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GreenSCENT Design Workshop

Sustainable because Accessible: Inclusion & Diversity

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Introductions

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Overview

- 1 What is accessibility?
- 2 Social versus medical model of disability
- 3 What is sustainability?

- 4 Universal Design Principles
- 5 Designing for accessibility & sustainability
- 6 Key questions

Learning Outcomes



- Distinguish between the different models of disability
- Identify the principles of Universal Design
- Recognise the benefits of integrated accessible and sustainable design for people & the planet

**In three words, what does
accessibility mean to you?**



Disability is an evolving concept



Disability results from interactions between persons with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others

**Convention of the Rights of Persons with Disabilities
(2006)**



Medical vs Social Model of Disability



Social Versus Medical Model of Disability

1. Transport

- a. Mainstream transport and infrastructure is made accessible for everyone.
- b. Specialist transport is provided for people who cannot access mainstream transport.

2. Communication

- a. Communication is tailored to meet the needs of the individual involved and information is made available in a range of different formats.
- b. Communication takes place in 'standard', e.g. in size 12, if someone is unable to read them they can be given magnifiers or ask someone to read the information for them.

Social Versus Medical Model of Disability

3. Language

- a. Language is focussed on the barriers faced by an individual and what can be done to remove them.
- b. Language usually refers to a person's medical condition, what is 'wrong' with them and what they can and can't do.

4. Attitudes

- a. People talk to individuals about their needs and experiences and the barriers they face.
- b. People make assumptions about what someone is capable of based on information about their medical condition.

**In three words, what does
sustainability mean to you?**



What is sustainability?



Defining sustainability

Sustainability means "meet[ing] the needs of the present without compromising the ability of future generations to meet their needs"



**"Our Common Future", UN Brudtland
Commission (1987)**



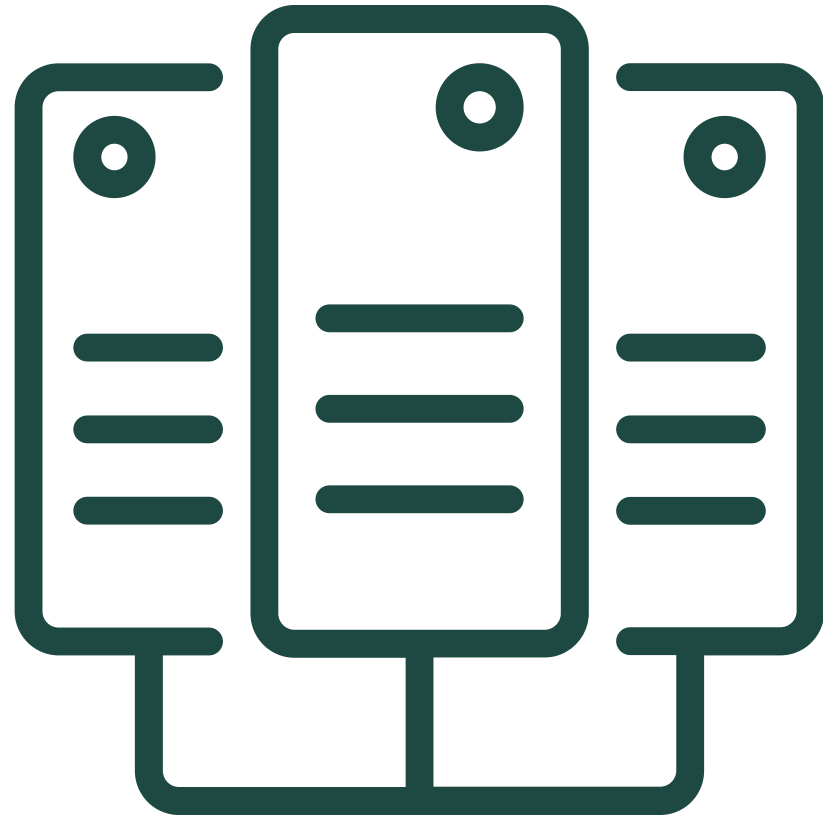


The Digital is Physical



Websites use electricity in

Data centres

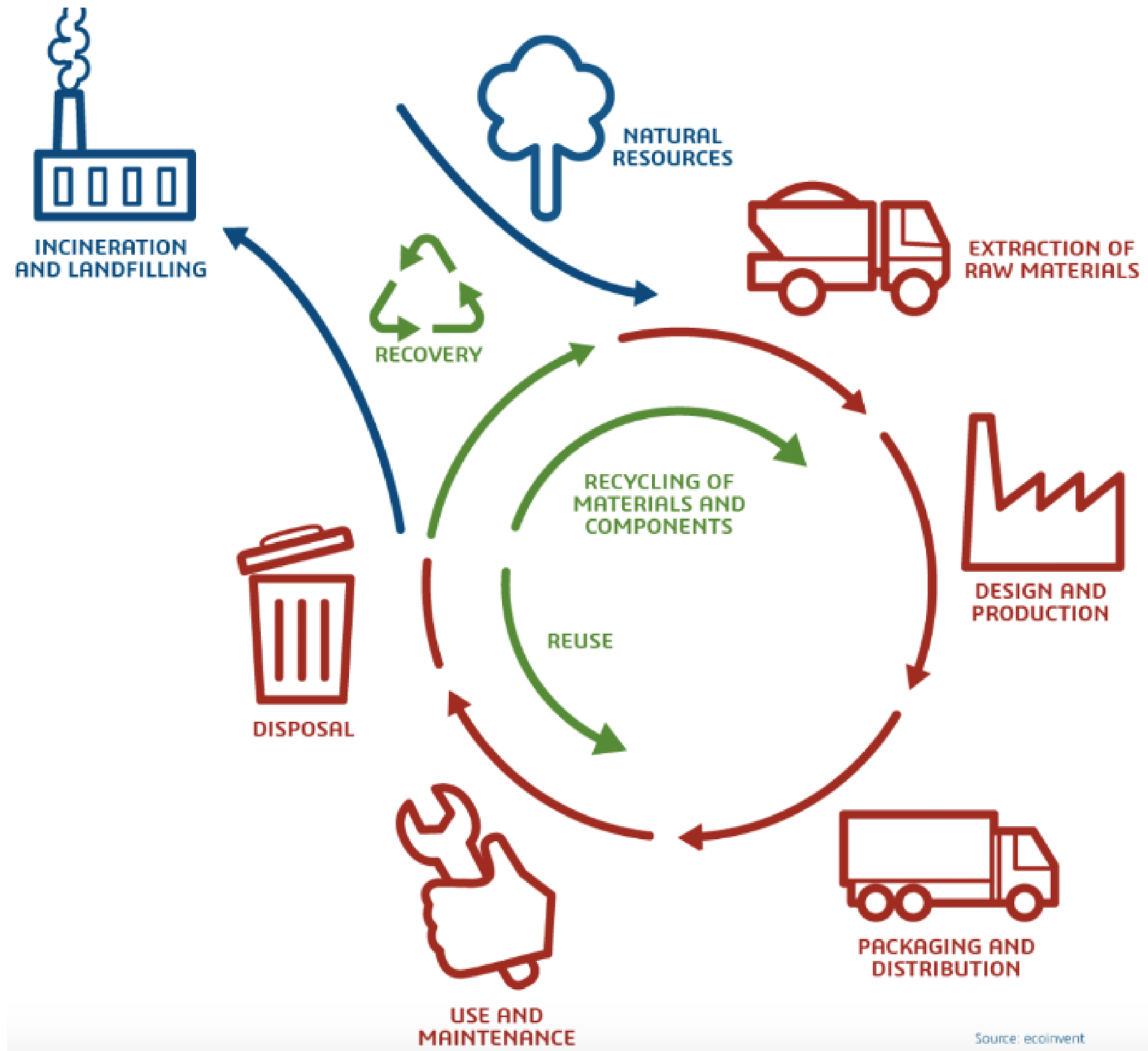


**Transmission
networks**

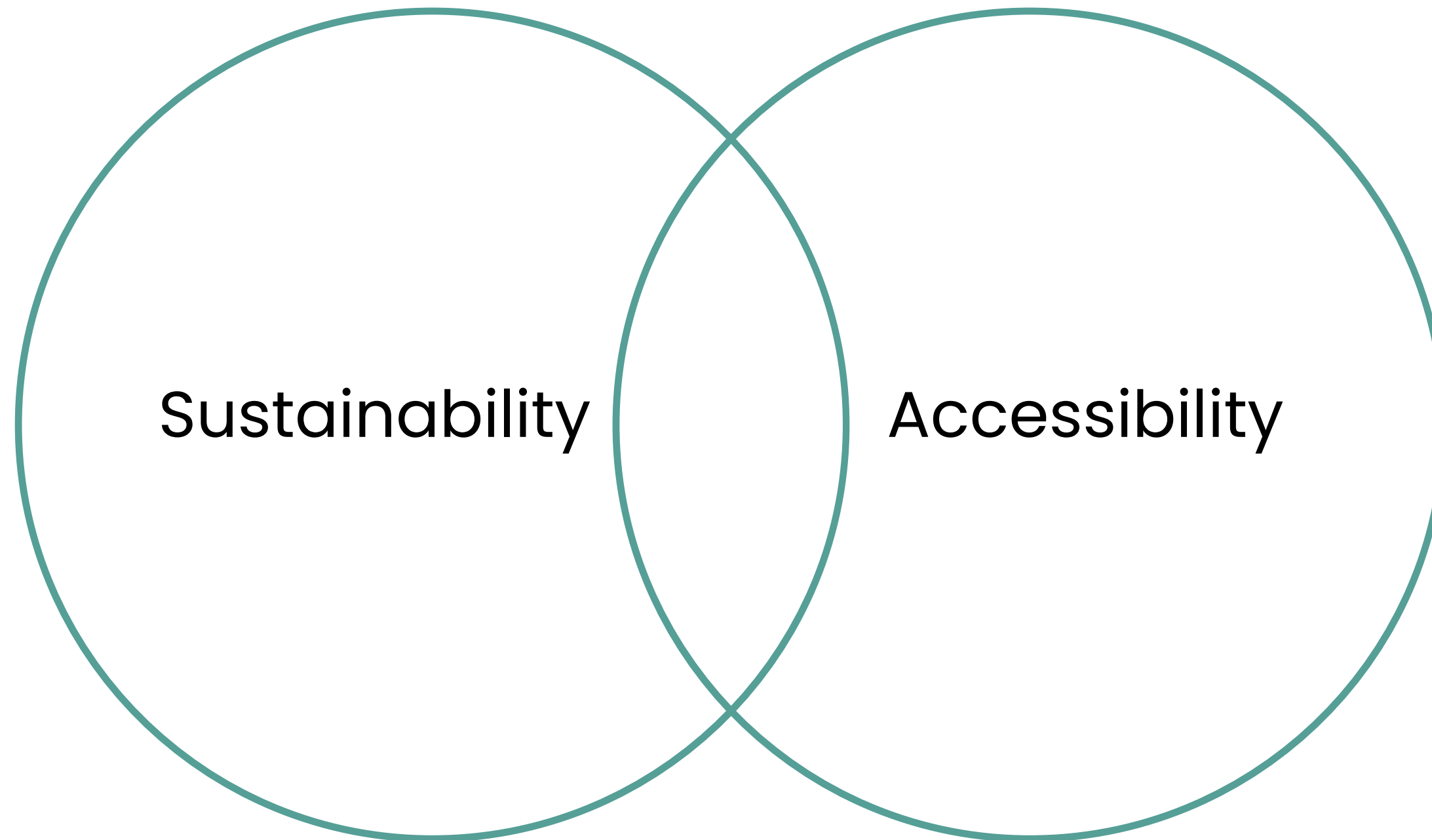


**End user
devices**





How do we connect the dots between accessibility & sustainability?



What is Universal Design?



Universal Design is an approach based on the principle "that the design of products, environments, programmes and services [are] usable by all people to the greatest extent possible, without the need for adaptation or specialised design"

National Disability Authority

Universal Design Principles

Equitable Use

Flexibility in Use

Simple & Intuitive Use

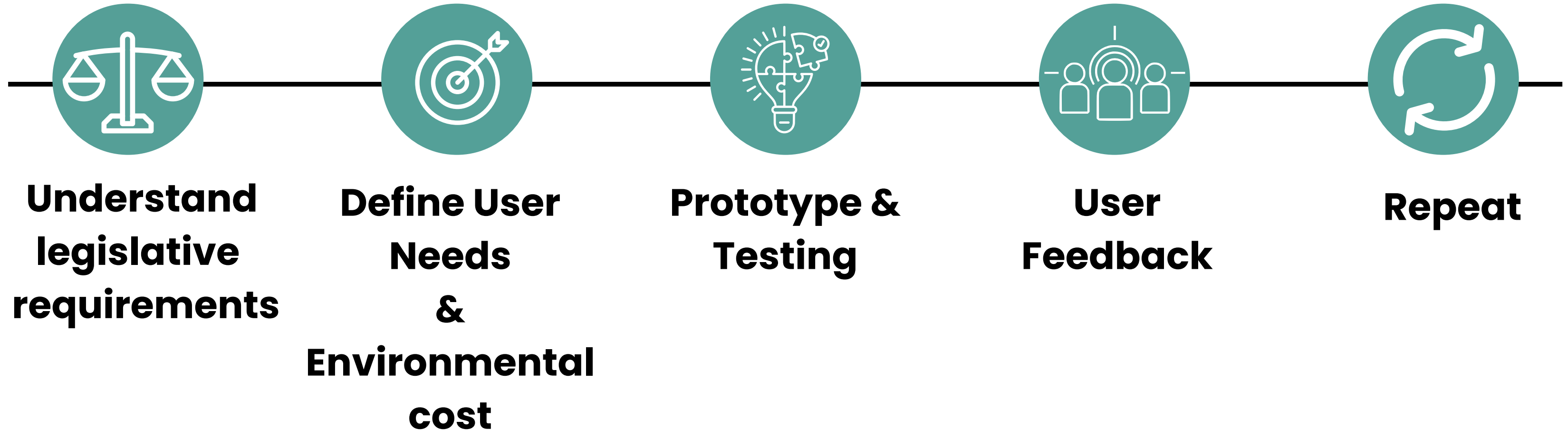
Perceptible Information

Tolerance for Error

Low Physical Effort

Size & Space for Approach & Use

Designing for accessibility & sustainability



Integrated Sustainable & Accessible Design

Benefits

1. Better accessibility
2. More people can use your product or service
3. Less energy and emissions

Challenges

1. Requires planning and attention to detail

Key Questions



1. How can I create a product or service that can be used by a wide range of users?
2. What barriers might someone face when accessing my product or service?
3. How can I minimise the environmental impact of my product or service?
4. How can I integrate accessible and sustainable thinking from the beginning of the design process?

Readings & Recommendations (1)



- European Accessibility Act (2019):
<https://ec.europa.eu/social/main.jsp?catId=1202>
- European Green Deal:
https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
- Frick, Tim (2016) Designing for sustainability: A Guide to Building Greener Digital Products & Services.
- Greenwood, Tom (2021) Sustainable Web Design.

Readings & Recommendations (2)



- Story, M. F. (2011). The principles of universal design. In F. E. Wolfgang & K. H. Smith (Eds.), Universal design handbook (2nd ed.). New York: McGraw-Hill.
- Sustainable Web Design: <https://sustainablewebdesign.org/>
- United Nations (2007) Convention on the Rights of Persons with Disabilities:
<https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>

Readings & Recommendations (3)



- United Nations (2015) Sustainability Development Goals:
<https://sdgs.un.org/goals>
- Web Content Accessibility Guidelines (WCAG 2):
<https://www.w3.org/WAI/WCAG21/quickref/>
- Website carbon calculator: <https://www.websitecarbon.com/>

www.green-scent.eu

Thank you for your attention

Any questions? Get in touch:
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