Transcript

Design ecologies

Voiceover:

We're marching quickly towards ambitious global plans to reach net zero by 2050. This is to support global environmental targets to reduce our impact on, and warming of, the planet.

The way many of us live is negatively impacting the future of humans and other species on earth. The persistent harm we're causing is reaching a tipping point, where, once reached, the damage becomes irreversible.

So how can design improve the health of the planet?

Firstly, we need to shift from supporting linear resource flows where products are made, used for a bit, and then disposed of to a more regenerative approach which aims to use and protect resources, improving planet, human and biodiversity health.

A product is a part of a wider system, and every product has an impact, caused by the chemicals and materials it is made from, the energy needed to manufacture, distribute, use, and dispose of it, and the pollution generated across its life.

Designers can reduce these impacts, through redesigning products, and focusing on how they are used, they can also reimagine and change the systems that surrounds each product.

Designers can improve the earth's ecosystems by reducing pollution and resource depletion. And they can embrace ways to reuse materials, design for durability and create new services for product sharing to reduce consumption.

So let's look at an average smartphone.

These super functional, small devices are our convenient means of organising ourselves and connecting to the world, but behind each phone is a detrimental trail of environmental impacts.

Despite weighing only 170g, a brand new smartphone generates, on average, around 80 kg of carbon equivalent emissions, which is about the same weight as an adult orangutan.
These emissions come from material extraction, manufacture and distribution processes.

With the global demand for smartphones continuing to rise, so does their contribution to global environmental impacts. So we need to design them with sustainability in mind.

To make the biggest environmental improvements for the smartphone, we need to design for:
- easier maintenance, including repair and upgrading parts to foster longevity
- multiple product lives and multiple users
- reuse and reconfiguration of the products
- and circular rather than linear material resource flows

If products lasted longer and we shared more, we would need fewer new things overall.

We need to design using energy-efficient production processes and prioritise materials that are recycled, renewable, and local to provide greater product utility that every kg of carbon equivalent emissions.

We need to design whilst considering the ecology of the product, and the consequences of our design decision. And when designing stuff, we need to understand the value of the earth's reserves and systems.

We need to protect earth's biodiversity and the vital ecosystems that absorb the waste we produce.

We need to ensure sufficient resources for future generations, and all specifies that share the planet.

For a sustainable future we need to consider design ecologies in the redesign of our material world, and we need to do it today.