

Anaerobic Digestion Strategy and Action Plan

Annual Report on Progress 2011/12

July 2012

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Ministerial Foreword

We are pleased to publish this report which highlights the significant progress that has been made in the first year since the Anaerobic Digestion Strategy and Action Plan was launched. During that time the industry has continued to grow: the number of AD plants has risen by more than a third and its capacity has doubled. There are also many proposals and significant investment in the pipeline.

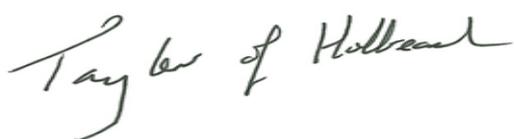
Nonetheless, there remain challenges and barriers to be overcome if this growing industry is to achieve its potential in producing renewable energy, treating our organic waste, and creating new sources of renewable bio-fertiliser. We remain committed to helping the industry to achieve this potential and contribute to our green economy.

We recognised in the Strategy the part that AD can play in achieving our environmental goals. This has been further recognised in the Government's Bioenergy Strategy, published earlier this year, which provides a strategic view of the role that different sources of bioenergy can play in helping us meet our renewable energy and carbon reduction commitments sustainably.

None of this progress could have been achieved without the efforts of industry, Government, and its delivery partners. We very much welcome this continued collaboration which is essential to delivering a thriving and successful AD sector. As a consequence, the Action Plan has made a strong start. Of particular note are the £10m AD loan fund, work to reduce the operational costs of AD, and the extensive programme of work to build confidence in markets for digestate.

For its part the Government has increased the support that we provide for the deployment of AD. Subsidy rates for small scale AD projects under the Feed-in-Tariff Scheme were increased and further support for AD was introduced through the Renewable Heat Incentive.

Our ambition ultimately is to avoid food waste going to landfill. We are, of course, taking action to reduce food waste arising in the first place, but where there is unavoidable food waste that cannot be reused, AD is the best environmental option currently available. That is why the Government has made AD a priority and why it continues to be a priority for us. We look forward with confidence to the future of the AD sector.



Lord Taylor of Holbeach and Gregory Barker

Contents

Ministerial Foreword	3
Anaerobic Digestion Strategy and Action Plan – Annual Report 2011/12.....	5
Summary.....	5
Chapter 1: Current state of the industry	7
Chapter 2: Tackling the barriers	12
Chapter 3: Actions remaining	20
Appendix A- Implementation of the Anaerobic Digestion Strategy and Action Plan	21

Anaerobic Digestion Strategy and Action Plan – Annual Report 2011/12

Summary

1. This document reports on progress in the year since the Government published its Anaerobic Digestion Strategy and Action Plan in June 2011¹. The Government has made a commitment to increase the energy from waste produced through anaerobic digestion. The Anaerobic Digestion Strategy and Action Plan was developed by Government and stakeholders and includes 56 actions designed to tackle barriers to the increased uptake of AD in England.
2. The Strategy did not set specific targets for the adoption of AD and the Government does not wish to do so. Instead, the Action Plan was designed to help ensure that there are no unnecessary obstacles to the development of the sector, by addressing the barriers that were identified by industry. The Strategy also recognised that it is ultimately a matter for local authorities, communities and industry to decide on the technologies that are most suitable for their waste and energy needs.
3. Anaerobic digestion involves bacteria breaking down organic material in the absence of oxygen to produce biogas. This is used to produce electricity or purified to run vehicles or can be injected directly into the gas grid. As well as the gas, anaerobic digestion also produces nutrient rich digestate – which can be used as a valuable bio-fertiliser.
4. Anaerobic digestion has a particular value as a way of dealing with organic wastes and avoiding, by more efficient capture and treatment, the greenhouse gas emissions associated with its disposal to landfill. Government guidance has identified AD as the best option currently available for dealing with separately collected food waste.
5. Defra has established a Steering Group to monitor and co-ordinate progress under the Action Plan and to ensure that the actions remain relevant to the challenges that the AD sector faces. The members of that group and its terms of reference are set out in Annex A. The group has met three times and this report is based on the work of group members. Twenty one of the Actions have now been completed, a further 28 are being progressed towards completion, and 7 are ongoing actions. It is expected that a final report will be produced when all the Actions have been adequately progressed or completed.

¹ <http://www.defra.gov.uk/publications/files/anaerobic-digestion-strat-action-plan.pdf>

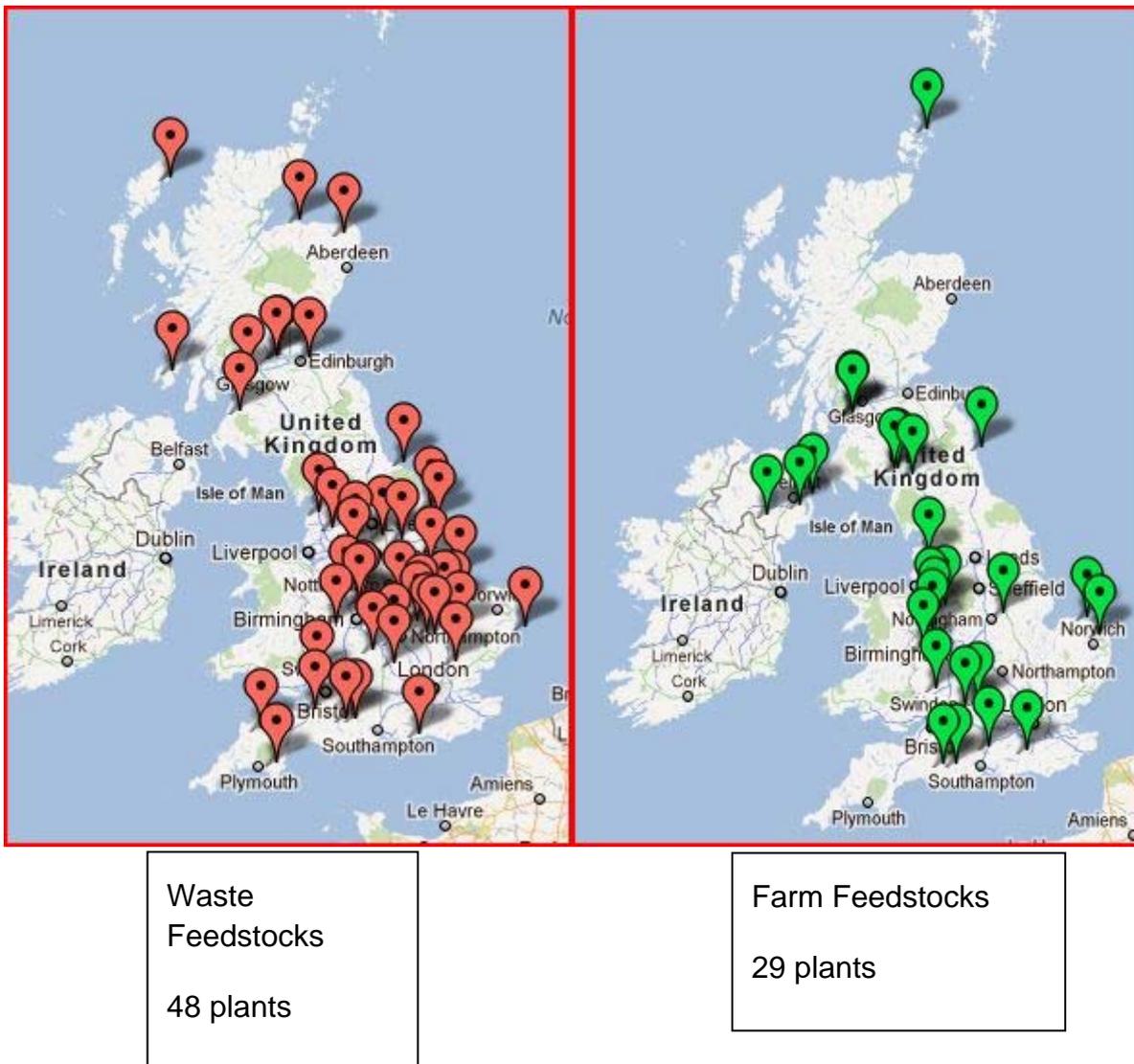
6. The eight major areas of work in the Action Plan are:-
 - Improving our understanding of the AD baseline
 - Building UK skills
 - Building safe and secure markets for digestate
 - Raising awareness of AD – Community AD and localism
 - Building markets for biomethane and transport fuels
 - AD in the rural community
 - Finance
 - Regulation
7. Chapter 2 of this document reports on each of these areas and there is a detailed update on all 56 actions in the spreadsheet that accompanies this report.

Chapter 1: Current state of the industry

1.1 AD Sector

1. The AD sector has continued to expand rapidly during the year, with an increase of over a third in the number of operational plants treating farm and waste feedstocks. The largest increase in numbers of plants has been seen in those that treat food waste. There are currently (June 2012) 78 AD plants operating in the UK (see Figure 1). 48 plants treat waste feedstocks and 29 treat farm feedstocks. One plant injects biomethane into the gas grid. This compares with a total of 54 plants when the Strategy and Action Plan was prepared. There is at least double the installed capacity that there was when the Strategy was prepared.

Figure 1: AD plants (excluding plants that treat sewage sludge)



1.1.1 Treating Food Waste

2. Treating unavoidable food waste through AD is the best option environmentally creating renewable energy, biofertiliser and avoiding the breakdown of food waste in landfill. The UK still generates 15 million tonnes of food waste a year and even after the efforts of waste minimisation policies (like the Love Food Hate Waste campaign), there will still be food waste from households and the commercial and industrial sectors to be processed. Landfill tax on biodegradable waste is increasing (currently £64/t), making gate fees for AD more and more competitive.
3. Many food waste facilities currently in operation fall into two camps, those which treat separately collected food waste, either from households through a Local Authority (LA) contract or from commercial collections, and those which treat the food waste generated by a single business.
4. The Agrivert plant in Oxfordshire is a good example of the former, treating food waste from the Oxford Waste Partnership (an innovative partnership between six Local Authorities) as well as waste food from both supermarkets and local food manufacturers. Agrivert's 45,000 tonne capacity site generates 2.1 MW of electricity, enough to power 4,200 homes in the local area.
5. The Blackmore Vale Dairy site just outside Shaftesbury is an example of a food processing business seeing the financial benefits of using AD to treat the waste generated on site. Manufacturing dairy products from over 35 million litres of milk every year, BV Dairy chose to use an on site AD plant to reduce the high costs of discharging their waste liquids to the sewer. Now the load has been lightened at the local water treatment works, freeing up capacity for much needed new housing in the area, and BV Dairy are reaping the financial and environmental rewards of generating their own energy from what was previously considered a waste material.
6. Both of these commercial models are experiencing growth as developers, manufacturers and Local Authorities see the benefits available to them.
7. The major benefits of AD are that it can provide a local solution to locally arising waste and is a scalable solution. Large scale plants treating LA and commercial food waste work just as well as smaller, on site treatment solutions for manufacturers and there are a host of technology providers who see the UK market as the next big growth area for them.
8. New LA and commercial food waste collections are being implemented all the time which is helping to get more plants financed and new players are coming into the market with ambitions to build a portfolio of plants. Tamar Energy is an example of this with a partnership with Sainsburys and financing from a variety of equity funds.
9. Local Authorities and commercial operators are beginning to realise that they can get a better deal for householders and their customers by being more competitive on gate fees while also stimulating investment into the sector by offering longer

term contracts. The commitment from UK Green Investments (the precursor to the Green Investment Bank) of £80m to two fund managers for waste and recycling projects (including AD) goes to show AD is considered to be a market with great growth potential.

1.1.2 Treating farm waste

10. AD can also provide an opportunity for much needed rural diversification, enabling farmers to generate a new income stream, reduce costs on farm and develop a level of energy security they have not previously enjoyed.
11. Using AD to treat some of the 90mt of manures and slurries generated on farms every year can not only help to reduce the fugitive emissions of methane from this material but enables farmers to capture this valuable resource and reap the financial benefits.
12. Other agricultural residues (like left over cattle feed or silage for example) and where necessary energy crops can, in combination with manures and slurries, play a role in producing energy on farm.
13. Many technology providers are developing equipment that is more and more suitable for small scale, on-farm installations. WRAP's Driving Innovation in AD programme has a workstream dedicated specifically to this area, helping to demonstrate the financial viability of these smaller scale technologies to deal with on-farm wastes. The goal of the programme along with the work of other organisations like the NFU, RASE and CLA is to stimulate faster growth in this sector, making our farming sector more skilled, more resilient and more profitable.

1.1.3 Use of digestate

14. Having safe and secure markets for digestate is crucial to the success of the AD sector which is why there is a wealth of activity to develop these markets. As Chapter 2 of this report demonstrates, large scale field experiments in different types of agriculture, landscaping and regeneration are already providing robust scientific evidence and data on the benefits of using digestate as a fertiliser replacement. The development of the Biofertiliser matrix and the updates to the PAS110 standard and the Quality Protocol for digestate continues this theme of giving users confidence in a quality product with verifiable benefits.

1.1.4 Electricity, Heat, gas to grid, or transport fuel

15. Of course, the ability of AD to produce renewable energy from waste products is a huge benefit. Currently, most AD plants turn their biogas into electricity (a hangover from the days when this was incentivised over other uses) but now the playing field has been levelled with the introduction of the Renewable Heat Incentive which provides support for both direct heat use and the injection of biomethane to the grid. In addition, the Renewable Transport Fuel Obligation recently increased the available support for waste derived fuels.

16. There is more work to be done to bring the costs of this technology closer to those of CHP engines but the AD sector is stepping up to this challenge readily and making excellent progress on this and other regulatory barriers.
17. The industry is set to continue its growth, (see Table 1), with more than 100 additional sites having received planning permission nationally. While we do not know how many of these sites will ultimately be built and become operational, the figures show the continued interest in the AD sector from developers, and is backed up by a number of high profile announcements of future investment in AD capacity.

Table 1: Anaerobic Digestion Projects with planning permission (source: WRAP)

Feedstock	Number	Capacity Tonnage	Capacity MW
Waste Feedstocks	85	over 3Mtpa	Approx 125MWe
Farm Feedstocks	38	over 550ktpa	Approx 21MWe
Total	123	3.5Mtpa	Approx 146Mwe

1.2 Highlights of the year

18. There has been very good progress under the Action Plan with many actions being delivered on schedule. Although in some cases there have been delays – for example where the original deadlines in the Action Plan proved overly ambitious, or where there have been funding constraints - there has been good progress in the most critical areas. In total 21 of the 56 actions are now complete, 28 are in progress, and 7 are classified as ongoing actions.

19. Highlights over the past year include:

- Launch of the £10m Anaerobic Digestion Loan Fund operated by WRAP, and the offer of the first loan under the Fund
- Strong industry response to WRAP's 'Driving Innovation in AD' programme, resulting in 19 projects being funded to feasibility stage
- A new £9.5m programme from the Department for Transport for low carbon trucks and re-fuelling infrastructure
- Good progress on reducing the costs of injecting biomethane to the grid
- New permitted development rights for on-farm AD, reducing the need for planning permission where the plant meets the specified size and feedstock criteria
- The subsidy for AD under the Feed in Tariffs scheme was increased for small scale AD plants, and the Renewable Heat Incentive was launched providing another route for financial support of AD projects. The Department of Energy and Climate Change also reviewed the Renewables Obligation and the Feed in Tariffs scheme during the year.
- Launch of new trials looking at alternative markets for digestate, for example for landscaping and regeneration

Chapter 2: Tackling the barriers

2.1 Improving our understanding of the AD landscape

20. This work involves actions to collect and make widely available information on AD. As a rapidly growing sector, it is important that the benefits of AD are widely understood by Government, industry and civil society alike, in order that it can play a full part in generating renewable energy, dealing with our waste and supporting a sustainable and competitive agricultural sector. The promotion of best practice and research that often underpins it is also key to the successful development of the industry. Equally it is crucial that we have a clear baseline from which we can measure the growth of the sector and its contribution to the green economy.
21. The main conduit for disseminating information on AD is through the official Biogas Portal: - <http://www.biogas-info.co.uk/> which is operated by the National Non Food Crops Centre (NNFCC) and funded by Defra. NNFCC continue to develop the Portal and have updated the site to coincide with the publication of this report. A page dedicated to the AD Strategy and Action Plan that provides summaries of the action updates and outputs has been created - <http://www.biogas-info.co.uk/index.php/ad-strategy-a-action-plan.html>
22. Understanding where we have started from is important in establishing whether we are successful in tackling the barriers to AD. In February 2012 WRAP and the NNFCC produced a baseline report on the AD sector which was published on the AD Portal: - <http://www.biogas-info.co.uk/index.php/news-archive/101-wrap-and-nnfcc-publish-report-on-current-status-of-uk-anaerobic-digestion-infrastructure.html>. This report sets out the current state of the UK AD infrastructure, detailing the size and capacity of the industry. Authoritative knowledge of the current infrastructure for AD helps to enable better investment decisions. In addition, it will improve the understanding of the current size of the AD industry in the UK and, going forward, it will facilitate enhanced monitoring of growth in the industry.
23. In December 2011, WRAP launched a £500,000 fund to support projects that demonstrate that food waste can be collected more efficiently from businesses, potentially increasing feedstocks for AD. The launch of this fund follows further research undertaken by WRAP which highlights the potential for delivering more affordable organic waste collection services to a range of hospitality businesses, targeting the recycling of food waste. This joins up with work underway to develop a new Hospitality and Food Service Voluntary Agreement, which will encourage the sector to increase the amount of food waste sent to composting and AD rather than landfill.
24. WRAP aim to publish by September 2012 information on feedstocks for AD. This information is produced in a wide variety of formats and from numerous sources. Collating the data via the Portal should make it easier for AD developers to identify potential feedstock supplies.

2.2 Building UK Skills

25. This work is focussed on ensuring the AD industry has the relevant skills and trained staff that it needs as the sector expands. This will help provide confidence to investors that the industry has the right level of operator competence, for example to ensure high levels of health and safety, or meet the necessary requirements for environmental permitting.
26. Progress has been made in developing a skills matrix by the Chartered Institution of Wastes Management (CIWM) and the trade associations assisting in identifying training needs. This will incorporate ADBA's health and safety training matrix. Information on operator competence requirements was published on the AD Portal - <http://www.biogas-info.co.uk/index.php/regulations-qa#opcomp>.
27. A major focus of the actions in this area is on developing appropriate National Occupational Standards (NOS). Progress in this area was delayed while EU Skills sought funding and approval (which has now been agreed) from the UK Commission for Employment and Skills to start the development of NOS. Other actions – such as an assessment of the need to develop qualifications to underpin NOS - depended on agreement from Awarding Organisations (AOs). EU Skills has received expressions of interests from a number of AOs. This should enable more rapid progress on the skills work in the year ahead.

2.3 Building safe and secure markets for Digestate

28. Digestate from AD plants is still considered a relatively new material. When used effectively and appropriately, it is a valuable fertiliser which can directly replace other inorganic fertilisers. There is a need to develop markets for digestate, and to build confidence within those markets on the safety and efficacy of its use. Lack of such markets could significantly constrain the development of the AD sector in the future, and will be a missed opportunity to recycle valuable nutrients to the soil.
29. WRAP is taking forward a group of actions on digestate under this workstream. The most substantial part of this work is the joint WRAP/Defra programme of field experiments to demonstrate the benefits of using digestate in agriculture. This work is combined with an extensive knowledge exchange programme. The first results of the experiments were circulated this year, and are summarised in the third edition of the project bulletin. The bulletin and other project information can be found at www.wrap.org.uk/dc-agri.
30. There is also a suite of projects through which WRAP is identifying market opportunities for digestate in other sectors such as landscaping and regeneration. Field experiments and demonstration trials have recently started which will examine the viability of using digestate in sports turf and turf production, energy crop establishment and soil improvement and manufacture, over a 2 year period.
31. WRAP's work on digestate can be accessed via: www.wrap.org.uk/category/subject/anaerobic-digestion

32. During 2011, WRAP published an in-depth report on digestate properties: *Compost & Anaerobic Digestate Quality for Welsh Agriculture*.
33. New issues also emerged during the year, the most significant of which is the development of potential new EU end of waste criteria for digestate and compost.
34. End of waste criteria help to ensure that materials such as digestate derived from waste inputs can be used as products, outside waste regulatory control. In England, end of waste criteria are set out in the Quality Protocol for Anaerobic Digestate and in the specification for digestate quality (PAS 110). Such criteria mean that end users can have confidence in the quality of the products that they use. The Quality Protocol and PAS 110 are currently being reviewed. The Environment Agency and WRAP held three workshops at the end of 2011 and WRAP are carrying out research in three areas highlighted by stakeholders at those workshops.
35. The UK is currently the only country in the EU to have implemented such criteria on a national basis. The European Commission have asked their technical experts to prepare proposals for EU-wide end of waste criteria for biowaste (food and green waste). If EU end of waste criteria are introduced and differ from our own existing standards, they could lead to extra costs and disruption for UK industry. Defra, the Devolved Administrations, the Environment Agency and WRAP are working closely with the AD and composting sectors to ensure that any EU criteria are justified and are workable within the UK.

2.4 Raising awareness of AD - community AD and localism

36. The AD Strategy and Action Plan recognised the need to raise awareness of AD as a technology and promote its benefits, notably in terms of generating renewable energy and waste management. Given the flexible nature of the technology, which can be deployed at a range of sizes, it was felt there was a need to highlight a range of different working models, through case studies of existing plants, and support to help projects succeed. It was also felt there was a particular need to focus on small scale AD, where project development costs can be high, but which has the potential to deliver benefits at a local level.
37. At the end of 2011, WRAP launched the “Driving Innovation in AD” programme. This called for innovative projects to help reduce the costs and improve the performance of AD plants. The fund has two strands, one on optimising the AD process at all scales and the second on reducing the costs and complexity of small scale, on farm AD. WRAP collaborated with the Small Business Research Initiative on both elements and with the Royal Agricultural Society of England on small scale AD. In total 48 proposals were received and 19 were selected for further development (13 optimisation proposals and 6 on small scale AD). A list of projects is available at: <http://www.wrap.org.uk/content/driving-innovation-ad>.
38. NNFCC are continuing to work with other stakeholders to develop case studies of all types of AD and to disseminate those through the AD Portal.

39. The Anaerobic Digestion and Biogas Association (ADBA) are continuing to develop the key elements of a toolkit that can be used by all those with a role in planning, procuring, delivering and operating AD.

2.5 Building markets for biomethane for transport fuels

40. Currently most AD plants in the UK convert biogas to electricity. However there is also considerable potential for the gas to be used as a transport fuel, notably in the road haulage sector. In December 2011, the Renewable Transport Fuel Obligation was amended to award two Renewable Transport Fuel Certificates per litre or Kg of waste derived biofuels, including biomethane.

41. In March 2012, the Department for Transport launched a competition for demonstration funding for low carbon trucks and their supporting infrastructure. This involves £9.5m of funding to encourage and assist UK road haulage operators to buy and use low carbon medium and heavy goods vehicles. Biomethane is one of the fuels eligible for support under the programme. The competition opened on 24th April 2012 with a deadline for applications of 20th June 2012.

<http://www.innovateuk.org/content/competition-announcements/demo-to-speed-up-introduction-of-low-carbon-commer.ashx>

42. The use of biomethane via direct injection into the national gas grid has significant potential and represents an opportunity for AD operators, and is now supported under the Government's Renewable Heat Incentive. To date there has been little implementation of such projects, though two gas to grid plants are expected to be commissioned in autumn 2012.

43. The Energy Markets for Biomethane (EMIB) review group was set up by OFGEM to support the AD Strategy and to provide a forum for informed debate on the potential barriers to the commercial development of biomethane projects, and the appropriate means of addressing such barriers. It tackled five areas of work with the aim of reducing costs to help the viability of future projects. The group concluded that, through a combination of a risk assessment approach, packaged solutions and changes in the accuracy required for measurement of the input of relatively low gas flows, entry costs could reduce by more than half in the short term with further gains possible by the time of the Renewable Heat Incentive review in 2014/15.

44. A key element was the development of a standardised package design for biomethane connections. Currently gas injection to the grid could cost around £600,000 and take 12 months. The standardised package that has been developed could reduce the time to 5/6 months and probably halve the costs. The Group submitted its recommendations to OFGEM for consideration.

45. Most recently, the Environment Agency have launched a consultation on a draft Quality Protocol (QP) for biomethane for injection into the gas grid, or as fuel for road vehicles. The QP sets out criteria for establishing the point at which

biomethane is considered to be fully recovered, and no longer waste under the terms of the Waste Framework Directive, easing one substantial regulatory barrier to biomethane production. Provided some remaining barriers can be resolved, it is estimated that introduction of the QP could stimulate a significant increase in biomethane-to-grid from landfill and anaerobic digestion of waste, reducing dependence on natural gas and gas imports, contributing to achievement of renewable energy targets and driving landfill diversion through increased take-up of AD . The QP will be applicable in England and Wales. Public consultation will run from the beginning of June until the end of July 2012 - <https://consult.environment-agency.gov.uk/portal/ho/waste/epow/protocol/biomethane>.

2.6 AD in the rural community

46. The AD Strategy identified the need to develop the evidence base on the sustainability and role of the use of purpose grown crops as a feedstock for AD. Defra hosted a stakeholder workshop on these issues in November 2011. The workshop reviewed the current evidence on the use of crops as an AD feedstock and the implications on food security, land use change, farming competitiveness as well as wider environmental impacts.
47. The findings from the workshop helped inform the development of the Government's Bioenergy Strategy and the Government's views were set out in the Department of Energy and Climate Change's consultation on the comprehensive review of feed in tariffs published in February 2012². The Feed In Tariffs consultation reported stakeholders' conclusion at the workshop. This was that the available evidence suggested that, within the current policy framework and at current FIT rates, only a modest increase in the use of purpose grown crops for AD was likely. However, the FITs consultation document also reported that concerns remain about the potential for localised impacts from, for example, diffuse pollution or habitat loss.
48. Defra is committed to working with industry and other stakeholders to develop and agree a voluntary code of practice for AD operators using purpose grown crops, with a view to avoiding or mitigating environmental risks, and securing the benefits of sustainable farming practice.
49. The FITs consultation concluded that Defra would work with industry and other stakeholders to monitor uptake of different AD systems, the effectiveness of the voluntary code and to evaluate other options, including a regulatory approach. Monitoring of progress will occur alongside the standard FIT review mechanism. If

² <http://www.decc.gov.uk/assets/decc/Consultations/fits-review/4311-feed-in-tariff-scheme-phase-2b-consultation-docume.pdf>

evidence emerges that this voluntary approach does not achieve its aims the Government will explore regulatory controls. DECC will be publishing a response to the consultation exercise shortly.

50. In November 2011, the Government announced as part of the Rural Economy Growth Review that it would promote the development of community-scale renewable energy projects in England through the establishment of a £15m Rural Community Renewable Energy Fund. AD projects will be eligible under the Fund.

51. The Fund will provide loans to help rural communities undertake the feasibility, planning and preparation work necessary to obtain planning permission, so that they can go on to benefit from the savings and returns available to them, including through Feed-in Tariffs and the Renewable Heat Incentive, once the projects are developed. Further details can be found at:

<http://archive.defra.gov.uk/rural/documents/economy/rcref-mainpoints.pdf>

2.7 Finance

52. Both retail and corporate banks have expressed a desire to fund new AD projects. However, investment in AD continues to pose a number of challenges. As well as the climate for investment in new capital projects generally, there are also specific issues for the AD sector. Compared with other renewables like wind and solar, AD does not fit neatly into a project finance product. They do not lend themselves to secure Engineering Procurement and Construction contracts and they fall between the scales required – too big for retail banks, too small for corporate, and may have issues with security of feedstock supply. All of this makes it more expensive to undertake due diligence.

53. As a result, there is limited debt financing available to AD projects. Developers used to look for a ratio of 80:20 debt to equity but today there is an increasing trend for projects to be built on 100% equity on a speculative basis, despite depressed returns, in the hope that a re-financing package will bring the debt in at a later date. Finance sector representatives at ADBA's Finance Forums (Action 48) have concluded that debt funding is not appropriate for the current risk profile of most AD projects in the present market.

54. Despite these challenges there are also many opportunities for investors, underpinned by incentives for the generation of electricity, heat and transport fuel from biogas, research and market development for digestate products, support for innovation in the sector, potential support from the Green Investment Bank and more.

55. There have also been a number of notable steps forward during the first year of the Action Plan. Lord Henley launched the Anaerobic Digestion Loan Fund in July 2011. This £10m fund, funded by Defra and administered by WRAP, aims to support the development of 300,000 tonnes of new capacity to deal with food waste through AD. The first loan was offered to a Wiltshire-based company in January 2012 (further details in Box 1).

56. In addition, two AD projects were accepted – subject to due diligence - for funding under the Regional Growth fund. These two projects, once completed, will put in place new capacity to deal with about 100,000 tonnes of food waste in the North East.

57. Anaerobic Digestion is one of the technologies within the scope of the work of the Green Investment Bank. The bank is the first of its kind dedicated to “greening” the economy. It aims to provide financial solutions to accelerate private sector investment in “green” infrastructure. During the year, the Department for Business, Innovation and Skills (BIS) set out the timetable for the Bank and announced that until such time as the Bank received EU State Aids clearance, the Government would begin making investments in green products and services. Further information is available at: <http://www.bis.gov.uk/greeninvestmentbank>. Until state aid approval has been obtained, UK Green Investments is investing directly in projects on fully commercial terms. £80 million has been committed to two specialist fund managers who will make and manage investments in small scale waste infrastructure, including AD, on behalf of BIS.

Box 1: Anaerobic Digestion Loan Fund

The first loan under the Anaerobic Digestion Loan Fund was made in January 2011. The loan for £800,000 was made to a Wiltshire-based company, Malaby Biogas which is building an AD plant at Bore Hill farm, near Warminster. The plant will initially handle about 17,000 tonnes of commercial and industrial food waste a year but may expand to 20,000 tonnes.

58. WRAP and ADBA together produced a due diligence template to simplify and reduce the time and cost of obtaining finance for projects. The Steering Group recognised that such documents need to be kept under review as the legislative and regulatory framework changes. ADBA also compiled a consolidated list of financial schemes that were available to AD projects³, and produced evidence in support of simplified Enhanced Capital Allowances as they apply to AD, though this was not taken forward by HM Treasury.

³ <http://dl.dropbox.com/u/35580347/120330%20AD%20Action%20Plan%20-%20List%20of%20Finance%20Schemes%20FINAL.pdf>

2.8 Regulation

59. The Government and the Environment Agency (EA) have taken significant steps to support the AD sector through proportionate risk-based regulation, allowing the industry to grow, while maintaining the need to protect human health and the environment.
60. In 2010 Defra introduced new exemptions from the need for an environmental permit for small-scale on and off-farm AD. The Environment Agency is developing new standard rules permits that will increasingly cover most AD plants, helping to reduce the cost of regulation to business.
61. The EA are in the process of gathering the necessary evidence to progress other actions in the Action Plan, including a process for assessing the suitability of new waste types for AD, and assessing the need for pasteurisation of crop residues destined for AD, to prevent plant-borne pathogens.
62. In addition, the EA and WRAP held three workshops in December 2011 to review the UK specification for digestate quality (PAS 110), the standard for end of waste in the associated Quality Protocol. This has been in place since 2009 and, as the number of AD plants dealing with food waste in particular have grown, new issues have emerged.
63. Although the AD Strategy identified few issues that might require regulatory change, it did recognise that there was a need to improve understanding among developers of the existing regulatory process. Defra and EA have set up a regular Government/Agency/Industry liaison forum on regulation as it applies to AD and other treatment of biowaste. The aim will be to provide a forum to monitor regulatory issues, give feedback on industry compliance with a view to improving regulatory performance in the biowaste sector as well discussing industry concerns. This forum will be closely linked to the Agency's sectoral and intervention plans for biowaste treatment.
64. On planning, the Department for Communities and Local Government introduced legislation to allow permitted development rights for on-farm anaerobic digestion systems that use feedstocks generated on that farm and that fall below the specified size. These rights came into effect on 6th April 2012⁴. It is for the local planning authority to determine in the first instance whether permitted development rights apply on a case by case basis.

⁴ <http://www.legislation.gov.uk/uksi/2012/748/made>

Chapter 3: Actions remaining

65. There are currently 28 outstanding actions. Most of these relate to developing safe and secure markets for digestate (11 actions), skills (four actions) and regulation (five actions). A summary of outstanding actions is provided at Table 2.

Table 2 – Outstanding Actions

Workstream	Number of Actions
Improving our understanding of the AD landscape	2
Building UK skills	4
Building safe and secure markets for digestate	11
Raising awareness of AD – community AD and localism	1
Building Markets for biomethane for transport fuels	2
AD in the rural community	2
Finance	1
Regulation	5

66. Work is underway to progress all these actions. Twenty five of the remaining actions will be completed within the next year, while three of them represent longer term tasks. Two of the longer term actions are part of WRAP's extensive programme on building markets for digestate and one action is looking into the regulatory tools for the delivery of the EU Industrial Emissions Directive.

67. Seven actions are classed as ongoing. They cover a set of issues ranging from provision of information on the AD landscape, through to addressing training needs, finance and regulatory requirements, and promoting schemes for biomethane injection into the grid. These actions need to be kept under review in light of developments in the AD landscape, and as the regulatory and legislative framework changes.

Appendix A- Implementation of the Anaerobic Digestion Strategy and Action Plan

Steering Group

Terms of Reference

Objective: To oversee implementation of the Action Plan in order to increase energy from waste through anaerobic digestion

Role:

- To oversee implementation and ensure that the desired outputs are achieved to deadline
- Deal with any synergies and links between different actions and policy areas
- To provide a sounding board for action owners to seek guidance from the Steering Group
- Identify and mitigate risks
- Keep the Action Plan under review to ensure that it remains relevant
- Provide progress reports to Government on delivery of the Action Plan

Process and Meeting Frequency

The Secretariat will ask Action Owners to complete a simple one page report on each action every two months. The Secretariat will collate this information into reports for the Steering Group. The Steering Group will conduct most of its business by telephone or email but will meet as a group approximately three times a year. The Group will review issues and risks to delivery of the Action Plan as identified in the Secretariat's reports and by Group members. It will not review progress on every action at every meeting. The Secretariat will propose for the Group's agreement a list of the actions that are the highest priority in achieving the Strategy's aim. This will help to focus the Group's attention on the most significant actions.

The Secretariat will prepare and clear with the Steering Group any periodic reports required by Government on progress.

Timescale for project

The Group will review progress in 2013.

Membership

The proposed membership of the Steering Group is one representative each from the Royal Agricultural Society of England, the Renewable Energy Association, the Anaerobic Digestion and Biogas Association, Water UK, the Environmental Services Association, the Country Land and Business Association, National Farmers Union, National Grid, Department for Business, Innovation and Skills, Department for Transport, the Department of Energy and Climate Change, Department for Communities and Local Government, Environment Agency, NNFCC, WRAP, Chartered Institution of Wastes Management, EU Skills, Low Carbon Vehicle Partnership, National Energy Foundation.

Other people identified as having an interest in particular actions (e.g. AFOR, LGA) will be represented by the action owner.

Defra will chair and provide the Secretariat for the group.