

Annual Report 2016







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Summary

This report provides an overview of the Compost Certification Scheme in 2016 through data collected in January 2017. By the end of 2016, there were a total of 178 certified composting processes located across England, Northern Ireland, Scotland, and Wales. The majority of certified composting sites were located in England and the most widely used processing type in the UK was open air, turned windrows, which accounted for 75% of all certified compost processes in the UK. Collectively, certified sites were processing over 3.5 million tonnes of organic waste annually and producing approximately 1.9 million tonnes of quality compost annually. Over half of the total amount of feedstock was green waste only and soil conditioner was the most common product type. This report also summarises the key scheme developments achieved in 2016.

A word from our chair

A key component in sustainable development is the recycling of materials wherever possible. Recycling of organic materials has been one of the areas in which considerable progress has been made in recent years, and a key pathway in the recycling of organics is through composting. Compost produced from recycled organics has a long history, but in the early days there were often concerns both about the quality and consistency of the composts produced. The development of PAS 100 was an important step forward in setting standards for compost quality based upon the earlier experience gained in compost production. The Compost Certification Scheme provides oversight on compost producers across the country to ensure that composts consistently comply with the specifications in PAS 100. The Scheme provides the compost consumer with the confidence that its members will provide compost of consistently high quality and which is safe for human, animal and plant health. As Chair of the Technical Advisory Committee it is my task to ensure that the Compost Certification Scheme reflects the needs of all stakeholders including producers, users and the various environmental regulators. I find it very satisfying to see the sector mature and the volumes of organic waste processed within the Scheme increase. 2016 was a year of consolidation during which we boosted the Scheme's robustness considerably. This has put us in an excellent position to oversee the revision of PAS 100 in 2017.

Professor Stephen Nortcliff



1 Introduction

This is the first annual report for the Compost Certification Scheme (CCS) published by Renewable Energy Assurance Ltd (REAL). The CCS was set up in 2007 by the Association for Organics Recycling (AfOR) but ownership was transferred to REAL (a subsidiary company of the Renewable Energy Association) in 2014. REAL now administers the CCS which is therefore now managed separately from the trade body and its activities.

The CCS is a quality assurance and end-of-waste scheme which provides assurance to consumers, farmers, food producers and retailers that quality compost is safe for human, animal and plant health. Under the Scheme, compost can achieve end-of-waste status through independent certification. The material can then be dispatched with 'product' status to various end markets as *quality compost* rather than a waste material, no longer subject to waste regulatory controls.

Within the report you will find key data on the status of the Scheme, representative of certified compost producers across the country.

2 Certified processes

There were a total of 178 processes certified under the Compost Certification Scheme by the end of 2016. This number fluctuated throughout the year as new producers applied to join the Scheme and became certified, and other processes were withdrawn. There were a total of eight producers that joined the Scheme in 2016 and a total of four processes were withdrawn in 2016.

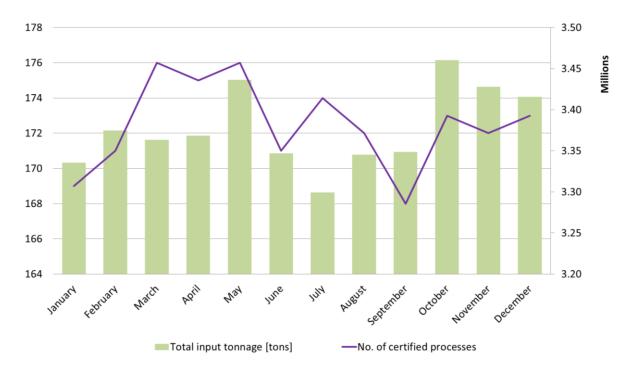


Figure 1 Number of certified processes and total input tonnage in the UK in 2016

There are various reasons for compost producers joining and leaving the Scheme. Primarily, producers join the Scheme in order to secure more contracts with waste suppliers or customers. Processes might be withdrawn from the Scheme because sites have ceased compost production or because the operators are struggling to manage a robust Quality Management System (QMS).



CERTIFIED PROCESSES PER COUNTRY

There were 136 certified processes in England by the end of 2016, which comprised 76% of the total number in the UK. There were 6 processes in Northern Ireland, 26 in Scotland, and 10 in Wales.

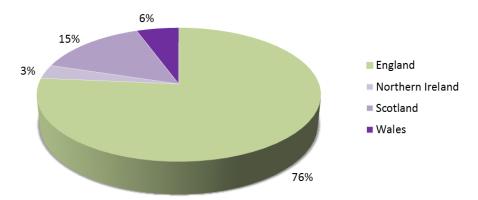


Figure 2 Percentage of certified processes in the UK in December 2016

PROCESS TYPES

Different technologies and techniques are employed to produce compost on an industrial scale in the UK. The most widely used processing type in the UK as a whole was open air, turned windrows, which accounted for 75% of all certified compost processes in the UK.

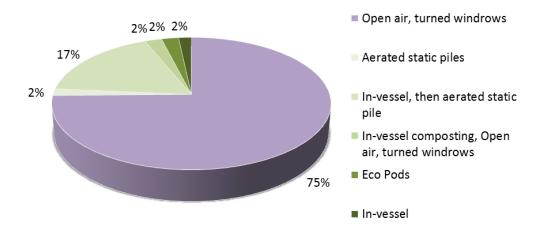


Figure 3 Compost processing types under CCS in the UK in 2016

Open air, turned windrow composting was also the most common process type in each country. 'Invessel, then aerated static pile processing' was the second most widely used in the UK as a whole and in each country. Members in England had the widest variety of compost processing types, while members in Scotland only used open air, turned windrows and 'in-vessel, then aerated static pile' composting technologies. Eco pod composting is a rare form of processing organic waste at composting sites but in Wales it was the third most commonly used process type.



3 Input tonnage

Feedstock materials are comprised of 'green waste' and 'green waste and ABPs materials'. Animal by-product materials (ABPs materials) are mainly derived from food waste curbside collections by local authorities. Although, other waste streams include the hunting, fishing and dairy industries. Green waste is derived from agriculture, forestry, household garden waste, garden and park waste, and various other waste streams. Over 1 million tonnes of co-mingled 'green waste and ABPs materials' was being treated annually in the UK through certified processes by the end of 2016. The total amount of 'green waste only' processed annually was more than 2.4 million tonnes.

Figure 4 shows the tonnage of organic waste (green waste only/green waste and ABPs materials) treated annually through certified composting processes in England, Northern Ireland, Scotland, and Wales. The amount of 'green waste and ABPs materials' treated in England and Scotland was lower in comparison to the amount of 'green waste only' treated. Whereas, certified sites in Northern Ireland and Wales processed more 'green waste and ABPs materials' than 'green waste only'.

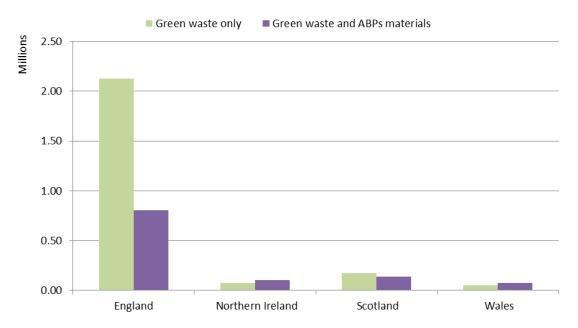


Figure 4 Amount of organic waste processed at certified composting sites the UK (December 2016)

4 Quality compost produced

By the end of 2016, certified sites were producing over 1.9 million tonnes of quality compost annually. Figure 5 shows the contribution each members in each country made to this total in 2016.



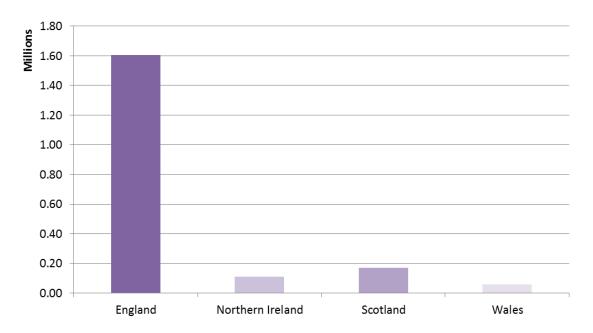


Figure 5 Compost tonnage produced in each country under CCS of the UK in 2016

PRODUCT TYPES

There are several different types of compost 'product' dispatched to a variety of end markets once compost has achieved end-of-waste status through independent certification. The vast majority of certified sites in 2016 produced 'soil conditioner', accounting for almost 95% of the total amount of quality compost produced. Certified sites in Northern Ireland and Wales only produced soil conditioner. The certified sites in Scotland produced mainly soil conditioner with several producing mulch or manufactured topsoil ingredient. Certified sites in England produced mainly soil conditioner with several sites producing growing medium ingredient or mulch.

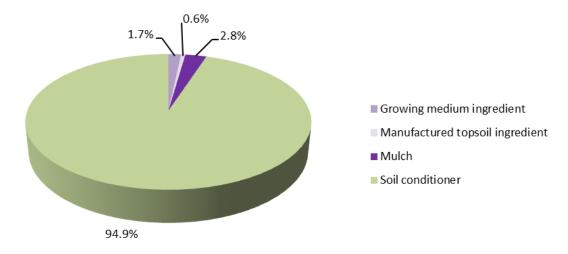


Figure 6 Certified compost product types in the UK in 2016



In countries where the Compost Quality Protocol (CQP) applies (England, Wales and Northern Ireland) quality compost must be supplied to one of the end markets specified in the CQP. The four end markets are 'land restoration and soft landscape operations', 'horticulture', 'agriculture and soil-grown horticulture', and 'forestry'. In Scotland where the CQP does not apply, composters must abide by SEPA's composting position statement (2017).

Compost produced as soil conditioner will mainly be destined for the agricultural sector and soil-grown horticultural markets to improve the structure and fertility of the soil. Mulch can be used in soft landscape operations, agriculture, and suppressing weeds during tree establishment in the forestry market. Growing medium ingredient can be supplied to growing media manufacturers to produce growing medium destined for horticulture. Quality compost may also be bagged on composting sites as part of the certified process.

5 Map of certified composting sites

The map below pinpoints the locations of all the certified sites in the UK in December 2016. The sites pinned in blue were certified to PAS100, and the sites in red were certified to PAS100 and the CQP. Most of the certified sites in Scotland were certified to PAS100 only (in line with the Scottish environmental regulations), although several were certified to PAS100 and CQP. This could be due to contracts they had with customers or local authorities in England, Wales or Northern Ireland.





6 Scheme developments

We introduced several changes to the operation of the Scheme in 2016 and we developed several aspects to improve the robustness and integrity of the Scheme – these are summarised below.

REAPPOINTMENT OF CERTIFICATION BODIES

Certification bodies were invited to tender for appointment last year and we received three very strong tender responses. After careful evaluation of these submissions, Organic Farmers & Growers (OF&G) and NSF Certification (NSF) were reappointed as certification bodies under the CCS.

UKAS ACCREDITATION PROGRESS

We are working with UKAS with a view to setting up accreditation of certification against the CCS standards. Last year, UKAS carried out a technical review of the Scheme documents (PAS100, CQP, Scheme Rules) for the assessment of accreditation to ISO 17065. We received a report from UKAS and began exploring their assessment findings. This work will continue over the next few years.

COMPLAINT PROCEDURES

The <u>Product Complaint Investigation Report Form</u> was created for certification officers to provide a summary of the investigation into a product complaint and the outcome of the investigation. The Case Studies page of the CCS website was produced to display these anonymised reports.

LABORATORY APPOINTMENT PROCEDURES

<u>Laboratory</u> appointment procedures and guidance notes were introduced for laboratories to apply to carry out testing under the CCS. A fifth laboratory applied in 2016 but the application was unsuccessful following an initial assessment carried out by the independent auditor.

LABORATORY AUDITS

Following the success of the first audit round, the CCS-appointed laboratories were fully audited again in 2016. The independent auditor reported significant improvements made to their practices since the first round in 2015. We also developed laboratory complaint procedures for producers to follow when raising a complaint against one of the CCS-appointed laboratories. More information can be found in the <u>Independent Audits 2016 Summary Report</u> on the CCS website.

CCS DATABASE AND PAS100 TEST REPORTS

The tests section of the CCS database was developed to incorporate and store PAS100 test reports uploaded directly by the appointed laboratories. The <u>PAS100 Compost Analysis Request Form</u> and <u>sampling Guidance Notes</u> were introduced as required documents to use when sending compost samples to the laboratories for certification purposes.

PAS100 REVIEW

REAL took over from WRAP as sponsor for the review/revision of PAS100. REAL started discussions with BSI for the review/revision and sent a letter to BSI with a list of any relevant technical work. BSI assessed this proposal and the PAS100 revision process was initiated earlier in 2017.