



Source: Irish News

nimms

Date: Monday 13. May 2013

Page: 13

(QUB-404)

Page 1 of 2

Circulation: 41932

Ref: Queen's University 897936

Size: 385

€4.8m research plan to find value in waste

A NEW €4.8 million research project at Queen's University Belfast is aiming to recover valuable materials from the estimated 5.2 tonnes of waste generated per person each year.

Known as ReNEW, the Questor Centre at Queen's is leading the project to identify the needs of the north's waste management industry and facilitate innovation among small businesses the waste sector.

Queen's will be working with the Department of the Environment (DoE) and Belfast City Council.

Through the project the DoE will fund a new member of staff for WRAP, the Waste Resources Action Programme to develop policy areas related to resource recovery.

ReNEW (Resource Innovation Network for European Waste) is a European initiative to bring together researchers, public authorities and businesses to explore new ways to extract valuable resources such as metals, nutrients and chemicals from household and industrial waste.

Dr Elaine Groom at Queen's is general manager of Questor, which next year will celebrate 25 years as a centre for world-leading environmental research.

"Europe produces an estimated

‘ Per gram, mobile phones contain more gold than gold ore – the average household has 22g of gold lying around in old mobiles

– Dr Elaine Groom

5.2 tonnes of waste per person each year," she said.

"This includes around 600kg to 700kg per person of domestic waste, and 17kg per person of electrical goods waste.

"Much of this waste contains valuable resources, so we are missing a huge opportunity by simply disposing of it and sending it to landfill.

"Mobile phones, for example, are a valuable source of gold.

"Per gram, mobile phones contain more gold than gold ore – the average household has 22g of gold lying around in old mobiles."

Similarly, valuable chemicals can be extracted from food waste and used to make bioplastics; while the extraction of phosphorus a key ingredient in fertilisers – from food waste is becoming more and more important due to the depletion of natural phosphorus sources and increased mining costs.

"Waste is big business, and the recovery of valuable resources from waste presents huge oppor-

tunities for SMEs in Northern Ireland and across Europe," Dr Groom said.

"Many, however, face barriers in their efforts to develop new techniques for resource recovery.

"The best ideas require input and support from many disciplines – industry, entrepreneurs and scientists.

"ReNEW aims to bring these disciplines together to facilitate partnership working in the development of new technologies that will benefit the environment, the economy and society."

ReNEW is part-funded (€2.44m) by the European Union. Partners



Source: Irish News

Date: Monday 13. May 2013

Page: 13

(QUB-404)

Page 2 of 2

Circulation: 41932

Ref: Queen's University 897936

Size: 385

were required to provide 50 per cent matched funding.

Environment minister Alex Attwood said it was essential that the north was an integral part of European projects such as ReNEW.

“Northern Ireland’s involvement in this innovative project which is bringing together organisations from across the island of Ireland and Europe, by our own Queen’s University Belfast,” he said.

“This project will develop our knowledge base and skills to attract investment and allow our businesses to compete globally.

“The ReNEW project yet again highlights the potential value of waste when it arises.

“Considering waste as a resource will assist in making our society more sustainable and resource efficient resulting in jobs and benefits to our economy and the environment.”



■ **VALUEABLE RESOURCE:** Europe produces an estimated 5.2 tonnes of waste per person each year