

**WRITTEN QUESTION TO THE MINISTER FOR ECONOMIC DEVELOPMENT
BY DEPUTY G.C.L. BAUDAINS OF ST. CLEMENT**

ANSWER TO BE TABLED ON TUESDAY 29th JANUARY 2008

Question

Would the Minister advise whether he is currently investigating the possibility of bio-fuel production in Jersey? If so, would he further advise:

- (a) whether he is working in conjunction with the Minister for Planning and Environment,

Answer

a) The Minister for Economic Development sits on the Ministerial Steering group for Energy Policy along with the Minister for Planning and Environment and the Minister for Transport and Technical Services. The Energy Green Paper 'Fuel for Thought?' was produced with the input of the steering group as well as other stakeholders and was lodged in the States in October followed by a period of consultation between 4th October and 7th December 2007.

Question

- (b) approximately how many vergées of land he believes may be available for such an enterprise,

Answer

b) Chapter 6, (in particular Paragraph 1.297 -1.306) of the green paper examines the potential for the local production of bio-fuels crops in Jersey and uses the information from a study that was carried out by consultants to inform Energy Policy^[1]. In summary, it is apparent that there are two major challenges to *growing* bio-fuels locally :-

- i) Economies of scale – the availability of sufficient appropriate land (in particular avoiding land of biodiversity value) in order to grow and manufacture sufficient quantities of biofuels locally
- ii) Gross-margins of crops - The gross margins from biofuel crops is low in comparison to alternative / existing land uses such as food crops grown for export.

Given this latter point it is likely that in order to be economically viable, any crops grown for biofuels would need to be on agricultural land that is currently uncultivated and/or as a second crop after the potato crop.

Bearing in mind these 'constraints' along with local land conditions etc, oil seed rape is considered a potential candidate for the production of biodiesel. The area available for its production are estimated to be approximately 320 hectares (1800 vergées) of spring oil seed rape as a green crop following the Jersey Royal Potato crop, with a further 220 hectares (1250 vergées) planted on other agricultural land. The total land available after the potato crop is constrained by factors such as slope and good rotational practice (with a one year in five rotation).

Using these figures it is estimated that up to 500 tonnes of biodiesel could be produced locally, although please see section c which describes work that is being carried out locally.

The potential for the production of bioethanol from wheat from the land areas shown above, has also been explored and it is estimated that up to 1,500 tonnes could be produced locally.

In addition, biofuel is produced locally from waste vegetable oil. In June 2007 the Transport and Technical

Services department contracted a partner to collect waste cooking oil from commercial catering premises and convert it to biodiesel for use in local diesel vehicles. The company, Channel Island Biodiesel Products Ltd., is now in the early stages of production and will soon be marketing the product to large volume consumers such as transport and haulage companies.

Question

(c) whether he is contemplating a States' owned processing plant or a co-operative,

Answer

c) There is already a commercial pilot study to produce biodiesel from oil seed rape that has been supported by the Rural Initiative Scheme. In 2007 three varieties were investigated for yield as a crop post potatoes, in partnership with the Planning and Environment Department. The results from this first year show that oil yields per hectare are comparable to that in the UK (approx 0.9 t/ha locally compared with 0.95 t/ha in the UK, assuming 100% extraction). The next stage is to extract the rapeseed oil and produce bio-diesel. The completion of this pilot phase will allow production costs to be calculated and local feasibility to be more accurately calculated. Understanding the feasibility of local production will assist energy policy development and the placement of such initiative.

Question

(d) which type of crop he believes would be most appropriate, or whether he is considering a range of different ones?"

Answer

d) A range of crops have been considered for biofuel production. For example, in addition to oilseed rape and wheat, barley could be grown locally to be manufactured into bioethanol. However, current agricultural practices appear to favour an oilseed rape crop. As work on the energy White Paper continues we have not discounted any options at this stage and further work will be required in order for the States to discuss the options. In addition to the economics there are many factors to consider, in particular learning from elsewhere where the benefits of growing biofuels have been counteracted by the impact on natural habitats and the displacement of food crops.

[1] Development of Energy Policy (March 2007) - A Report commissioned by the States of Jersey by AEA Energy and Environment Ltd. A full copy of the AEA report is available on <http://www.gov.je/PlanningEnvironment/Environment/From+global+to+local+policy/Energy+Policy+Green+Paper+Launched>