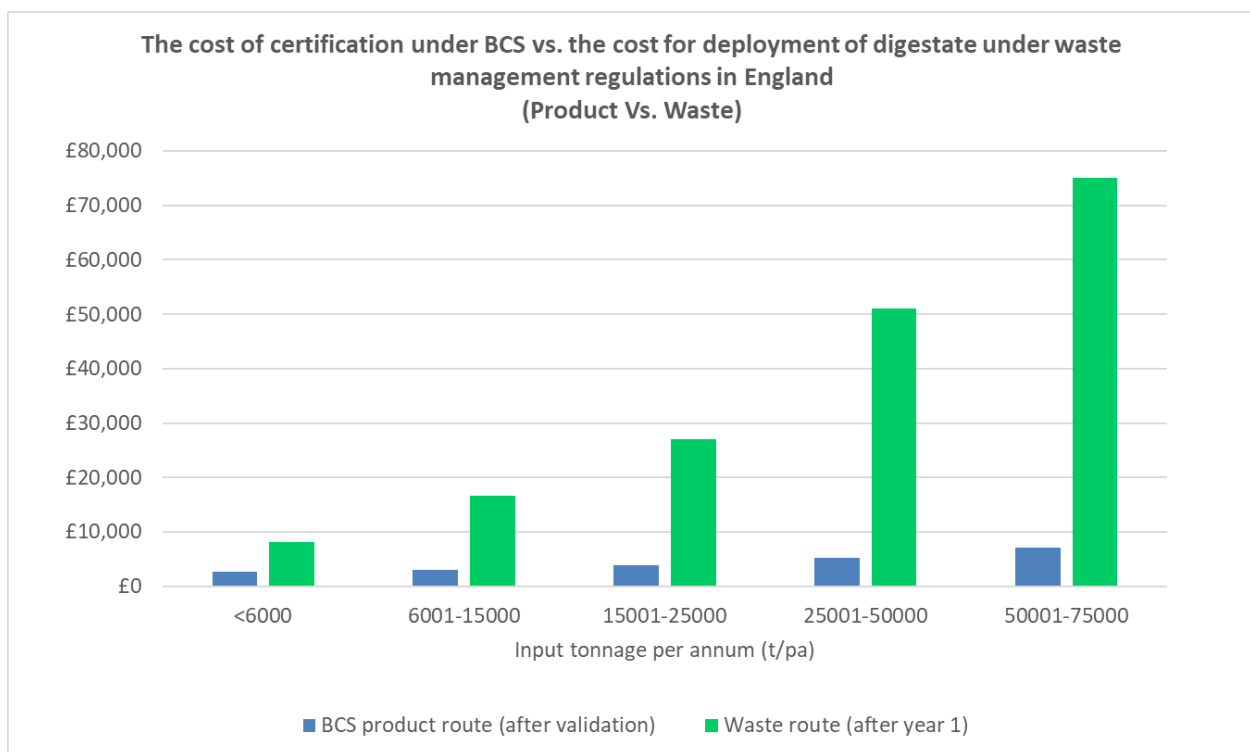


Application of digestate to land as *biofertiliser* vs. waste

Cost Comparison - England

The graph below presents an indication of the average annual costs associated with certification of digestates to renew ‘product’ status and average annual costs of deployment of ‘waste’ digestates under waste management regulations in England.



Digestate producers were assigned to categories based on their annual throughput as per the pricing structure of the scheme 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 25,001-50,000 tonnes of organic waste per annum.

An operator processing 25,001-50,000 tpa would incur an annual cost of approximately £5,200 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 £51,000.

NB Note that 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 are indicative only.

For example, the costs do not account for infrastructure necessary to meet the requirements of the Scheme, such as the cost of installing a pasteuriser, where required.

Assumptions and supplementary information

Price for certification: Annual charge for renewal of certification by scheme certification bodies + annual Research Fee contribution to the Research Hub + 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 the approved 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% mass reduction).

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 that spreading can take place immediately, should a last-minute request for Quality product be received. This avoids any time lag in ensuring deployments are in place, as is necessary for waste digestate.

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 advised and considered to be £350 per sample on average. 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 30 t/ha and the maximum area of land for deployment was assumed to be 50 ha. This is considered an average scenario so lower/higher costs might be incurred if spreading more or less than 1,500t / 50 ha per deployment.

The calculations did not account for additional costs for consultancy and soil sampling and analysis.