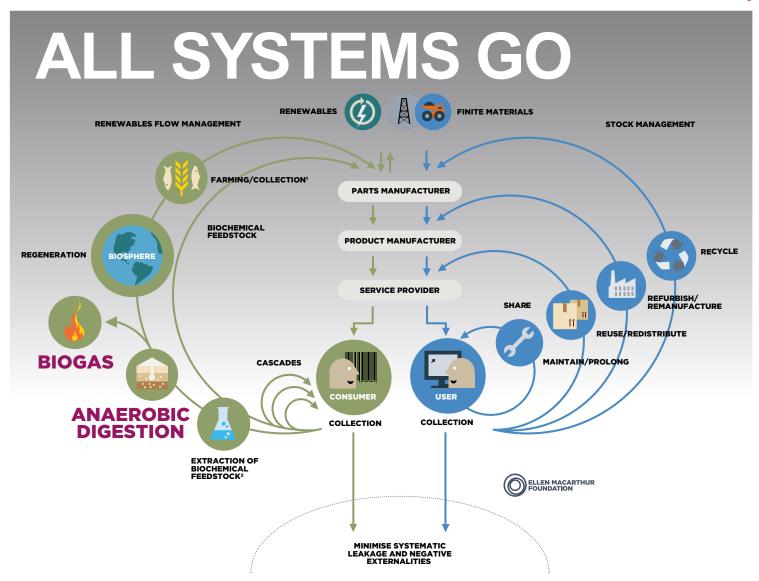
# AD&BIORESOURCES THE UK ANAEROBIC DIGESTION & BIORESOURCES TRADE ASSOCIATION'S QUARTERLY MAGAZINE

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## **ANAEROBIC DIGESTION CENTRAL TO \$34TRN TRANSITION OPPORTUNITY**

CHP: HOW YOU KEEP YOUR MOTOR RUNNING EFFICIENTLY

APPRECIATION: AD CHAMPION CLARE LUKEHURST OBE

NORTHERN IRELAND CAN BE A BIOMETHANE POWERHOUSE

BIOINFORMATICS COULD UNLOCK GREATER BIOGAS PRODUCTION

### **CLARE LUKEHURST OBE – BIOGAS PIONEER**

Angela Bywater celebrates the "indefatigable promoter, defender and adviser on Anaerobic Digestion"



r Clare Lukehurst, who has died aged 87, was one of the UK's leading experts on anaerobic digestion and played a key role in the establishment and development of the UK's now flourishing biogas industry. From 2005 until her death, Clare was the National Team Leader representing the UK at the International Energy Agency's (IEA) Task 37, which covers anaerobic digestion of biomass feedstocks to mitigate climate change through reducing dependence on fossil fuels.

As a tireless promoter of AD, Clare had a strong appreciation of the intrinsic value of this international collaboration, since it enabled countries who had moved furthest in the introduction of biogas plants, such as Denmark and Germany and more recently the UK, to share their expertise on the subject and to encourage other countries still lagging behind in the use of this important biotechnology. This international knowledge was extremely useful: she had been known to set UK policymakers right when their perspective was not wide enough.

#### Early life on the marshes

Clare Therese Lukehurst was born in Canterbury, Kent in 1935. When she was only a few years old her family moved some 20 miles east, to the coastal town of Broadstairs on the Isle of Thanet. She was to develop a deep affection for the historic and agriculturally rich landscape of East Kent, and for the Isle of Thanet in particular, and would take a lifelong interest in its distinctive farming practices; her doctorate, awarded by Birkbeck College, University of London, in 1977, was on "The Changing Use of the Stour Marshes, 1840 to 1964".

Educated at Simon Langton Girls' Grammar School in Canterbury, Clare went on to complete a degree in geography from the University of Exeter (at that time the University College of the South-West).

After graduation, she began her first career of teaching geography, working first at the Bishop Thomas Grant School in Streatham, London, and later at Brighton



Polytechnic (now the University of Brighton), where she was Principal Lecturer in Geography and Director of the Countryside Research Unit in Brighton, a project which looked at changing land use in Sussex.

#### A pioneer of agro-energy

Then in 1991, after taking early retirement, she became an "agro-energy" consultant for Rural Development and Renewable Energy. This was the beginning of what proved to be a highly distinguished career advising in the sustainable management of what Clare lightly referred to as "muck" — animal manure and other forms of farm and food waste.

Clare had begun her long cooperation with the Department of Energy in the late 1980s, a moment of rising national concern about high international oil prices. An early project involved consulting on an exploratory scheme to plant willow trees to be used as biomass fuel. Although the scheme did not prove successful, it led to more than 30 years of dedicated work promoting another form of bioenergy: biogas.

In 1993, Clare introduced the concept of centralised Anaerobic Digestion (based on a Danish model) to the UK in a study for the North Tamar Business Network. What started as an enquiry into reducing local problems caused by slurry odours and muck spreading in large farms, including the pollution of rivers due to manure run-off from fields, led in 2001 to approval to build the first centralised biogas plant in the United Kingdom in Holsworthy, Devon. In an early example of her success at fundraising for the fledgling biogas industry, Clare secured £3.5m towards the plant's construction on the Devon and Cornwall border.

The Holsworthy project was used by the UK Government as a foundation for further program design, forming the basis for guidance and recommendations on good practice for AD and the regulatory framework. Initially, however, raising the profile of biogas required determined lobbying of government departments and of often sceptical farmers. Clare had amazing energy and wasn't afraid to speak to or deal with anyone. She helped to establish awareness of AD through her attention to detail and provision of evidence for those critical early AD plants.

#### Mucking in

In a sense Clare's career in education never ended, with her attention focused on the farming community in particular, whom she helped to inform not only via numerous publications that explained the technicalities and benefits of AD, but also in multiple visits to potential sites, where she would stride in heavy

