



The Prince's
Responsible
Business Network



Brain Gym

WASTE TO WEALTH & CIRCULAR CONSTRUCTION OPPORTUNITIES

11 July 2019



BUSINESS IN THE COMMUNITY

Our vision

To make the UK the world leader at responsible business

Our proposition

We convene a unique network of purposeful leaders to share insight, expertise and create innovative programmes that deliver impact

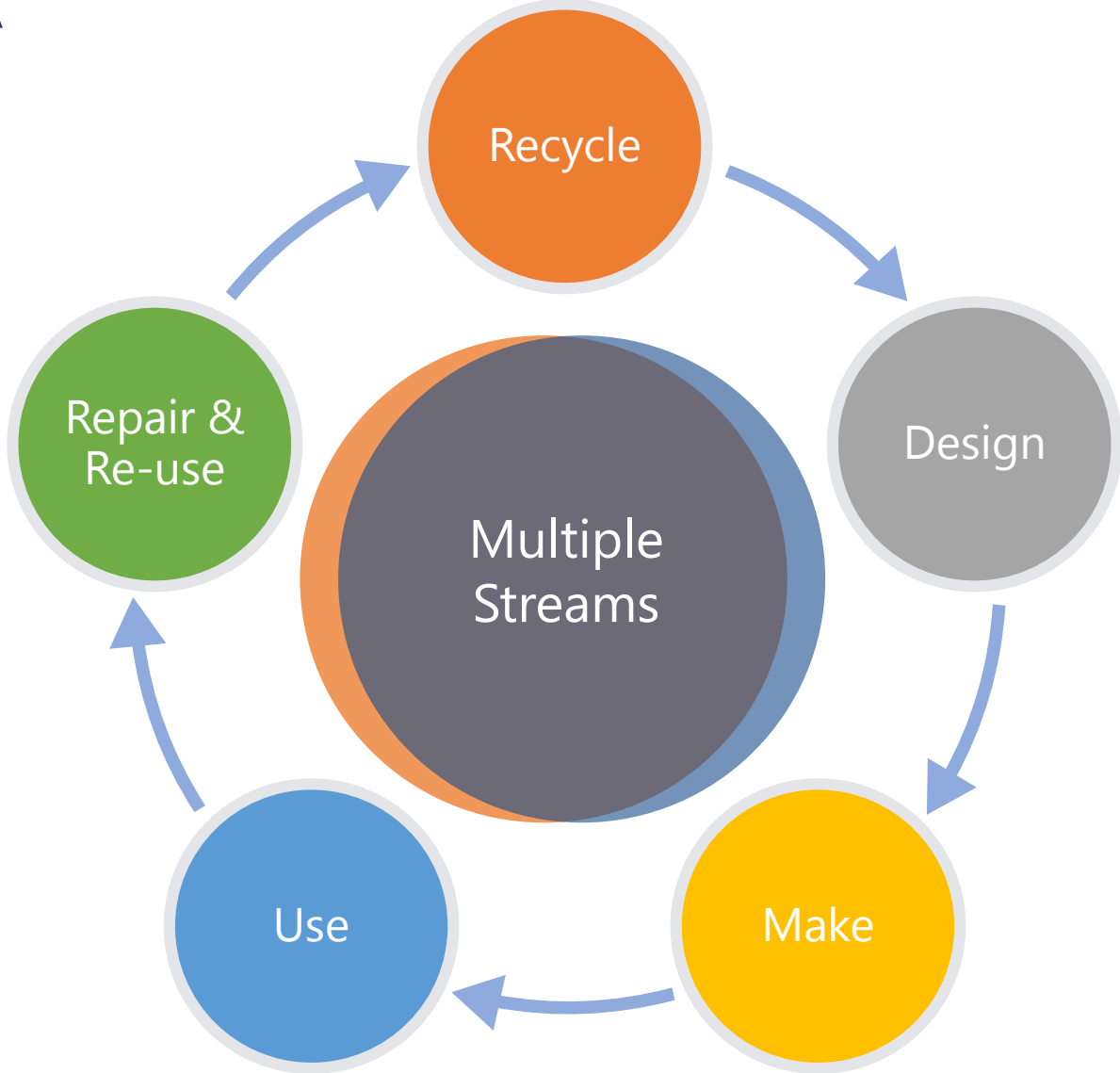
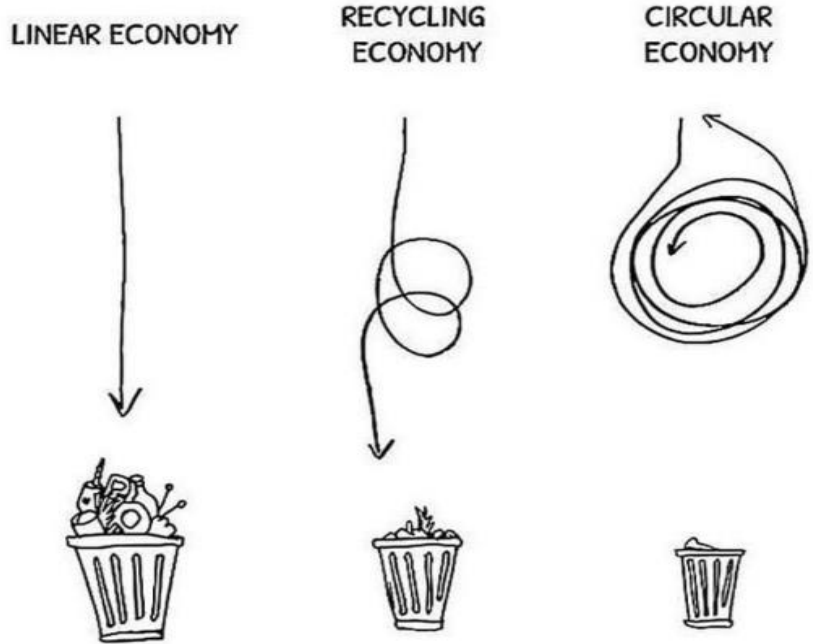


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WASTE TO WEALTH – A CALL TO ACTION

- **12 years** to mitigate risk of catastrophic climate change and reverse destruction of natural habitats
- **We must turn the tide** on excessive resource consumption and waste
- **Window of opportunity** to rethink and restructure our economy

WE NEED TO MOVE FROM A LINEAR TO A CIRCULAR ECONOMY



THE WASTE TO WEALTH COMMITMENT

1. Set targets to improve productivity of resources key to your business
2. Work collectively to eliminate avoidable waste by 2030
3. Redesign how resources are used
4. Collaborate
5. Reconvene and report on progress



STRUCTURAL WASTE IN THE BUILT ENVIRONMENT



BUILT ENVIRONMENT SECTOR IS CRITICAL

- Largest sector in global economy **13% of GDP**
- World's urban population growing rapidly **over 2/3 of us will live in urban areas**
- Size of built environment will double **huge pressure on urban systems**
- Improvements in energy efficiency and liveability of cities
- Still designed around a linear model
- Price of materials used in construction increased 4.9% from May 2017 to May 2018, continuing a persistent upwards trend
- Major consumer of natural resources and producer of waste and carbon emissions **25-30% of all EU waste and cement 10% of CO2 emissions**

CIRCULAR ECONOMY BUILDING BLOCKS FOR THE BUILT ENVIRONMENT

- **Circular economy design** e.g. design for reuse, repair, recycling, modification/upgrading, disassembly/reassembly; passive design; Cradle to Cradle building materials
- **New business models** e.g. product as a service, performance based contracts, DBOM contracts
- **Reverse cycles** e.g. take-back schemes, material passports
- **Enablers** e.g. collaboration, leading by example

Source: Adapted from Ellen MacArthur Foundation

WHERE ARE WE AT?

- Interest in and commitment to a circular approach growing rapidly
- Practical demonstration projects emerging
- Strong partnerships and collaborative initiatives

UKGBC Gold Leaf members survey results

	Zero waste target	Strategic commitment to circular economy
2017	10%	6%
2018	12%	40%



EXAMPLES



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Kerkrade

- Super Circular Estate - First Circular Social Housing Estate
- 100% reusing and recycling of materials acquired from the demolition of an outdated social housing high-rise flat
- 805,000 kilo reduction of CO₂ emissions compared to the construction of a new high-rise flat
- Tenants will be strongly involved in the co-design, operation and



monitoring

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PARK 20|20, AMSTERDAM

- Based on Cradle to Cradle® design philosophy
- Largest collection of certified C2C materials in the world
- Buildings connected to grey water purification system
- Roofs fitted with photovoltaic cells
- Biodiversity stimulated by integrating greenery, fresh vegetables & fruit



HAMMERSON'S NET POSITIVE BY 2030: RESOURCE USE TARGETS

- Minimise waste from operational assets & maximise recycling and reuse of waste materials on site
- Work with contractors to minimise construction and demolition waste from our developments & maximise reuse and recycling
- Manage waste out of developments during the design phase, reducing consumption
- Minimise the use of resources that are neither recycled nor renewable through application of our design standards across all areas of work, including fit out
- Create innovative ways to offset any raw material use, and any waste sent to landfill



JLL'S AIMS AND TARGETS

“By 2020, we will support the UK’s transition to a circular economy through our services, our workforces and our public affairs activities”

	2020 Target	2017 Progress
Resource use	100% diversion from landfill; 70% waste recycled	95% diversion from landfill; 68% of all waste recycled
Resource use	Achieve 30% paper reduction per FTE against 2014 baseline	-46%
Energy & Carbon	Achieve 100% renewables across JLL UK corporate and residential estate	65%

BITC'S WASTE TO WEALTH AND THE BUILT ENVIRONMENT CHAMPIONS PROGRAMME

- Led by JLL, Interface and Arup
- Baseline report
- Deep dives
- Demonstration project
- Individual commitments



WHAT ARE YOUR OPPORTUNITIES?

- What opportunities are there for greater circularity in your own projects? What are you already working on?
- How could you support clients to incorporate circular principles?
- What challenges do you foresee?
- Can you think of opportunities for circular demonstrations?
- What do you need to do to move forward?



Business in the Community

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