

Submission to the PIU Project on Energy Policy

Fusion Research

I have been a member of the committee in the European Parliament dealing with energy research since 1979 and was Vice-Chairman for 15 years. During that time the future of fusion research has been a topic of special interest to me. I have visited the European Centre at Culham several times and taken part in a number of conferences and a wide range of information meetings. Hence this submission.

To provide options for energy supply for future generations it is imperative that new technologies are developed in parallel to improvements in existing technologies.

I wish to draw the attention of the PIU to the EU research on fusion carried out in the UK at the Euratom-UKAEA Fusion Association, Culham, where the work is undertaken on behalf of the UK Department of Trade & Industry and Euratom. The work at Culham is focused on the development of fusion (the process which occurs naturally in the sun) as a potential long-term, safe and environmentally acceptable source of energy.

1. There has been substantial progress in fusion research and it can be confidently predicted that electricity production from fusion can be demonstrated within the time under consideration.
2. Fusion has many environmental advantages; fuels are widespread throughout the world and abundant; fuels are non radioactive; a fusion power plant would not contribute to global warming; the process is inherently safe and even in the worst possible accident scenario there is no risk to the general public; by careful choice of materials and recycling, waste can be minimised.
3. JET at Culham, the world's largest fusion experiment, has demonstrated the production of some 16 megawatts of fusion power.
4. There is consensus amongst experts that the time is right to invest in fusion as part of the UK future energy portfolio.

It should be noted that while, within the European Parliament, there has been growing opposition to nuclear fission, there is much broader support for fusion. However, concerns do exist regarding the time frame to establish a demonstration power plant, and this is a key question which the PIU project team should explore.

Gordon Adam C.Eng, MIMM, MEP
Member of the European Parliament for the North East Region, UK
Chairman, The Northern Energy Initiative
Chairman, Northumbria Energy Efficiency Advice Centre