Thank you for your letter of 26 June regarding resource use and the circular economy. My officials have briefed me on what sounds like a very interesting set of discussions, and I am pleased that the Committee is considering this important area. I am happy to set out the Scottish Government’s approach to driving forward a transition to a circular economy, and to update the Committee further in due course.

The Committee has emphasised the importance of providing leadership in promoting and supporting the development of a circular economy in Scotland, and I agree wholeheartedly with this sentiment. Scotland is already recognised as being at the forefront of the circular economy movement in the UK, and I am determined to continue this leadership within the UK and beyond that at EU level. The Green Alliance recently indicated that the UK Government had much to learn from Scotland in recognising the economic and environmental opportunities of better resource management, and the Westminster Environmental Audit Committee’s report into a circular economy published in July pointed towards a number of initiatives in Scotland, while simultaneously criticising the UK Government’s lack of ambition and leadership.

The Scottish Government is therefore leading a programme of evidence-gathering and engagement on the circular economy, working in partnership with Scottish Enterprise, Highlands and Islands Enterprise (HIE), SEPA and Zero Waste Scotland (ZWS). This aims to identify specific opportunities and benefits for Scotland, building on the compelling evidence presented by the Ellen MacArthur Foundation (EMF) on the potential international benefits of moving towards a circular economy. International cooperation is of fundamental importance since achievement of a circular economy requires changes to the products, business models and material supply chains of multinational companies. In July 2013 Scotland became the first nation to join the EMF’s CE100 group of global leaders committed to accelerating a circular economy.
This evidence and engagement programme is complemented by the work of the Zero Waste Taskforce, which the Cabinet Secretary for Finance, Employment and Sustainable Growth and I co-chair with the COSLA Spokesperson on Development, Economy and Sustainability Councillor Stephen Hagan. The Taskforce aims to articulate the opportunities and benefits for local government from a circular economy in Scotland, make recommendations on actions to enable local government to seize these opportunities and more broadly provide clear leadership on the circular economy agenda.

Evidence and engagement programme

The evidence element of our circular economy programme focuses on a number of sector-specific and thematic studies to inform the development of a circular economy “roadmap” which will identify policy interventions required over the short, medium and long term. The sector studies are directed towards areas strategically important to the Scottish economy where circular economy thinking is either already partially embedded or where it may offer significant opportunities for the future.

Opportunities are being examined in the following sectors:
- aerospace, defence and marine;
- renewable energy, oil and gas decommissioning;
- food and drink;
- medical electronics; and
- chemicals.

These are supported by a number of thematic studies covering a range of enabling mechanisms and key issues such as the use of new business models, smarter use of regulation and producer responsibility measures to support the development of a circular economy. I anticipate these studies being completed later this year.

In addition to evidence gathering, a range of communications and engagement activity is underway to promote and embed the circular economy concept within the business community. In many cases this utilises existing business events as platforms, but we have also been supporting organisations such as the Green Alliance and the Scottish Council for Development and Industry (SCDI) to undertake engagement work to identify circular economy opportunities.

While work is still in progress to gather evidence, early findings indicate that a number of Scottish companies are already applying circular economy business model principles, but the extent to which they do so varies by industry. In some cases the core principles of these business models have been applied for decades (e.g. in aerospace), while in other industries these models have only recently been enabled by technological innovation or driven by increasing resource costs. Established examples tend to occur in sectors with high value manufactured components where the business case for remanufacturing and high asset utilisation is very strong. Alongside Scottish Enterprise and HIE’s support to growth companies, Zero Waste Scotland works with a range of companies and industry sectors to help support the development of new markets for waste materials and products. The findings from the evidence work will inform the future focus of this market development support.

Zero Waste Scotland is also working on a project to develop a medium and long term data strategy to support the development of a circular economy in Scotland. The focus will be on the next 5-10 years, with the potential to scope work to cover data needs to 2050, and expert opinion will be sought to understand what Scotland should be measuring and how this might be done most effectively.

Taigh Naomh Anndrais, Rathad Regent, Dùn Èideann EH1 3DG
St Andrew's House, Regent Road, Edinburgh EH1 3DG
www.scotland.gov.uk
I understand that SEPA provided further information to the Committee in May on the timescales for and background to the related project to introduce electronic tracking of waste materials to support a circular economy.

The programme also includes research to identify the trends and drivers which will impact upon skills requirements in the next 5-10 years. ZWS is presently working with a range of stakeholders to map out relationships and interventions to ensure that our approach to skills for a circular economy – in resource management, resource efficiency, reuse and repair, creative industries and design – is thorough and coherent. Once that work is at a more advanced stage I will be working closely with Ministerial colleagues to take forward the next steps.

**National Waste Brokerage Service**

We want to nurture the conditions for growth in the resource sector, and create employment opportunities in reuse, remanufacturing, recycling, reprocessing and energy production. To help get the best price for material from the public sector, and to facilitate investment in the Scottish economy through releasing this material to reprocessors, we are leading the development and delivery of a collaborative market place for waste materials through a National Waste Brokerage Service. Such a service will create the right market conditions to stimulate the inward investment necessary to encourage the growth of a circular economy. We are presently considering the best options for the shape, remit and focus of the National Waste Brokerage Service, and I would be very happy to update the Committee on progress in due course.

**Procurement**

Public procurement is widely recognised as one of the key tools that can drive innovation in business models and increase the market for refurbished/remanufactured products. Section 36 of the Procurement Reform Act further develops the measures set out in the Climate Change Act and provides for regulations to require procurement specifications to include recycled/remanufactured content and to provide the option of alternative business models as such performance or leasing-based models. Now that the Act has been passed, the Scottish Government’s procurement professionals and waste policy team will work closely together to examine opportunities and support the application of the relevant sections of the Act to future procurements.

**Specific opportunities**

The Scottish Funding Council, Scottish Enterprise and ZWS are in discussion with Strathclyde University regarding the creation of a Centre for Remanufacturing in Scotland. The purpose of the centre would be to bridge the gap between research in remanufacturing and its practical application in industry, and would be of particular value to support Scottish SMEs wishing to commence or expand remanufacturing. The concept of the centre is supported by a wide range of companies and industry bodies and, if confirmed, it would work closely with the Scottish Manufacturing Advisory Service and ZWS to support Scottish companies develop remanufacturing opportunities and increase their competitiveness.

Scottish Enterprise, Scotland Europa and Zero Waste Scotland are also assisting two Scottish SMEs to access funding from the latest Horizon 2020 European call: *Moving towards a circular economy through industrial symbiosis*. The bid is worth €10m with an estimated €2m for Scotland.
The bid includes two large demonstrator projects: one on the collection of plastic polymers and one on the use of bio-waste to create base chemicals for industry.

Together with Scottish Enterprise, HIE and ZWS, the Scottish Government is bringing together a group of innovative SMEs in Scotland that are already demonstrating a circular economy focus. These SMEs will be linked to the Ellen MacArthur Foundation CE100 global membership and will have networking opportunities to develop potential business opportunities with major global companies and other like-minded SMEs from other countries.

Turning to the oil and gas sector, the opportunities from oil and gas decommissioning over the next 30 years could be significant, particularly in relation to the potential for the higher value recycling of steel/alloys and the potential to reuse high value components. Oil and gas North Sea platforms within Scottish waters are estimated to contain 1.6m tonnes of topside structures and 1.8m tonnes of sub structure. A Green Growth Programme has been created under the auspices of the Scottish Energy Advisory Board to accelerate the priority circular economy opportunities around steel recycling and the decommissioning of energy infrastructure.

Next steps

There is a significant amount of work underway across sectors to articulate specific opportunities within Scotland and to determine how we might seize these opportunities, with much more still to do. As the conclusions of our circular economy programme begin to emerge, John Swinney and I will be engaging with colleagues across Ministerial portfolios to identify key actions, and I would be very happy to update the Committee further in due course.

In the meantime, we will be taking advantage of the next round of European Structural Funds to expand and accelerate our work with proposals to support the development of new ideas and models, help drive established and proven interventions to market, support business in implementing resource-saving activities and engage and develop community-led approaches to resource efficiency.

RICHARD LOCHHEAD