

# AD&BIORESOURCES

## NEWS

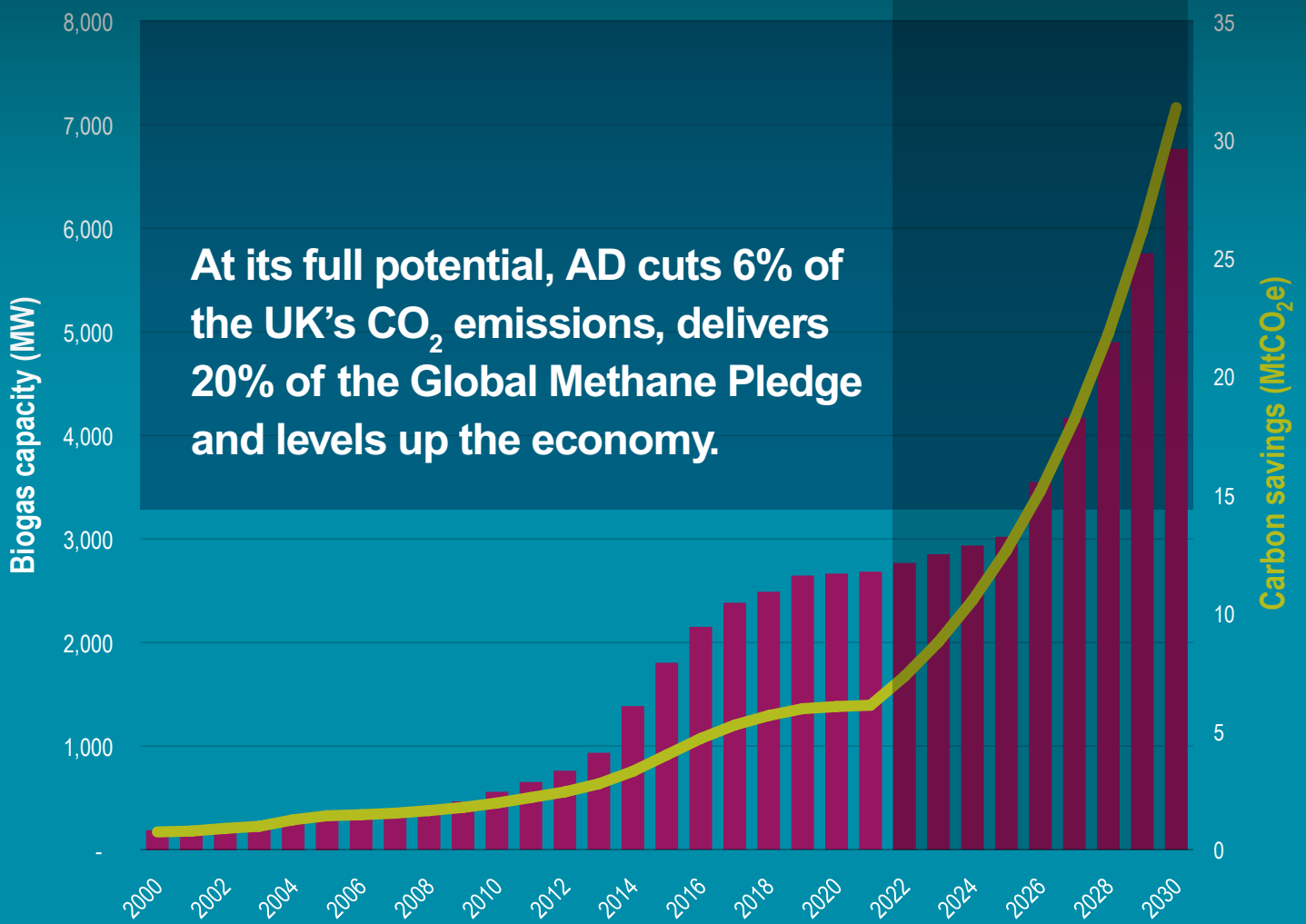
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## NET ZERO OPPORTUNITIES

### WE HAVE THE KNOW-HOW AND TECHNOLOGY



**ACTION PLANS FOR  
DELIVERY OF THE GLOBAL  
METHANE PLEDGE**

**RASE REPORT – AD AND  
FUTURE FARMING**

**AD ‘DESERVES PRAISE  
AND RECOGNITION’ –  
MINISTER**

**PLANT OPTIMISATION –  
DIGGING OUT**

## CARBON FARMING

Climate change and the need to manage carbon will transform farming forever. The Royal Agriculture Society of England (RASE) says AD has a vital role to play.

**P**ractice with science. That is the motto of the Royal Agriculture Society of England (RASE), an independent charity dedicated to the application of science and technology to optimise agriculture and food resources to ensure a secure global future.

Over the past decade it has issued several reports addressing future farming – notably A Review of Anaerobic Digestion Plants (2011) and Refuelling the Countryside (2014). Both integrally sought to build rural resilience while safeguarding food security, envisioning farms as sustainable green energy hubs serving local communities.

Ahead of COP26, RASE issued a briefing paper for policymakers and key stakeholders, entitled “Farm of the Future: Journey to Net Zero”, an interim position statement drawn from an in-depth report scheduled for release next year.

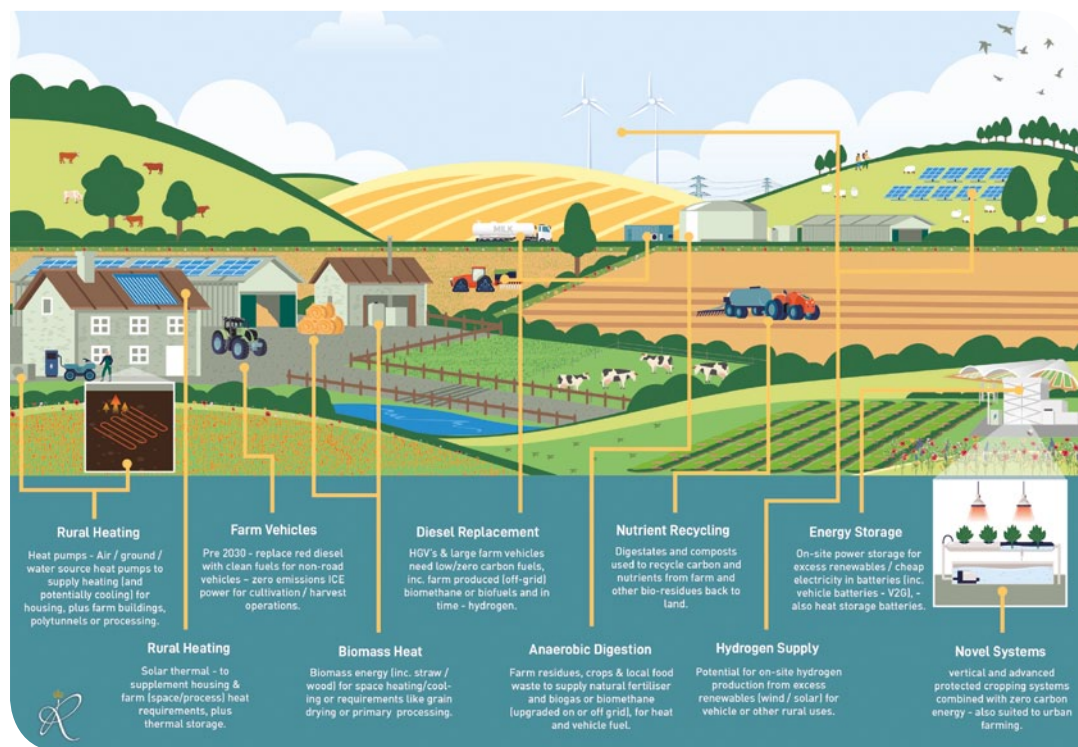
Showcasing innovative and practical solutions, the briefing paper includes some key policy demands: the need for sound economic valuation of natural capital; a consistent and integrated cross-sectoral food, energy and carbon transition policy; the introduction of standardised farm-level emissions accounting; and the adoption of environmental and carbon impact labelling on food to help inform consumer choice.

It also covers a broad range of inter-related topics critical to decarbonising agriculture and ensuring resilient food production: land and resource management; low carbon and renewable energy options; agricultural vehicles and fuels; agritech innovation, including robotics; decarbonisation of four main product sectors; and novel crops.

In describing a number of renewable energy options, the briefing points out that, despite many years of various incentives for biogas, ‘farm-scale anaerobic digestion, based on livestock, local and crop residues, has largely failed to deliver multiple on-farm AD plants, tailored to the needs of local communities.’

The role of AD as a vital part of the carbon cycle is highlighted, noting that the technology is key to intercepting volatile carbon from these organic materials in the form of energy. Under normal circumstances, this carbon would have been emitted as carbon dioxide and methane via uncontrolled biodegradation. AD returns the recalcitrant carbon to land as part of the digestate biofertiliser, offsetting fossil fertiliser use and helping to restore depleted soil, improving resilience and productive potential.

The report notes there is growing recognition that the Red Diesel subsidy does not sit comfortably within the context of climate change and low-carbon aspirations and says biomethane derived from biogas upgrading – ‘an adoption-ready option’ – could play a key role to deliver early diesel



replacement for tractors and HGVs.

The report authors call for BEIS to come up with a dedicated scheme to support small off-gas-grid biomethane which could be used directly to fuel tractors or HGVs or transported to an injection hub or discrete village gas grids. They also propose a rural infrastructure investment fund to help deliver rural decarbonisation.

The briefing calls for the Green Gas Support Scheme (GGSS) to be revised. Currently, it does not support off-grid biomethane production, so there is no support for smaller on-farm AD and therefore no impetus to valorise local bioresources such as slurries, manures and waste feed. Local food wastes could also be used to supplement farm wastes, reducing food waste miles and supplementing lower methane value slurries.

Since farming occupies 75% of the UK's landmass and the viability of its food production businesses is of strategic importance, the briefing says farmers are key to owning and implementing land-based low carbon and bioeconomy solutions. “Therefore, a coordinated approach across government and the agri-food sector is required in order to deliver full ‘systems change’ and this approach must include farm sector voices.”

The full “Farm of the Future” farm of the future report, to be released in Spring 2022, will highlight the emissions reductions options available to farmers and land managers now and those likely to emerge over the next decade. The report will also include case studies which illustrate the positive changes being made now – helping to illustrate how a ‘solutions revolution’ is possible.

The “Farm of the Future: Journey to Net Zero” briefing paper is available at: [www.tinyurl.com/RASEPreCOP26BriefingPaper](http://www.tinyurl.com/RASEPreCOP26BriefingPaper)