



# The transition to a circular economy: the case of Scotland

11 February 2015, 12:00-13:00

## Speaker(s):

**Louise McGregor**, Head of Circular Economy, Zero Waste Scotland

**Tim Dew**, Director, Market LED

Contact Emma: [easton@eauc.org.uk](mailto:easton@eauc.org.uk) / 01242 71 4321

11<sup>th</sup> February 2015



# EAUC Webinar

The transition to a circular economy:  
the case of Scotland

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# Introduction

- Brief introduction to:
  - the Circular Economy
  - Zero Waste Scotland
- Scotland's policy drivers and circular economy ambitions
- Delivering the Circular Economy in Scotland
  - Current work programme
  - Support available for businesses

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# Introductions

The Circular Economy

&

Zero Waste Scotland

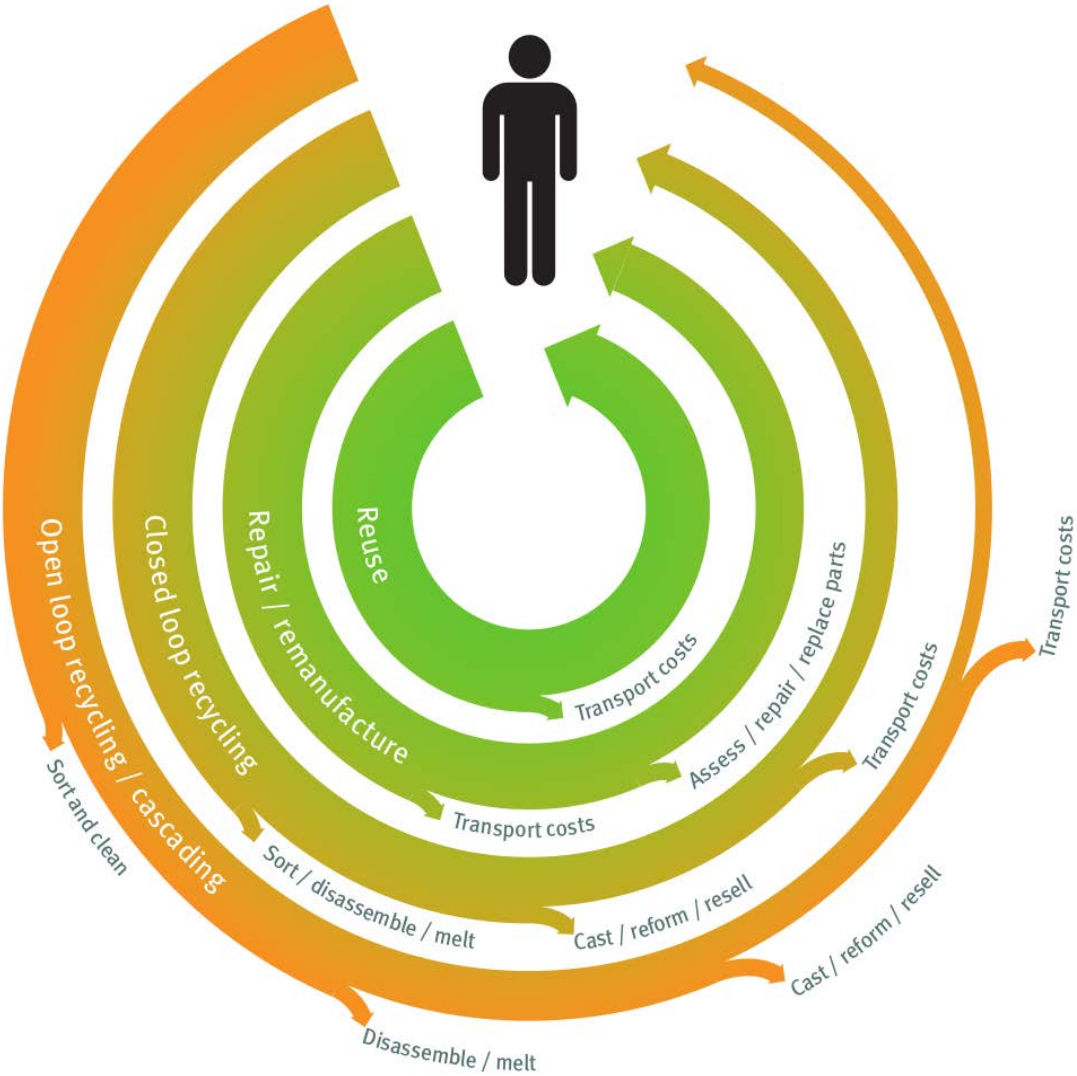
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# Definition of a Circular Economy

- A Circular Economy is an economic system where we keep materials and products in use for as long as possible in order to extract the maximum value from them. **BY DESIGN**
- Contrasts with how we currently 'take, make and dispose' of products.
- Move from a 'one-way trip' to a 'circular journey'.
- A win, win, win for businesses, consumers and the environment.

# The circular economy



## Example:

- Service models
  - Desso, Interface Flor
  - MarketLED
- Requires:
  - design for longevity, reuse, repair, remanufacture
  - incentivising returns
  - considering end-of-life (recycling choices)





# About Zero Waste Scotland

Our Mission

**We help reduce waste, increase energy efficiency and promote responsible water use – all as part of a journey towards a low-carbon, sustainable economy**



# Our core principles

## Efficient

Resources should be used as efficiently as possible.

## Fewer

Fewer resources should be lost to the economy in the form of waste.

## Value

More value should be added to secondary resources within the economy.

# Areas for action

Supporting a circular economy



Implementing resource efficiency savings



Transforming attitudes to food waste



Reducing the impacts of litter



Accelerating the development of low carbon heat



Harnessing the value of recycling



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# Scotland's Policy Drivers & Circular Economy ambitions

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# Scotland's Policy Drivers

Overall aim:

- Prevent Waste
- Increase Resource Efficiency
- Enable a shift to a circular economy



# Scotland's Policy Drivers

- Zero Waste Plan
- Safeguarding Scotland's Resources
- Economic Strategy
  - Transition to a low carbon economy
  - Strong emphasis on resource efficiency
- Circular Economy Roadmap

Waste & resource management

Preventing waste, increasing resource efficiency

Sustainable economic growth, productivity, competitiveness

# Leading and mainstreaming

- First regional member of the EMF CE100 programme
  - Identifying opportunities for Scottish business
  - Building collaboration across countries
- Building CE ambitions into cross-government strategies
  - Circular Economy Evidence Programme
  - Circular Economy Debate
  - Circular Economy Roadmap

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# Delivering the Circular Economy in Scotland

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# The opportunities

- EMF
  - ‘Scotland and the Circular Economy’
  - £2.3 - £3bn material savings across manufacturing sectors
- Green Alliance.
  - ‘Circular Economy Scotland report’
  - 3 key sectors
  - Oil & Gas; Food & Drink; Finance



# Current work programmes

- Collaborative approach
- Working across support agencies and government 'Team Scotland'
  - Scottish Enterprise, Highlands & Islands Enterprise, SEPA, Zero Waste Scotland
  - Evidence, engagement, support
- Working with Ellen MacArthur Foundation
  - CE100 programme
  - Pioneer Universities
- ZWS Circular Economy programme

# Circular Economy Evidence Programme

- Aerospace, Defence & Marine
- Energy
- Food and Drink
- Medical Electronics
- Chemicals
- Regulation
- Fiscal Measures
- Design
- Remanufacturing

## Aims:

- Understand the drivers behind circularity
- Understand the opportunities for increasing circularity
- Quantify the benefits of increasing circularity

# EMF CE100 Membership

- Access for Scottish SMEs to:
  - CE training and best practice
  - CE100 members
  - SME CE100 network
  - Demonstration projects
  - Charters
- Pioneer universities: formal agreements with the EMF, agreeing a programme of co-operation and development involving research & /or teaching
- Sharing good practice

# ZWS CE Programme - rationale

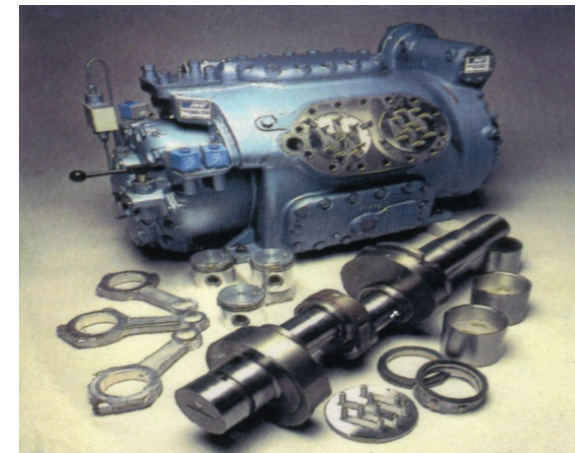
- Requires significant innovation in economic, industrial & commercial systems
- Significant barriers to be tackled: market inertia, inadequate infrastructure, government policies, market failures
- CE programme at early stage:
  - Innovate: build on SSR and catalyse business to seek & try opportunities
  - Cultivate: develop a deeper understanding of how to create conditions to accelerate up-take
  - Consolidate: maintain ZW activities

# ZWS CE Programme

- Four key elements:
  - Developing the evidence
    - Scale of opportunity, nature of opportunity, ZWS role, data needs
  - Trying and show-casing good examples
    - Business models, reuse, procurement
  - Engaging & influencing stakeholders
    - Key sectors, Scottish Enterprise
  - Innovation: technologies & supply chains

# Example: Scottish Institute for Remanufacture

- Collaboration with Scottish Funding Council, Scottish Enterprise and Zero Waste Scotland
- Seeks to provide academic expertise to industry
- Aims to capitalise on opportunities presented by remanufacturing for Scotland
  - Scale, expertise etc



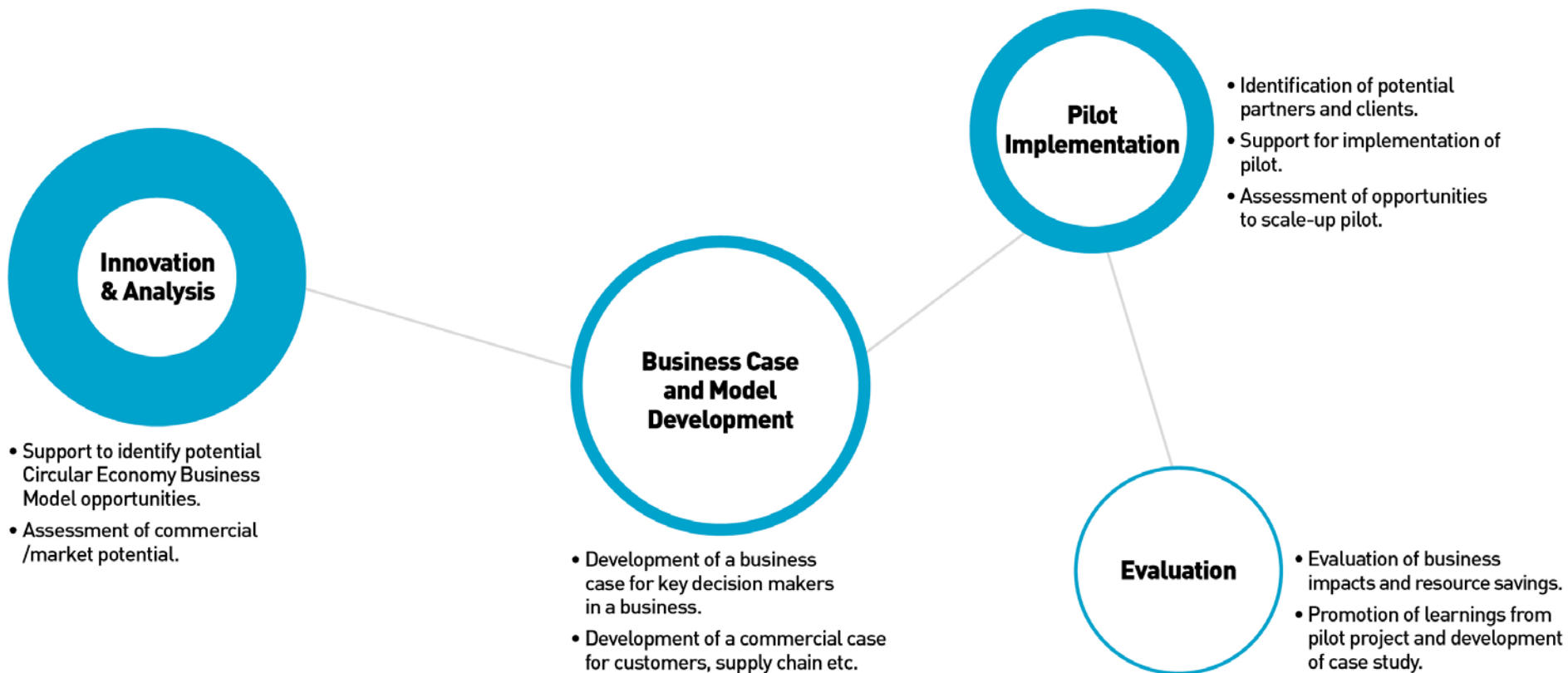


# Support for Business

# Business support

- SME engagement
- Remanufacturing technical support
- Development of reuse and repair infrastructure
- Support for early adopters:
  - New circular business models
  - Innovation support
  - Demonstration projects







# Thank you

Contact:

[Louise.Mcgregor@zerowastescotland.org.uk](mailto:Louise.Mcgregor@zerowastescotland.org.uk)

# Market LED - Introduction



- Established 5 years ago
- Simple model of engagement:
  1. Audit; understand what lighting you've have installed, the maintenance costs and your current energy consumption
  2. Recommendation; explain how much money you can save (or, very occasionally, not!) through our energy quote report
  3. We supply you with quality LED replacements lamps (retrofit) and fittings and you reduce your energy costs by up to 85%!

# Market LED – Scene setting

- **Lumens:** Have you got the right levels?
- **Maintenance costs:** how many Professors does it take to change a lightbulb?
- **Quality:** Will the bulbs continue to put out a guaranteed light lumen level?



# Market LED – Decision making



**The challenge:** Potentially large CapEx cost for organisations despite up to 85% savings on running costs.

**The old way:** If you don't have the money then tough!

## Working with Zero Waste Scotland

Supported the development of a new path. (Light Bulb moment!)

# Market LED – Rent-a-Light



What does it do?

1. Removes need for CapEx expenditure – do you need to own?
2. Makes the whole decision making process a no-brainer.
3. Lamp and fitting costs, installation, maintenance and removal are rolled into a time based contract and taken out of the savings.
4. Savings still made to operating costs.
5. Improved lighting quality
6. No maintenance costs too – lucky professors!



# Market LED – Big Thank You!



Driving force behind this change has been ZWS. Without their help we would have struggled to get this across the line.



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Tim Dew – [tim.dew@marketled.co.uk](mailto:tim.dew@marketled.co.uk)

0791 222 7863