



Innovation in Managing Resource Streams

Introduction to discussion at the WEC Executive Roundtable

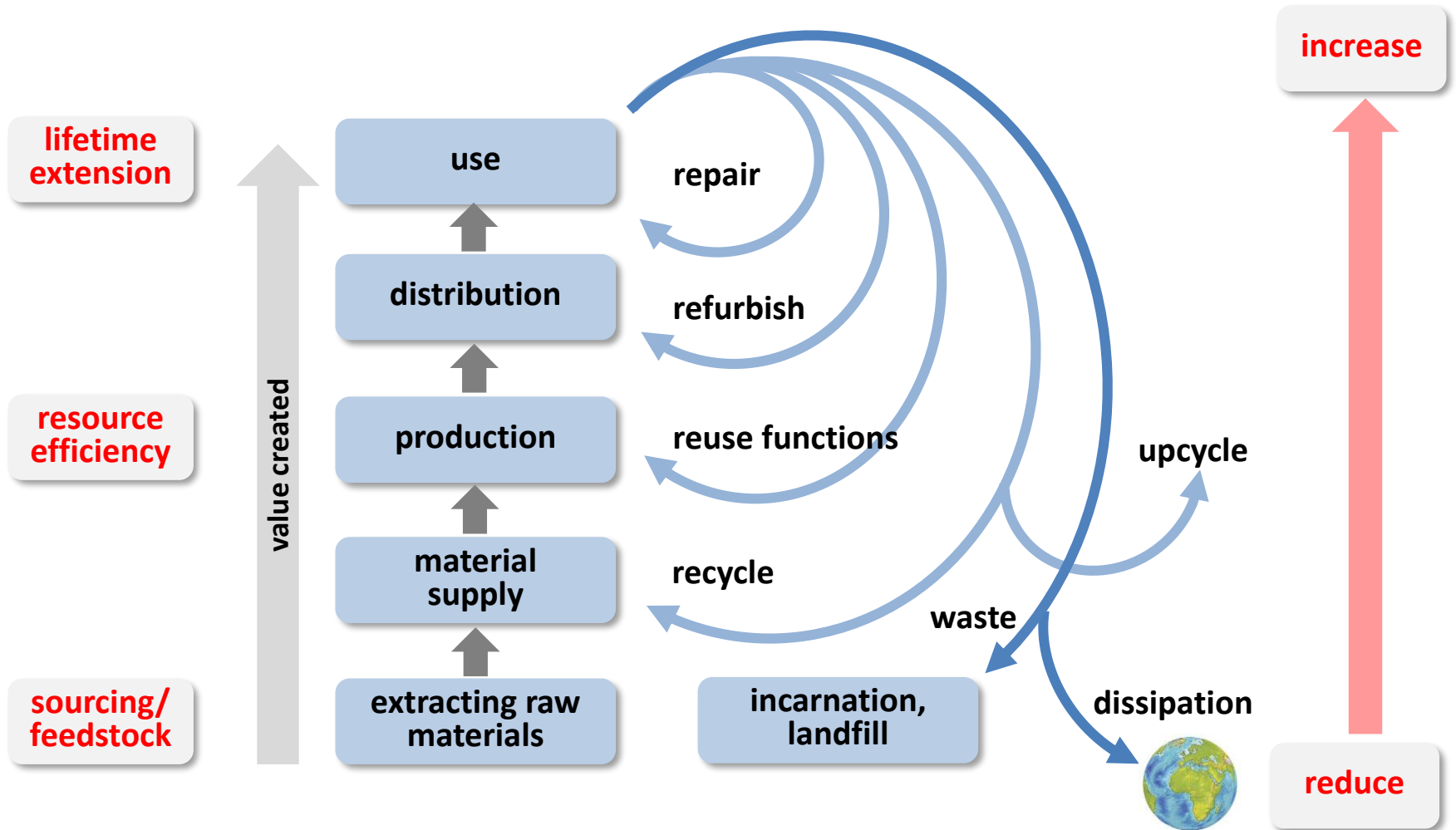
“Managing Resource Streams Sustainably”

Universität Augsburg

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WBX Ventures

Our playing field – how can we tilt it in the right direction?



Some of our key challenges

how to use less and less “costly” resources in production?

how to best repair, refurbish, re-use, recycle?

how to get products back after use?

our business models are not designed for circularity

we don't know enough about our supply chain

we haven't learned to design for sustainability

we are not innovative enough

Some Innovation Topics

Supply Chain Insights

- what's in my product and where are things coming from?
- to make better design and sourcing decisions
- to enable better repair, refurbish, re-use, recycle

Design for X

- for resource efficiency in production and use
- for recollection
- for repair, refurbish, re-use, recycle
- for biodegrading
- business model, technology, logistics, etc.

X as a Service

- maintain product ownership during complete lifecycle
- to extend lifetime
- to assure recollection
- to make it attractive to design for repair, refurbish, re-use, recycle

More Open Innovation

- venturing with startups
- cooperation with partners

X as a Service

Outcome based performance guaranteed by Philips

Today, more and more customers want a lighting infrastructure that is hassle-free, reduces operating expense, and offers an outcome-based performance guarantee.

At Philips Lighting Managed Services, we provide complete end-to-end solutions – quickly, cost-effectively, and with minimal disruption to your business. You won't need to deal with a multitude of suppliers or contractors. And if you've already got a team in place, we'll work with them to ensure everything runs to plan

Light as a Service (LaaS): Managed Services without ownership of the lighting asset

Equipping your facility or workplace with future-proof lighting means more than just having better light. It means improving the way people work, saving energy and boosting revenues. But it doesn't have to mean spending more money on it. On the contrary, Philips Light as a Service offers you full OpEx-based lighting systems to fit your needs. Without investments or hassle, but with an outcome-based performance guarantee. This means you can focus all your attention on your business and your people, while we take care of the light.

Thanks to our leading-edge technology, which enables us to monitor and control the use of the lighting infrastructure and so optimize energy management, we can offer our customers Energy Performance Contracts instead of them having to own the lighting assets.



Circular Lighting

In a world of increasing energy demands and rapidly declining natural resources, the transition from a linear economy to a circular economy is essential to ensure sustainability. A circular economy uses resources more effectively by creating rather than wasting, using rather than owning, and reusing rather than disposing.

[More about Circular Lighting >](#)



Make - Circular design

We build products with future-proof components that are easily upgradable and serviceable to last longer and with the option to switch to connected lighting later. Applications such as Philips Service tag let you easily service lighting products by selecting the right spare parts and retrieving information on the history of spare parts used. Modular components such as drivers and light engines are designed for easy maintenance and replacement, extending product life. Easy disassembly means that materials and components can be fully harvested for reuse or recycling.



Use - New business models

By changing the way we do business, we remove financial hurdles and relieve you of the hassle of ownership and maintenance. All-in-one managed service contracts cover maintenance, optimization, and service efforts—and you pay only for the light you use. You benefit from evolving lighting technology without upfront investments.



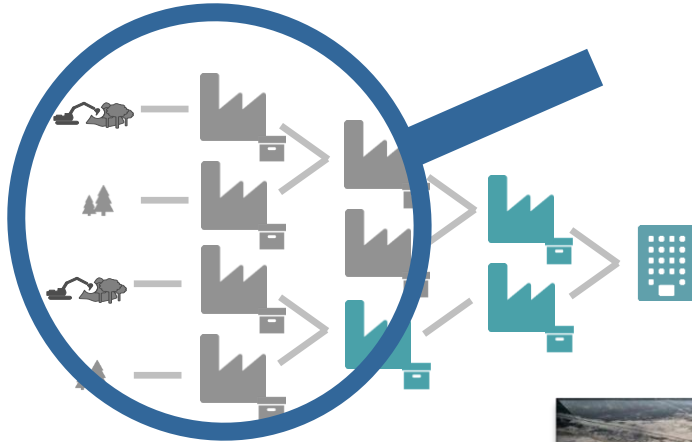
Return - Reverse logistics

We minimize CO2 emissions and waste of materials through reverse logistics. We efficiently recover, disassemble, and reuse components and lighting systems to extend their life. By re-engineering our product designs, we enable efficient ways of recycling and repurposing components and systems. There are no hidden waste costs or disposal fees, allowing you to realize additional incremental savings at end of system life.

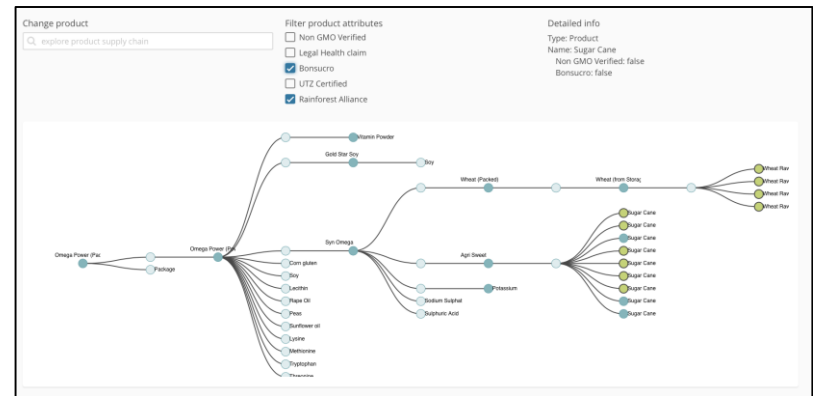


source: <http://www.lighting.philips.com/main/services/>

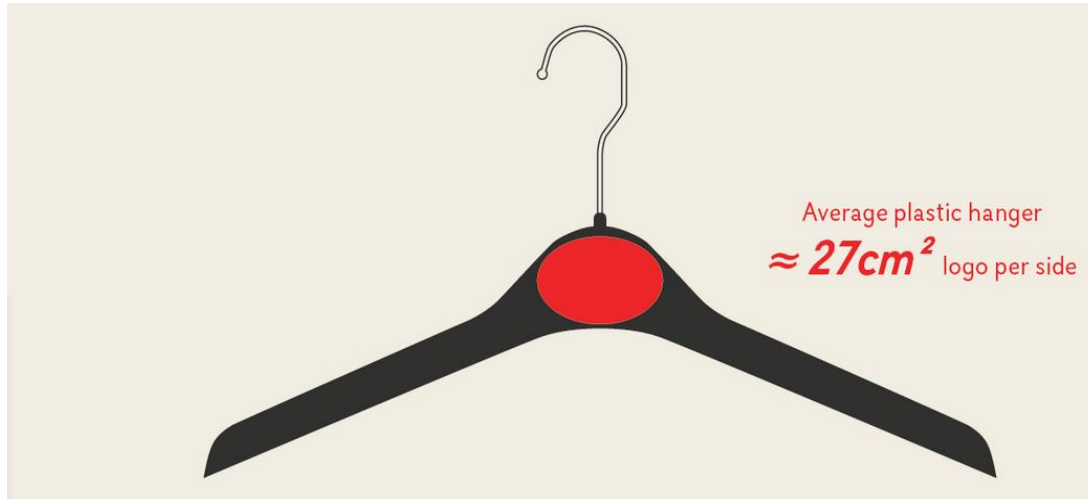
Supply Chain Insights



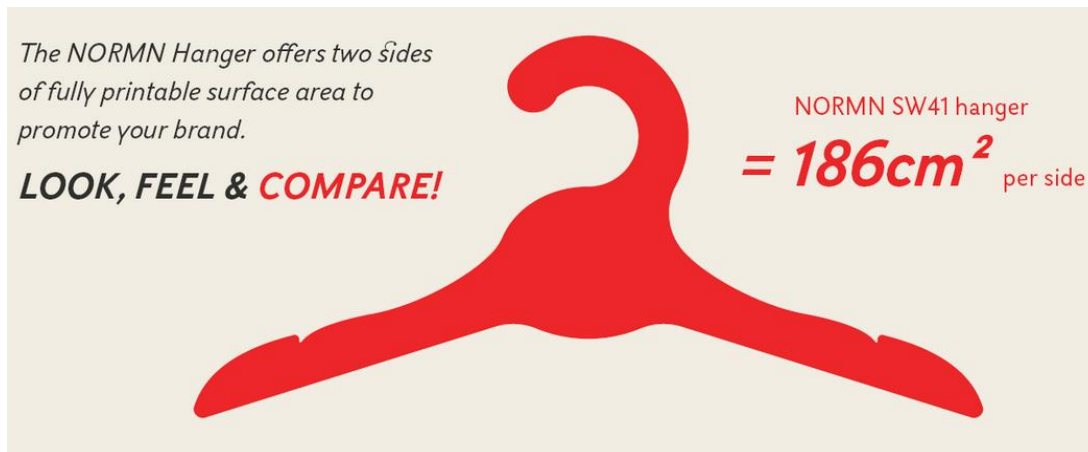
- What is in my products?
- Where do materials and resources come from?
- What critical materials are in which products?
- What environmental footprint do my products have actually (not statistically)?



Design for X



- 10 billion produced per year
- only fraction is recycled



- 100% recycled paperboard
- 100% recyclable in standard paper stream
- 3 times less space during transport
- great marketing real estate!!

Thanks!



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Unlearning

