Westminster diary

Tam Dalyell on a gem of an anti-smuggling idea, and generating electricity from human sewage

Tam Dalyell

As CHAIR of the All-Party Latin America Group, it was my job to host a meeting with Alvaro Uribe, President of Colombia, when he visited the House of Commons last year. He was then journeying around Europe as president-elect before taking up office. One of his many concerns, he said, was the illegal trade in emeralds from his country. Colombian emeralds are of high quality, and often sell for twice as much as emeralds from African countries, Russia or even Brazil. Terrorist groups and drug traffickers make huge sums of money from smuggling them.

Recently researchers at the National Centre for Scientific Research in Nancy, France, showed that the oxygen isotope ratio of an emerald is characteristic of the region where it was mined. However, measuring that ratio requires specialist equipment and involves vaporizing a tiny amount of the gem, something dealers are understandably reluctant to go along with. Now another French team led by Alain Cheazel at the National Polytechnic Institute of Lorraine has developed a non-destructive routine that can also reveal where the stones were mined.

Such a technique would help solve President Uribe’s problem. I asked Paul Goggins, a Home Office minister with responsibility for policy on public protection and dangerous offenders, if his department was supporting any research on the subject in the UK. Before he was appointed to his ministerial job, Goggins was active in asking questions on Colombia in the Commons. Now as minister, he told me that no research on non-destructive testing of emeralds is being done in the UK. However, he was particularly interested and said he would make sure his department followed up the French research.

ANY sensible way of providing electric power cheaply should surely be examined. It was for this reason that I suggested to Lord Sainsbury, the science and technology minister, read a recent news piece on the work by Bruce Logan and his team at Pennsylvania State University on generating electricity from sewage. It might mean sewage treatment would be able to pay for itself.

Sainsbury replied that the idea of generating electricity from sewage water treatment sounded highly promising. However, as far as he knew, no research on doing this is currently being undertaken in the UK. He agreed with Derek Lovley of the University of Massachusetts, who told New Scientist that the technology is still in its infancy. It is at the stage now that solar power was 20 to 30 years ago, Lovley said. Although the principle of a sewage-powered generator has been shown to work, much needs to be done before it can be considered for large-scale use, Sainsbury said.

The minister added any British universities interested in pursuing research into generating electricity from sewage water treatment would apply to the research councils for a grant. But being a minister who believes in doing something when he sees a good thing, he passed the news piece to Keith O’Nions, director-general of the research councils, to alert him to the idea.