REDISCOVERY CENTRE

The Circular Economy and Degrowth

Sarah Clear, Head of Education

The Rediscovery Centre

Mission: the National Centre for the Circular Economy in Ireland, a creative movement connecting people, ideas and resources to support greener low-carbon living.

Aims:

- To divert waste from landfill and move to circular economy
- Provide community employment & training
- Inspire sustainable living

The Rediscovery Centre

- Rediscover Furniture
- Rediscover Fashion
- Rediscover Paint
- Rediscover Cycling
- Research
- Education
- Eco Store and Café
- CE Programme

Education Programmes

We deliver Education Workshops and Programmes for:

- Primary workshops
- Secondary workshops
- Third Level courses
- Additional Needs groups and schools
- Community workshops & events
- Educational Tours of Centre
- Adult Practical Skills courses
- Teachers CPD courses
- Corporate talks & workshops

Our workshop and programme topics include:
Waste, Energy, Water, Biodiversity, Global Citizenship, Sustainable Design, Sustainable Living, Gardening, Circuits, Maths, Forces, Space, Science Investigations, Geology, Engineering, Creative Waste Reuse, Creative Lab, Maths, Design thinking & Innovation

STEM & Sustainability

STEM & Sustainability Project: education and public engagement to develop and deliver education programmes, workshops and events on sustainability and STEM topics throughout Ireland.

Project Aims:

- To educate students, teachers and the public on the science of sustainability
- To educate people on the ways that STEM can provide solutions to societal challenges
- To build capacity to create solutions for a more sustainable future.

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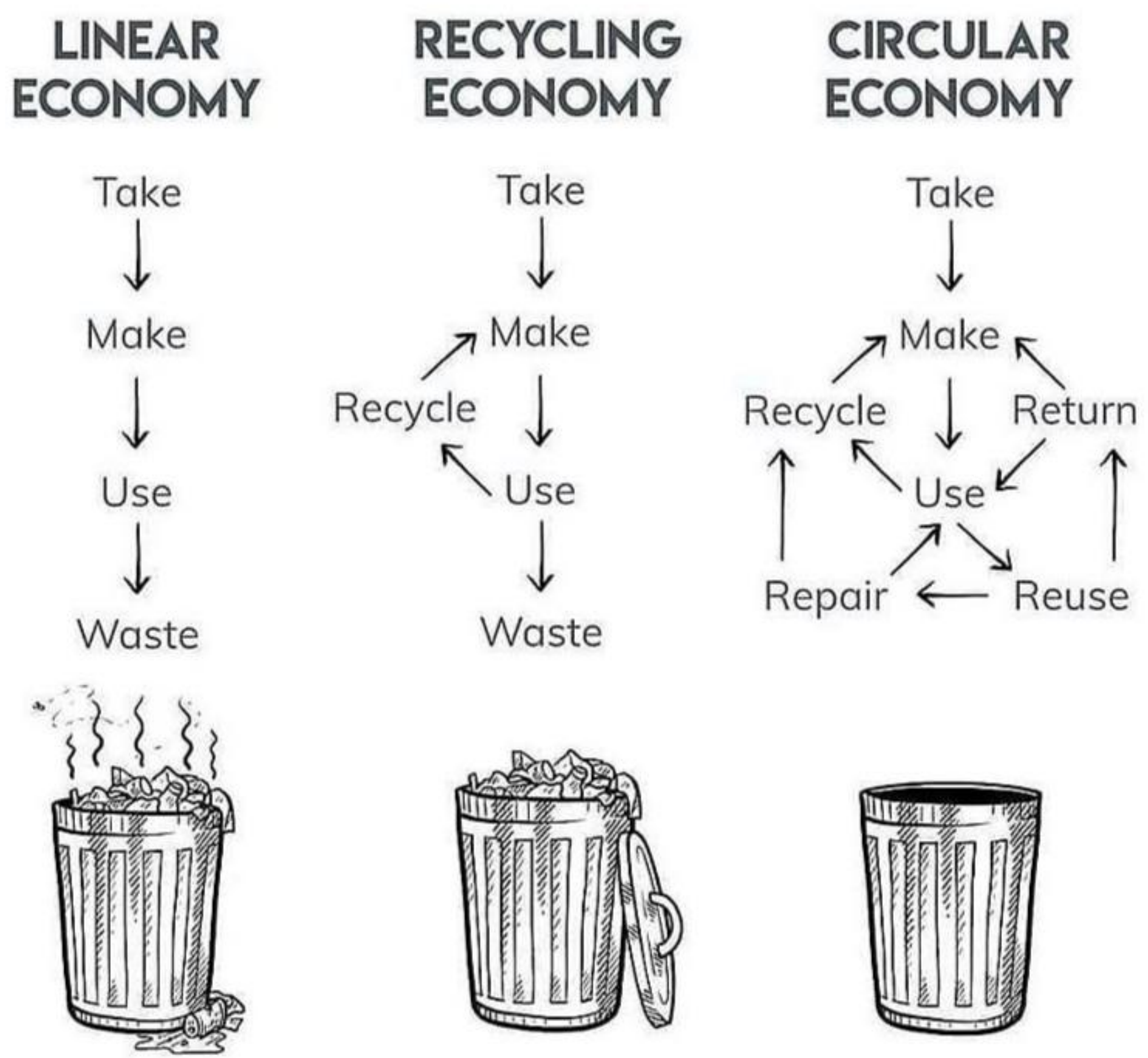
Science Foundation Ireland sfi For what's next

"We can’t save the world by playing by the rules, because the rules have to be changed. Everything needs to change and it has to start today.“ – Greta Thunberg

Economy Models



The Fashion Industry

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Fashion Industry

Today's global

is worth

€2.5 trillion

each year

= €2,500,000,000,000

The Fashion Industry

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What do you know about the fashion and textile industry

The clothing & textile industry:

- Produces **400%** more clothes now than 20 years ago
- contributes more to climate change than international aviation and shipping industries combined
- 63% of textile fibres are derived from petrochemicals
- China produces nearly 54% of the world's textiles
- The EU average person consumes 26kg of textiles per year

Activity: Natural Resource Use

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List all of the natural resources you have used so far today.

E.g. if you read a newspaper this morning, the natural resources used include; wood, water, energy, soil (to grow the trees), and minerals, plant oils and petroleum for printing inks.

Remember to include textiles, wearables, food, toothpaste etc

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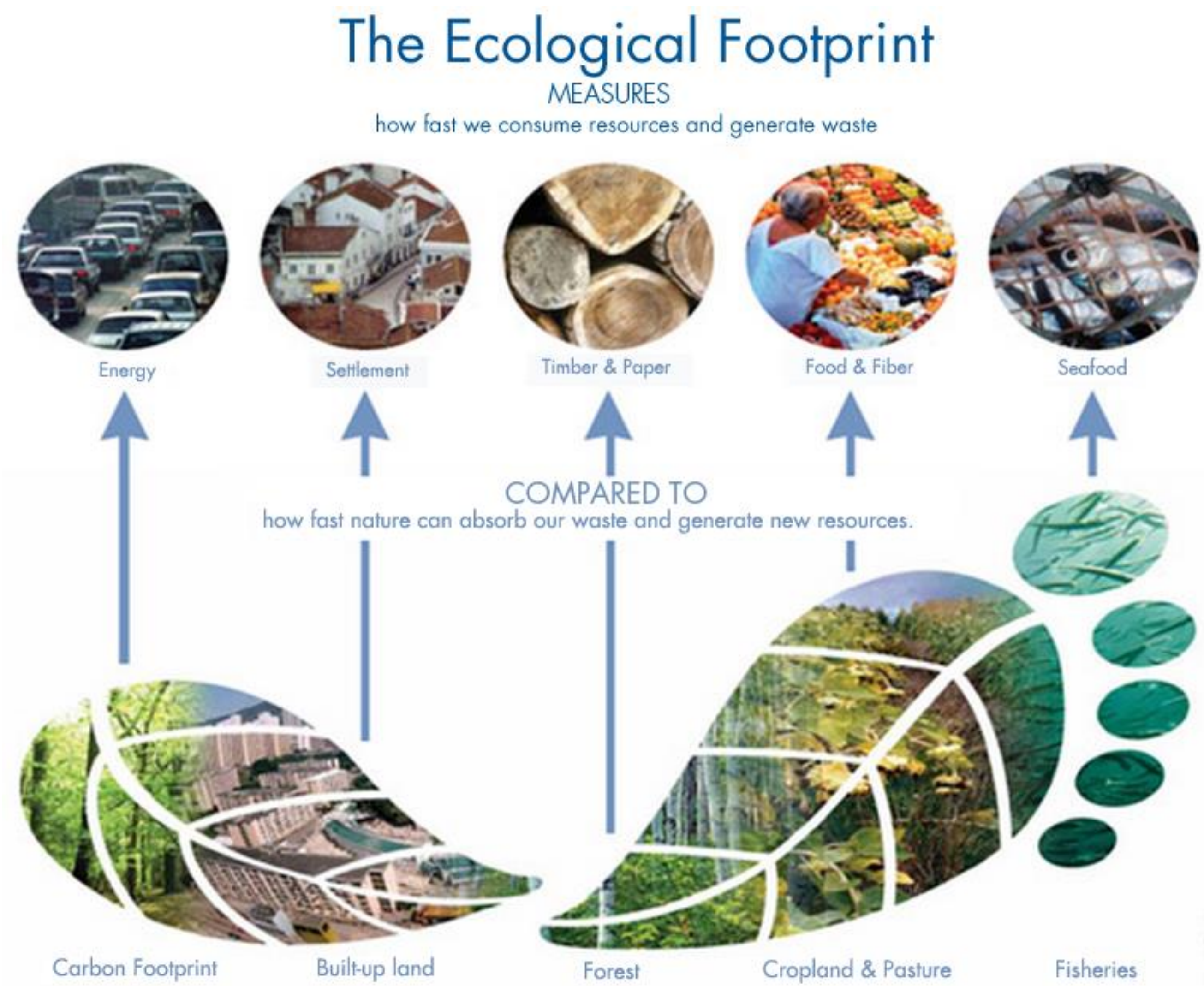
Natural Resource Use Activity

List all of the natural resources you have used so far today.

Activity	Natural Resources Used

Ecological Footprint

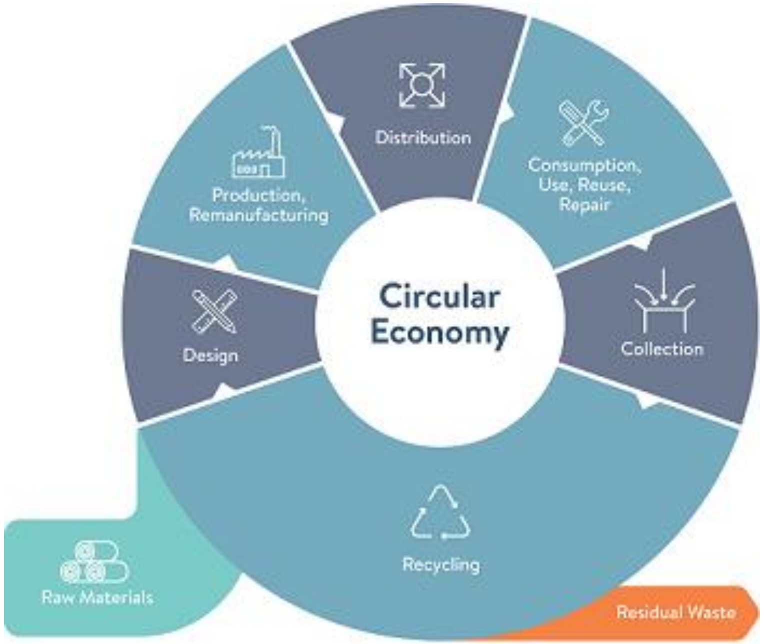


Circular Economy & Sustainability & Degrowth

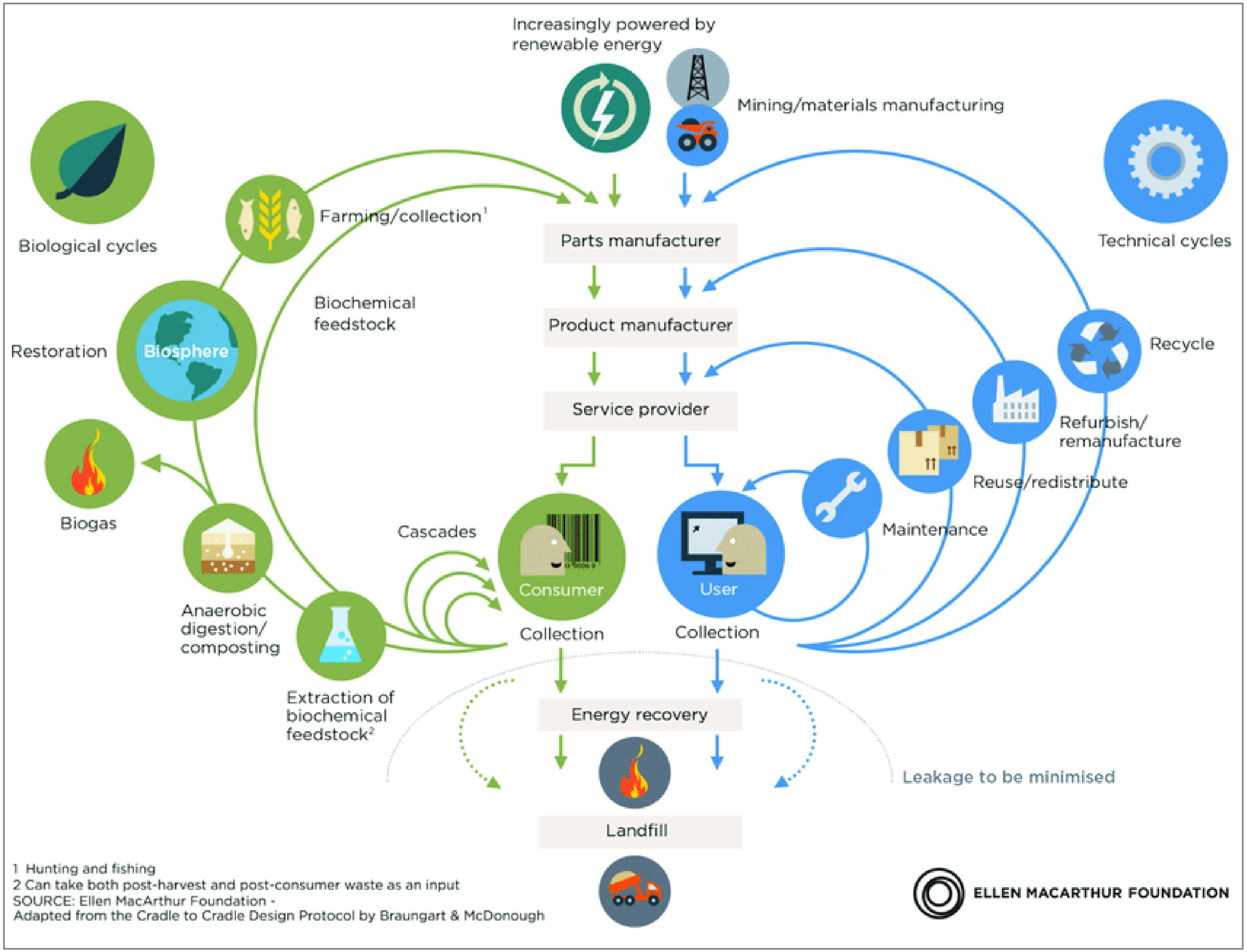
"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

3 pillars of Sustainability: Social, environmental and economic

- Designing out waste and pollution
- Keeping products and materials in use
- Regenerating natural systems



Circular Economy



Principles of Circular Economy

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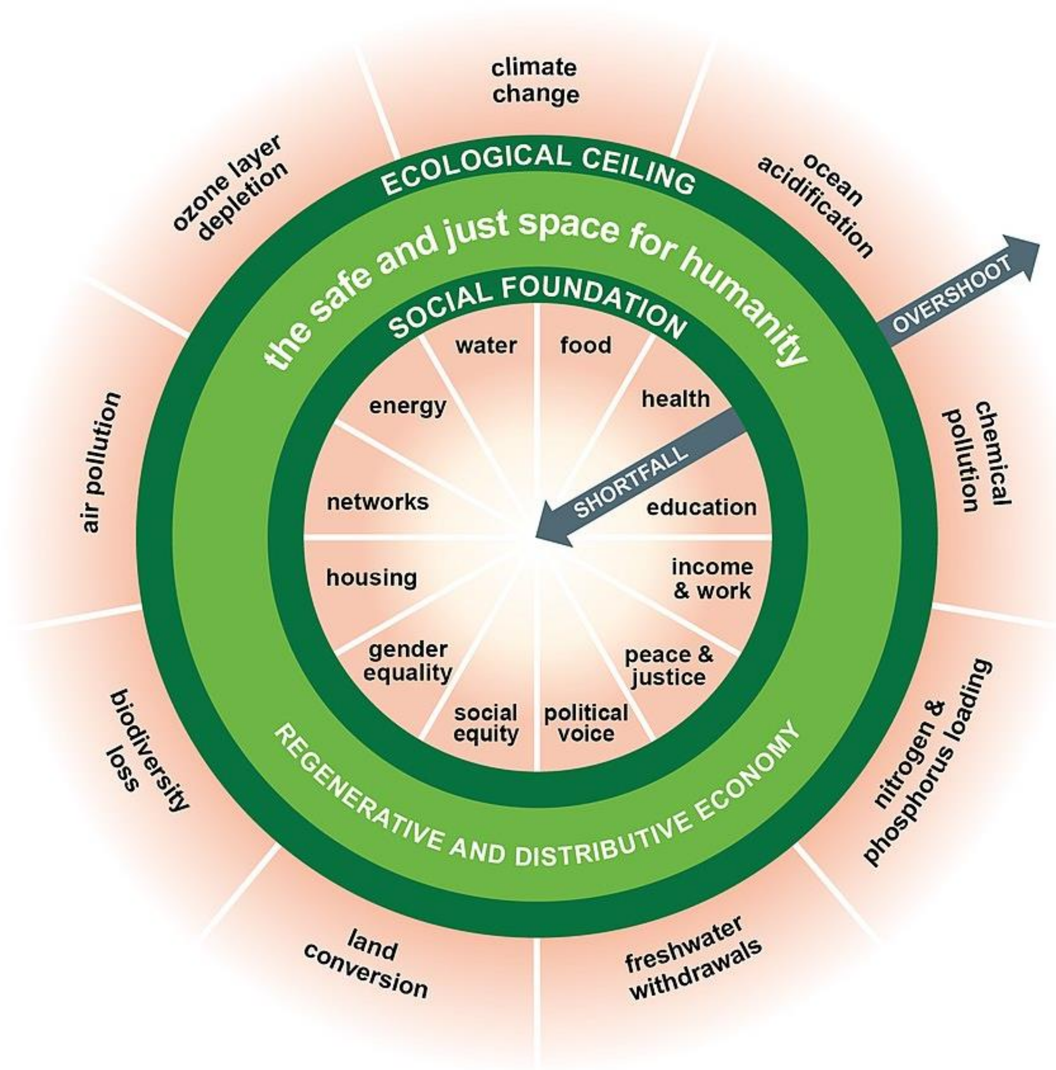
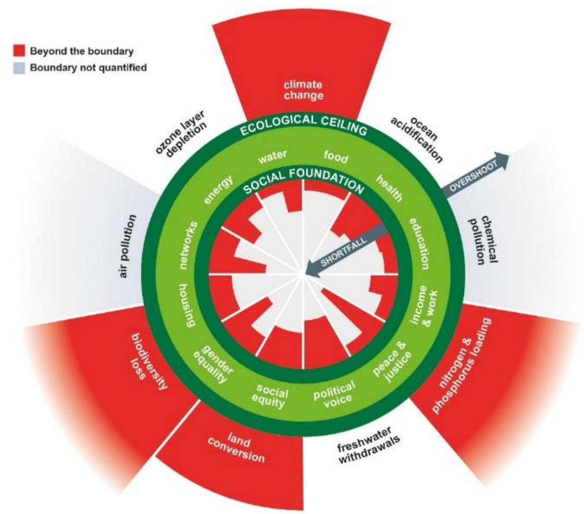
1. **Low-impact materials**: non-toxic, sustainably produced or recycled
2. **Energy efficiency:** use manufacturing processes and produce products which require less energy
3. **Quality and durability:** longer-lasting, better-functioning products
4. **Design for reuse and recycling:** Product ‘afterlife’
5. **Carbon Footprint:** Looking at the amount of carbon that is generated throughout the entire life of a product, production, transportation, use and disposal

Principles of Circular Economy

6. **Service substitution:** Shifting the mode of consumption from personal ownership of products to provision of services which provide similar functions, e.g., Renting products - from a private automobile to a car sharing service
7. **Bio - mimicry:** Learning from our natural environment
8. **Renewability:** Local, sustainably managed, renewable sources
9. **Design standards:** Use available standards and best practice guides

Measuring for CE





The Future of Sustainable Fashion

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covet
The Borrower's Boudoir

R|R
RAG REVOLUTION

BORROWER BOUTIQUE
why buy when you can borrow?

Clothing **rental companies**, like these ones based right out of Dublin, provide high-fashion without risking the potential waste of a purchase.

Using **single-thread knitwear** allows designers to unravel a piece and create something entirely new later! This is an example from Italian brand Benetton.

STEM Solutions

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Textiles can be **spun using food waste**, solving two problems at once: **Piñatex** (pineapple leaves), **Seacell** (the regenerative part of seaweed), **AppleSkin** (mushy pulp from juicing apples)!

Left: Taiwanese actress Chiling Lin is wearing a gown made from **Orange Fibre**!

Thank you for listening and participating!

For further information:

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