

Fuel Cells UK's response to the Reform of the Renewable Obligation and the Statutory Consultation on the Renewable Obligation Order 2007 – Part 2

Introduction

This paper presents the response from Fuel Cells UK, the fuel cell trade association for the UK (www.fuelcellsuk.org) to the Renewable Obligation (RO) consultation. Fuel Cells UK represents the leading UK fuel cell companies, as well as organisations from the academic community and other stakeholders.

Our members are:

Bac 2	Fuel Cell Control
Baxi	Intelligent Energy
BOC	Johnson Matthey
Calor Gas	The Micropower Council
Cenex	Philip Sharman
Ceramic Fuel Cells	Porvair
Ceres Power	Renew Tees Valley
City University	Rolls-Royce Fuel Cells Systems
CMR Fuel Cells	Unitec Ceramics
E.On	University of Birmingham
Fuel Cell Application Facility	

This response has been produced through consultation with our members.

Our main response concerns an important extension to the RO - the necessary extension of the RO to low carbon technologies. We are also responding to specific questions within Part 2 of the consultation.

Important proposed extension

We support the decision by the Government to review the RO, and its overall aim of reducing carbon emissions, maintaining reliable energy supplies, promoting competitive markets and making energy affordable for the poorest.

To achieve these aims, we strongly believe that the RO should be extended to low carbon technologies (LCTs), especially fuel cell technologies, because:

- LCTs are more reliable than intermittent renewable technologies;
- LCTs also reduce carbon dioxide emissions and can deliver considerable benefits relative to conventional technologies;
- With appropriate support, some LCTs are potentially significantly cheaper than renewable technologies;
- Fuel cells can be linked to intermittent renewable energy sources (e.g. wind and photovoltaics), to provide an energy buffer, smoothing supplies and delivering greater overall reliability and security.

Through their inclusion in the RO, fuel cells will help to take forward the Government's commitment to meeting the two major long-term challenges in UK energy policy:

1. tackling climate change by reducing carbon dioxide emissions:

Fuel Cells deliver significant CO₂ savings since they are very efficient (e.g. 80-90% efficient for a fuel cell combined heat and power system in residential applications). A fuel cell running on hydrogen fuel emits no CO₂ at all at the point of use.

2. delivering secure, clean energy at affordable prices:

Fuel cells offer an excellent contribution to the reliability of energy supplies, as they can be run on a wide and growing range of fuels. In addition, as well as being able to play a key role in efforts to achieve more distributed power generation, they can also help to overcome intermittency issues for renewables; power generated by renewable energy sources can be stored as hydrogen and used in fuel cells when more power is required or when renewable energy sources are not generating (due to lack of wind or sun, for example). Without the introduction of fuel cells in the UK, the impacts of falling indigenous supplies could be significantly greater.

Fuel cells offer the best route to silent, compact, reliable and affordable micro-CHP devices that could allow every home to capture the heat released when electricity is generated (by comparison, heat generated at central power stations is currently wasted). As micro-CHP devices, fuel cells can use existing gas supplies and replace conventional boilers to provide heat and power as needed.

Therefore, LCTs and fuel cells, in particular, should be made eligible technologies under the RO. This could help these technologies to achieve their potential to deliver against the key UK energy policy objectives, whilst simultaneously accelerating the development of key future industry sectors for the UK.

Responses to specific questions

- Q43. Yes, we agree that agents should be able to act on behalf of small generators. This will be particularly important in enabling distributed generation using LCTs such as fuel cells.
- Q49. Yes, we agree that agents acting on behalf of small generators should be allowed to amalgamate their output in order to claim ROCs. This could be significant, for example, in domestic application where an agent could be acting for individual home owners, each using a fuel cell CHP unit to provide heat and electricity for their properties and feeding excess electricity back to the grid.
- Q55. Yes, we agree with the proposal to remove the need for a sale and buyback agreement for all generators. Removing this unfair red tape step will certainly simplify the processing of ROCs and encourage more people to acquire renewable and low carbon technologies to produce their own electricity.
- Q56. We strongly recommend that ROCs are extended to all types of low carbon technologies, beyond just renewable technologies. Please see the recommendation paragraph at the start of this response.