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JOHN QUINN
President CIWM

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Introduction

John Quinn
President CIWM

John is Chief Executive Officer of arc21, a local government waste management partnership representing 6 councils and approximately 60% of the population of Northern Ireland (NI) tasked with delivery of it's Strategic Waste Plan and Regional Infrastructure.

He is a Chartered Civil Engineer, Fellow of the Institution of Civil Engineers (ICE), Fellow of the Chartered Institution of Wastes Management (CIWM), a Chartered Environmentalist and Chartered Waste Manager and has around 40 years experience in the Environmental Engineering and Waste Management Sectors.

He is President of CIWM, Chairman of it's General Council, and Co-Chairman of R&W UK (a joint CIWM/ESA Company set up to maximise policy influence).

He has chosen the Circular Economy and its impact on the waste and resources sector as his presidential theme.

The Circular Economy in Practice - what will it mean to the sector?

- The CE Model and EU Consultation
- CIWM Position
- Possible Outcomes
- Implications for the Waste Sector including Local Government

Three Planet Living?

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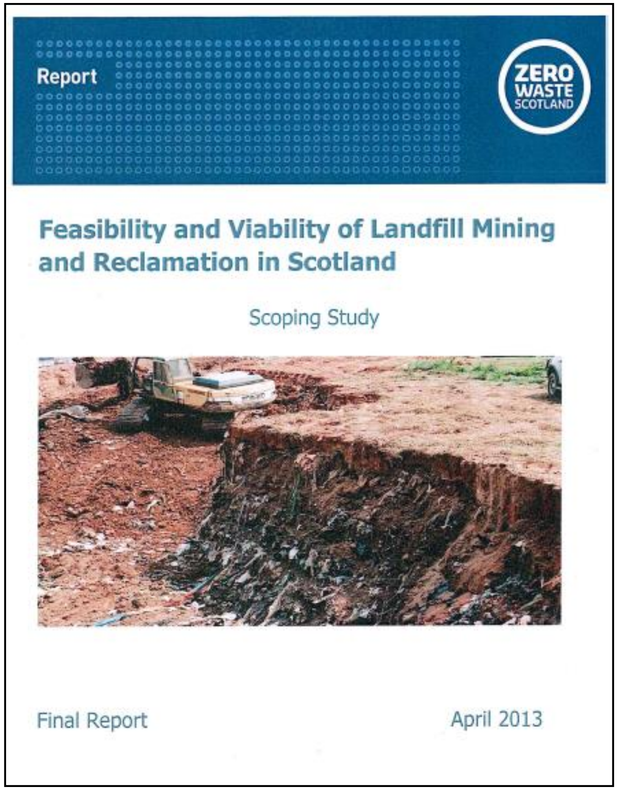
Resource Mining

Landfill Mining

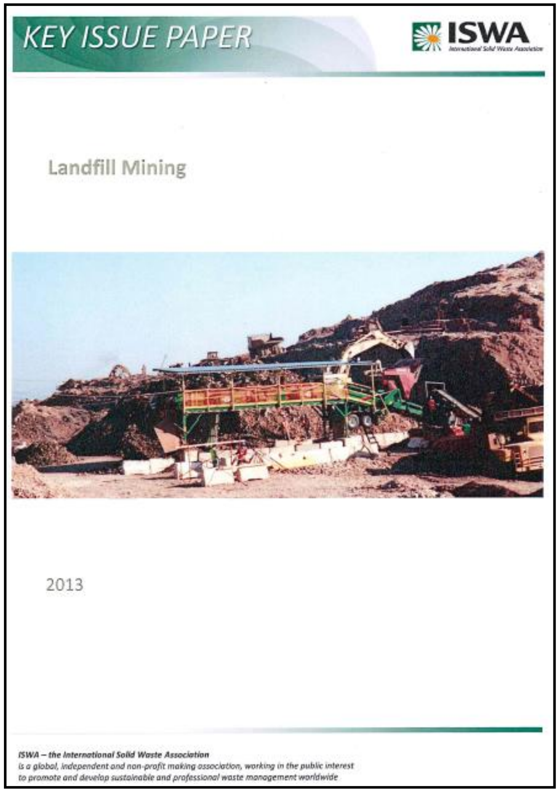

Report

ZERO WASTE SCOTLAND

Feasibility and Viability of Landfill Mining and Reclamation in Scotland

Scoping Study

Final Report April 2013


KEY ISSUE PAPER

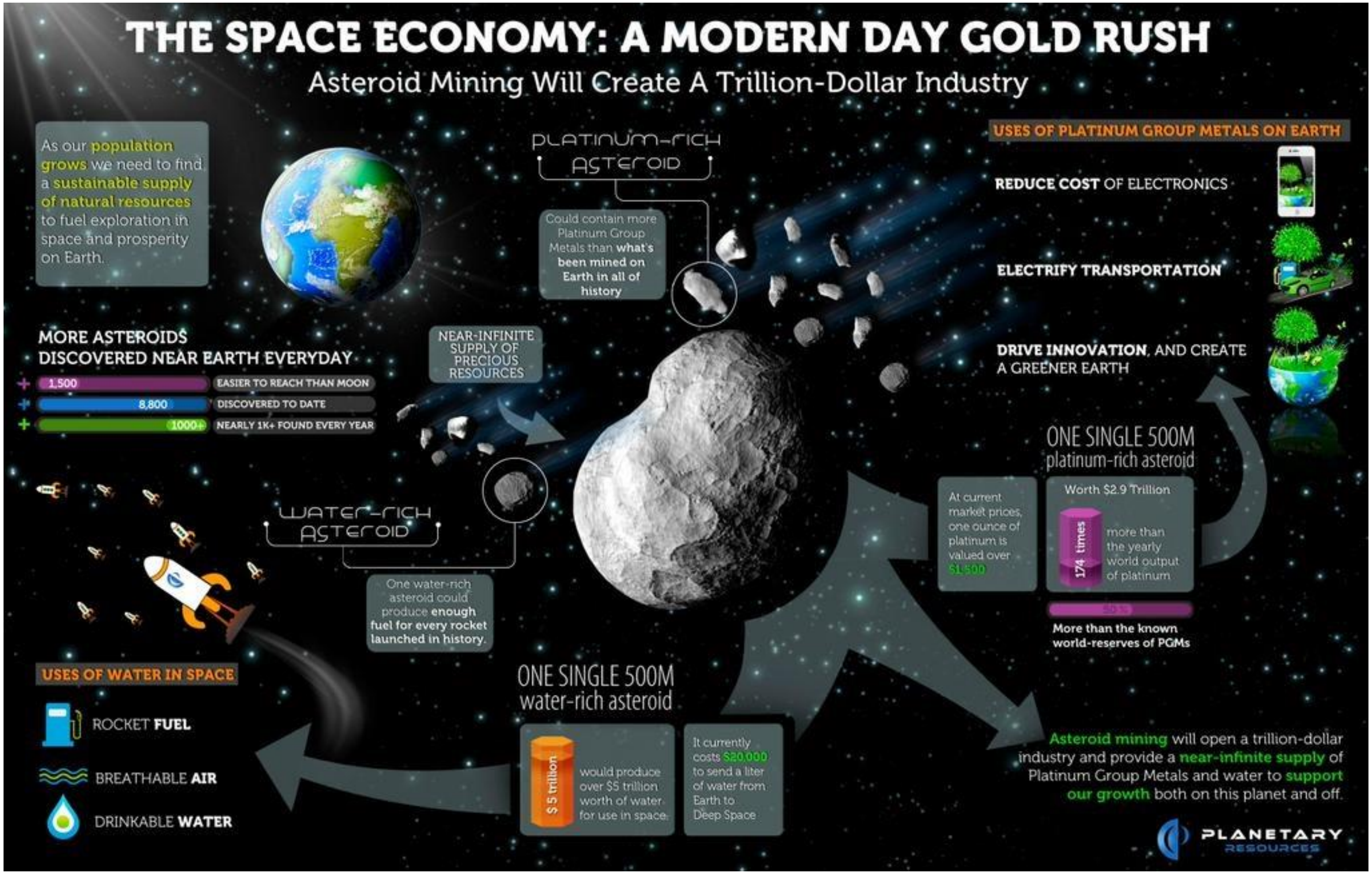
ISWA

Landfill Mining

2013

ISWA – the International Solid Waste Association
is a global, independent and non-profit making association, working in the public interest to promote and develop sustainable and professional waste management worldwide

Asteroid Mining



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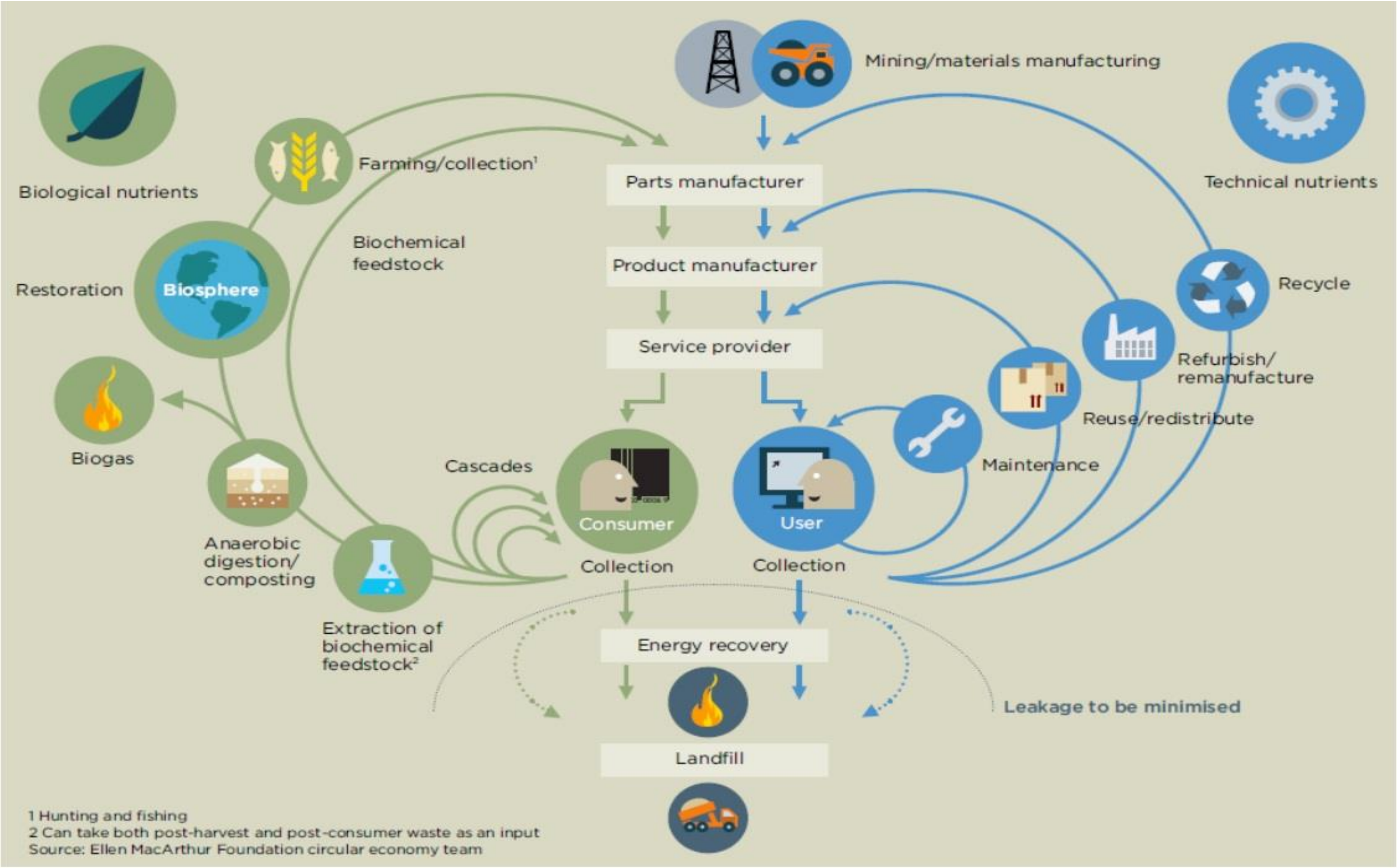
Drivers of a Circular Economy

- Population growth & consumption
- The new Middle Class
- Urbanisation/Industrialisation
- Extreme weather
- Rising energy costs
- Limited and increasingly expensive materials especially critical raw materials
- Political volatility
- High net importer of resources
- Environmental, economic and social imperative

The Circular Economy



The Vision

"A circular economy is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life."

WRAP

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Some Key Circular Economy Principles

Adapted from the Ellen MacArthur Foundation

- Design out waste
- Understand that everything within the economy has value
- Design with disassembly and reuse in mind, with minimal changes required to reuse components of a product
- Differentiate between consumable and durable components . Biological materials go back into nature; durable, or technological, materials stay in use for as long as possible
- Find ways to reuse materials across the value chain. (For instance, Nike uses recycled plastic bottles in its polyester products.)
- Eliminate toxic chemicals, making it easier to reuse components without risk of contamination
- Fuel the system with renewable energy
- Build resilience through diversity
- Adjust prices to reflect the true cost of the effort required to produce a product
- Think in systems, taking into account how one action will impact the whole
- New business models
- Dematerialisation
- Servitisation
- A sharing society

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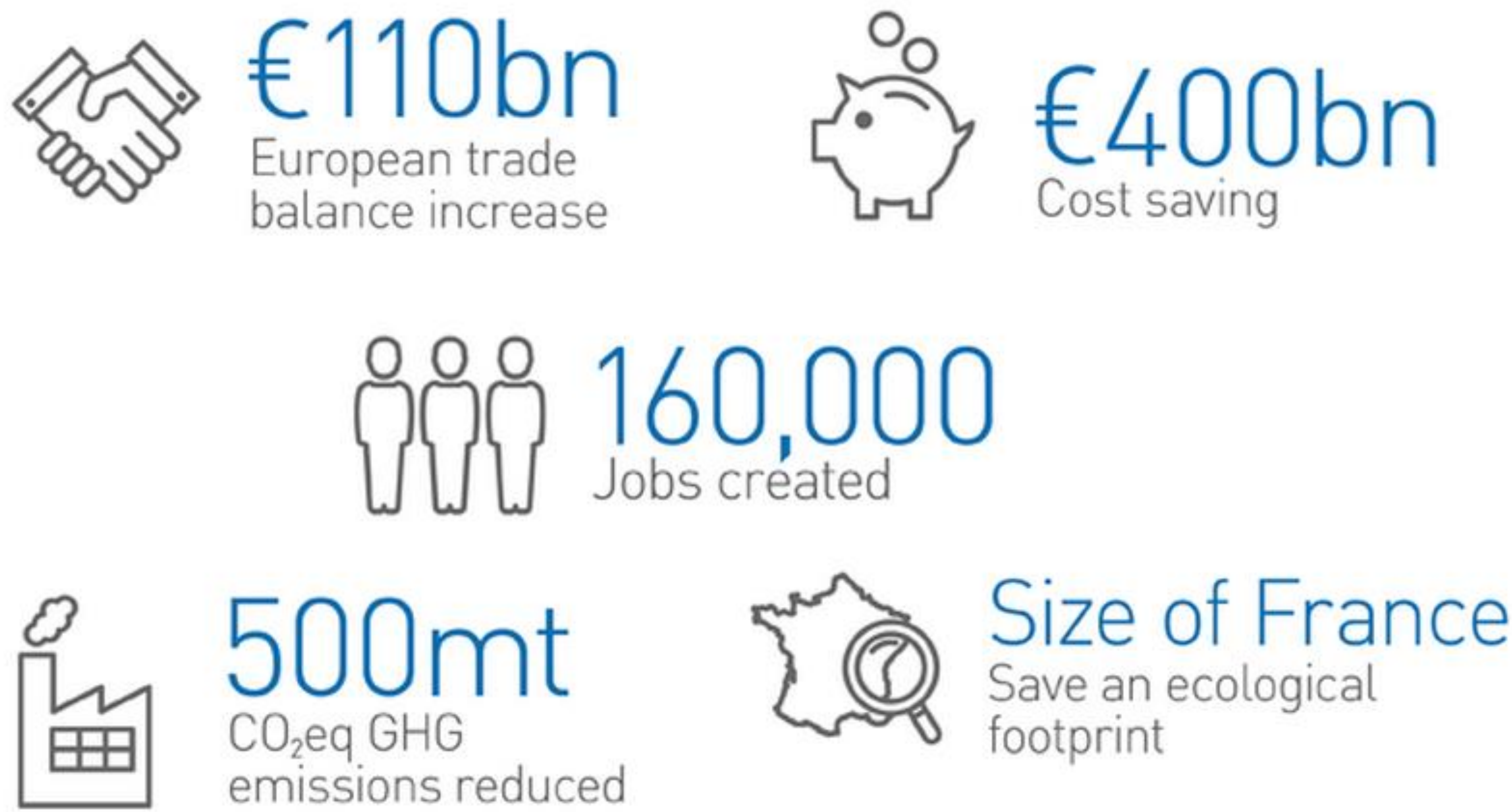
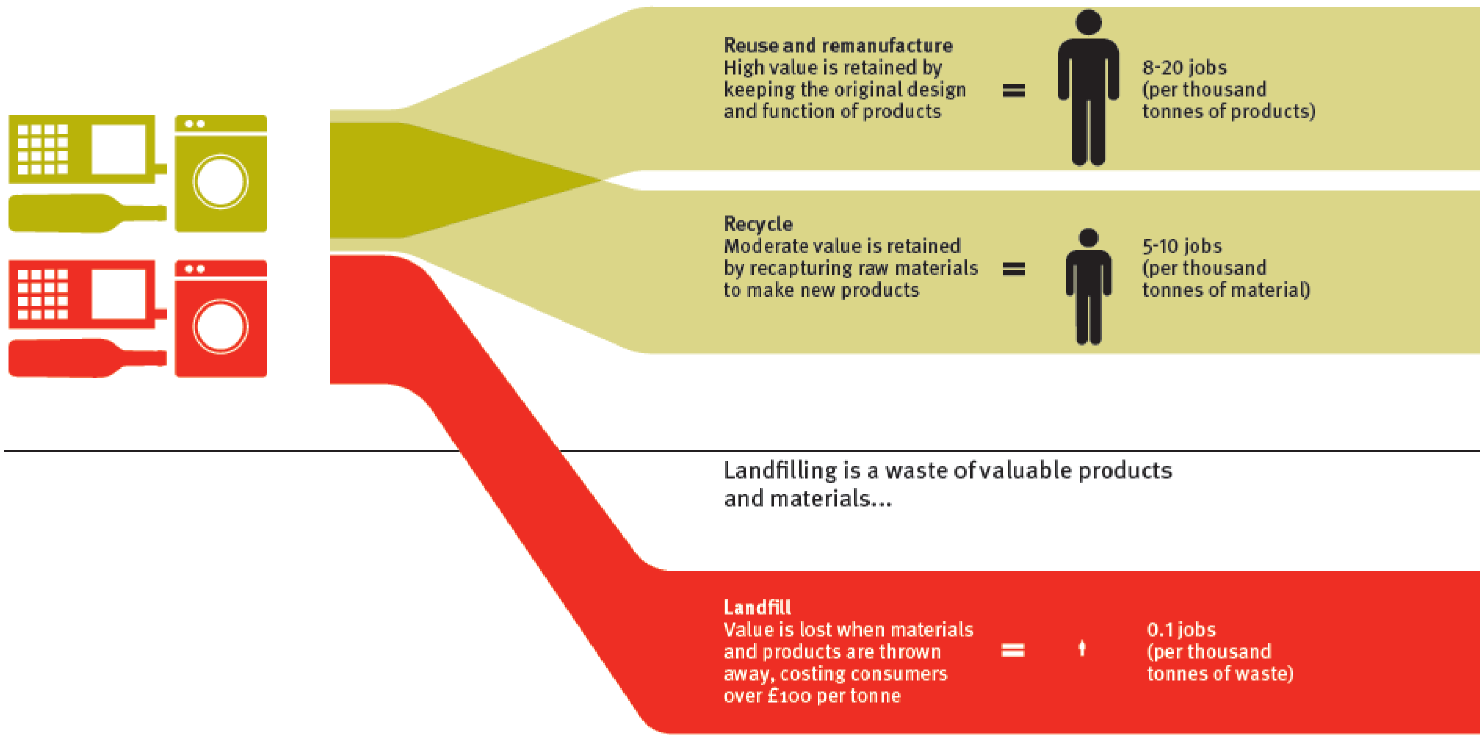
The Benefits of a More Circular Economy in Europe



WRAP UK (2013) http://www.wrap.org.uk/content/eu-vision-2020

The Sale of Products for Reuse and Remanufacture Supports More Jobs



Source: Green Alliance

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WRAP/Green Alliance

	Scenario one No new initiatives	Scenario two Current development rate	Scenario three Transformation
Gross jobs growth[6]	31, 000	205, 000	517, 000
Net job creation[7]	10, 000	54, 000	102, 000
Unemployment rate fall	0.02%	0.15%	0.28%
% offset of predicted decline in skilled employment over the next decade[8]	1.3%	6.8%	17.7%

Note: Jobs figures are rounded to the nearest 1,000

Potocnik's Circular Economy Package

- 70% MSW Recycling by 2030
- 80% Packaging Recycling by 2030
- Extended Producer Responsibility?
- Develop New Markets for C&D Waste
- Landfill Ban on Recyclables by 2025
- Full ban on all Recoverables by 2030
- 30% Reduction of Food Waste by 2025
- 30% Fall in Marine Litter by 2020
- 30% Increase in Resource Productivity by 2030 (+ new Indicator)

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New EU CE Package – A Materials / Economy Focus?

The Circular Economy: what does it mean for the waste and resource management sector?

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CIWM Circular Economy Report

- Commissioned by CIWM from Yorkshire partnership of RGR, Beasley Associates and Green Gain
- President's brief includes requirement for deeper understanding of the industry's understanding of and preparedness for the circular economy – implementation of outputs from the main theme for Presidential year
- Comprises analysis and narrative from 612 electronic surveys (around 8% of CIWM membership) and 54 interviews with industry leaders across sectors within the industry and spread from England, Northern Ireland, Republic of Ireland, Scotland and Wales

What is the Circular Economy?

Definition; principles; visualisation; drivers; advantages & benefits; industry leadership

- Headline results of a major survey of CIWM members and waste and resources industry leaders
- What does the sector understand by the circular economy?
- How prepared is the waste and resources sector for future changes?
- What can CIWM do to support the sector?

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Geographical Spread of Respondents

	Where is your organisation mainly based?		
Answer Options	Response Percent	CIWM profile comparison	Response Count
England	66.7%	82.1%	408
Wales	6.0%	3.5%	37
Scotland	9.2%	6.1%	56
Northern Ireland	5.9%	2.0%	36
Republic of Ireland	5.2%	2.8%	32
Other (please specify)	7.0%	3.5%	43
	answered question		612
	skipped question		0

Organisation Spread of Respondents

What is your organisation type? (Highlights)			
Answer Options	Response Percent	CIWM profile comparison (selected)	Response Count
Local Authority	24.8%	31.5%	152
Consultancy	22.1%	21%	135
Research Organisation	1.1%		7
University or College	5.1%	1.8%	31
Waste Management Company	9.0%	18.5% *	55
Reprocessor/Recycling Company	4.2%	2.5% *	26
Collection & Logistics Provider	0.8%		5
Waste Brokers	1.5%		9
Government (Policy Makers) - England	2.8%		6
NGO	1.8%		11
Retailer	0.2%		1
Manufacturer	3.6%		22
Designer	0.2%		1
Engineer	1.3%		8
Trade Association	1.3%		8
Environmental Regulator	7.2%		44
Other (please specify)	13.1%		80
answered question			612
skipped question			0

Hurdles and Challenges

What are the main hurdles to your organisation in developing the circular economy? (select all that apply)		
Answer Options	Response Percent	Response Count
Lack of awareness	55.3%	259
Clarity of terminology	41.9%	196
Customer buy-in	37.2%	174
Competition	7.1%	33
Economics	38.5%	180
Inertia	27.4%	128
Short-termism	41.7%	195
Leadership issues	25.4%	119
Policy framework	37.8%	177
Other (please specify)	16.5%	77
answered question		468
skipped question		144

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Support wanted from CIWM

Is there any specific support that CIWM could offer or make available to your organisation to help in your delivery of the circular economy? (select all that apply)		
Answer Options	Response Percent	Response Count
Training	42.1%	205
Guidance	56.3%	274
Research	36.1%	176
Professional Development	37.2%	181
Leadership	37.2%	181
Roadshows	17.5%	85
Seminars	38.4%	187
Lobbying	35.7%	174
None of the above, they have no role to play	3.3%	16
Don't know	8.2%	40
Other (please specify)	6.2%	30
	answered question	487
	skipped question	125

Preparedness and Leadership

- Only small numbers of respondents indicated where they thought sectors were very prepared - majority indicated no leadership or at best confusion about leadership
- Largest of these modest responses indicating that Scottish and Welsh policy makers, research organisations, reprocessors and consultancies were best prepared
- Sectors regarded by those responding as least prepared were local authorities, English policy makers and retailers
- Unprompted and asked where leadership was coming from, most mentioned were Ellen MacArthur Foundation, European Commission, WRAP & Zero Waste Scotland
- CIWM widely credited for this research and indicating intent, but not seen as a current leader

Headline Findings: Familiarity and Understanding

- Familiarity with the term 'circular economy': over 80% very or reasonably familiar; just under 20% not very or not at all
- One-third say the term is frequently used in their organisations; although they are evenly split as to whether the term is understood
- Respondents have split views on whether CE is a repackaging of sustainability or a radical new approach
- Clearer views on CE as primarily about improving recycling, resource and energy efficiency, designing out waste and reducing use of virgin resources

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Headline Findings: Opportunities, Threats and Planning

- Majority (80%) see circular economy as an opportunity not a threat
- Significant minority (27%) see circular economy as a threat
- Minority (18%) say the circular economy will have no effect on their organisation
- Significant minority (27%) are doing no planning for the circular economy (on analysis of a low response answer)

Report Outputs - What can CIWM do to Support the Sector?

- Information sharing: case studies; good practice; data
- Facilitating: links between waste sector and design
- Training: professional development
- Advocacy: lobbying; policy
- Host for open and honest discussion
- Researching: case studies
- Addressing image of the sector: maintain focus on professionalism
- Developing alliances within the sector and forming a united view
- Building networks

Report Outputs - Recommendations for CIWM

1. Develop, lead and co-ordinate a Circular Economy Action Group with a focused remit to engage internally with the waste and resources sector and externally with all key players in the supply chain, which will deliver an Action Plan with a route map assisting organisations to drive towards the transition to a circular economy.

2. Develop a Circular Economy Policy Statement that clearly signals to outside stakeholders in the resources supply chain the intent of the Chartered Institution with regard to its role in the development of the circular economy.

3. Identify opportunities to embed the circular economy into CIWM's day to day activities, structures, strategies and future planning.

Report Outputs - Recommendations for CIWM

4. **Utilise all communication channels such as the website, journal and social media, focusing on the potential role of the CIWM as a catalyst and facilitator, for engagement and dissemination of circular economy developments and practice within the whole CIWM membership.**

5. **Invest further time and support in initiatives, such as the RSA's The Great Recovery, linking designers and other actors in the supply chain with waste and resource managers, by providing a combination of corporate support from CIWM and development of a network of waste and resource management organisations willing to contribute.**

Reflections

- We’re doing a lot already in the progression through landfill through resource management to CE
- But we need to do more
- Report serves as a mandate to act and embed CE in CIWM strategic direction
- Challenges and opportunities
- Sector must maintain a position at front and centre of CE landscape to maintain relevance, influence and capacity
- The Industry must engage with the supply chain and other sectors
- Progress would be accelerated with Government leadership on culture change and intelligent use of regulation and fiscal incentives (or penalties)
- We ignore it at our peril
- The drivers will be harder to ignore the longer we wait

Reflections

- Thought leader and advocate
- Engagement up and down the supply chain including design and manufacture through to re-processors and across sectors
- Relationships hub through established and new networks
- Training and embedding in education and design schools
- Communication
- Dissemination of case studies
- Information hub
- Research
- Co-ordinate unified voice across the sector as holders of intellectual capacity, funding facilitation and major SRM players

The Way Forward

- Define and promote existing CE activities
- Refocus on future CE activities
- Collaboration & partnerships up & down the supply chain, across sectors and administrations
- Consolidate role as key part of the Circular Economy
- Reliable, cost effective suppliers of secondary materials
- Global perspective on the supply chain
- Communication and partnerships
- Knowledge and skills
- Influence political & social agenda
- Work to Action Plan/Programme

Draft CIWM CE Action Plan

- Ensure ownership at Board level
- Integrate /embed CE as cross-cutting Corporate Objective with Business Plan/SMART targets and regularly monitored KPIs
- Reinforce and rebrand existing CE activities in recognition of current strengths in the area
- Undertake dedicated CE Training Needs Survey of membership and identify opportunities to supplement/enhance training and knowledge
- Liaise with business arm to maximise commercial opportunities
- Ensure all operational activities presume towards CE and sustainability
- Facilitate cross-sectoral partnerships
- Focus on kindred organisations, education and academia, supply chains and designers/manufactures
- Create knowledge hub/repository for CE in the sector
- Reinforce profile as key stakeholder in CE though existing communication vehicles
- Assess opportunities for dedicated conferences, webinars, think-tanks, research and case studies
- Continue focus on political influence

CIWM Position on New CE Package

- Entire supply chain
- Pull and push
- Focus on producers, more eco design
- EPR, recyclate content, procurement
- Clear product information
- Use of product guarantees
- Residual waste target
- Landfill restrictions
- C&I, Food waste
- Consistent definitions/returns and smart targets based on LCA
- Better data capture
- Sustainability of markets to meet targets
- More local policy intervention/support/interaction
- High efficiency EfW at home

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Possible Outcomes

- To issue 2nd December - Communication and Action Plan
- Whole Value Chain & Life Cycle approach
- Possible variable country specific targets across EU
- Landfill Bans/Restrictions
- Food Waste reduction target
- Quality and separate collection
- Incineration – possible restriction on recyclables e.g. plastics
- Hazardous waste
- More materials/resources and jobs focus beyond simply waste
- Packaging
- Metrics – more consistency/validation of method of measurement but still weight based

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Possible Outcomes

- Extended Producer Responsibility
- Eco-labelling
- Industrial symbiosis
- Focus and design
- Eco design legislation
- More Eco-labelling
- Focus on reuse, recovery, remanufacturing, and repair
- Improved legal definitions?
- Smart product design for disassembly
- SRM Standards
- Aspiration for reduction in resource consumption and more resource efficiency
- Aspiration for a European Product Passport

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Possible Outcomes

- Innovation and partnership working - targeted investment/challenge funding
- Resource efficiency targets
- Business Models/dematerialisation
- Focus on job creation
- Green procurement
- Possible mandatory recyclate content

Possible Outcomes

- **Concern - focus on hard targets (push) without commensurate pull mechanisms to sustain viability (pull)**

Implications

- Possible higher targets for UK
- Possibly without necessary pull mechanisms
- Bigger focus on quality
- Source separation
- Landfill restrictions
- Incineration restrictions
- Food waste restrictions
- Prevention, reuse, remanufacture
- Position on proximity/self-sufficiency
- EPR/Ecodesign/Ecolabelling
- More producer activity to capture e.g. reverse vending, reverse logistics, take-back, post-back
- Consequent need to engage higher up supply chain

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