## Driving Sustainability

## The CFO's Role





Jacob Fink Ferdinand, Green Growth Counsellor

### **AMBITIONS AND TARGETS** TOWARDS ZERO



We will eliminate carbon emissions at our breweries by 2030 and be using 100% renewable electricity by 2022. Through the Carlsberg Circular Community, we are working with partners in our value chain to reduce beer-in-hand emissions by 30% by 2030.





We will offer 100% distribution of alcohol-free brews by 2022 to expand consumer choice. We will also provide responsible drinking messaging as well as nutrition and ingredient information on our packaging and online, while forming partnerships to encourage responsible consumption.





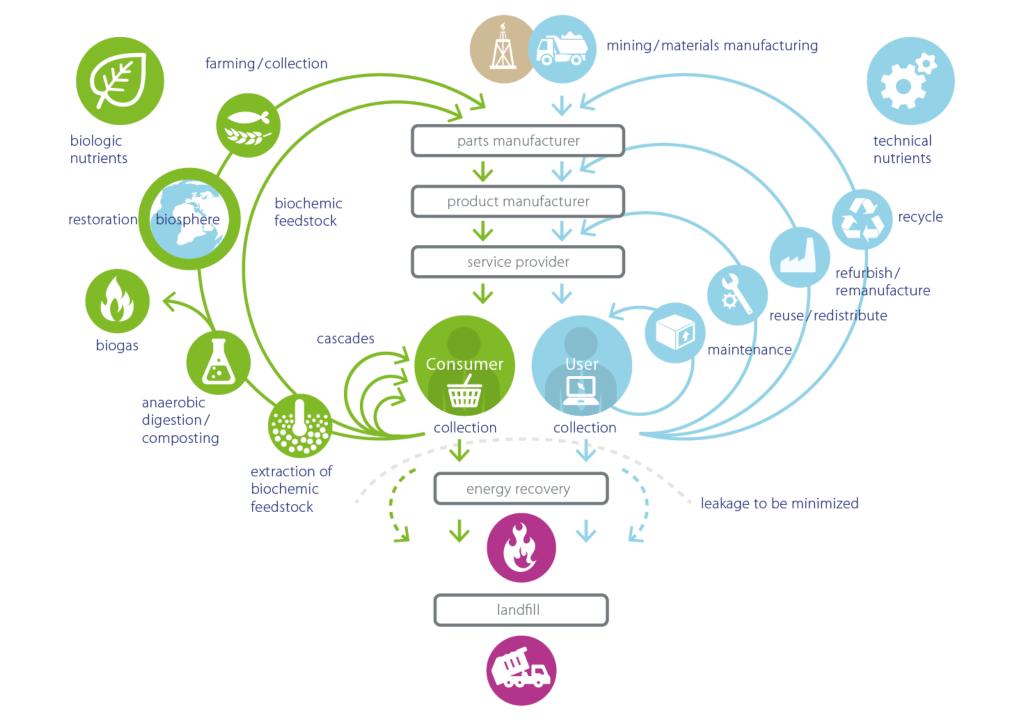


We will cut water usage at our breweries by half by 2030, effectively eliminating water waste during the brewing process. We will also engage with partners to improve water management outside selected breweries in high-risk areas.



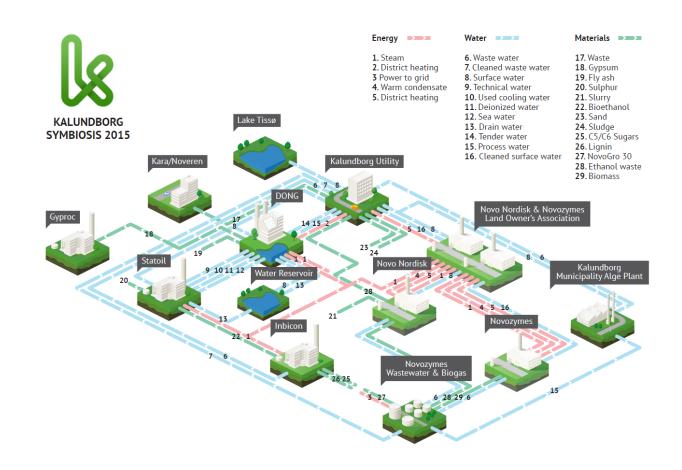


We will continue to target a year-on-year reduction in our accident rate in order to achieve our 2030 target of ZERO lost-time accidents.



# Danish experience: Industrial Symbiosis Business AND Environmental Benefits

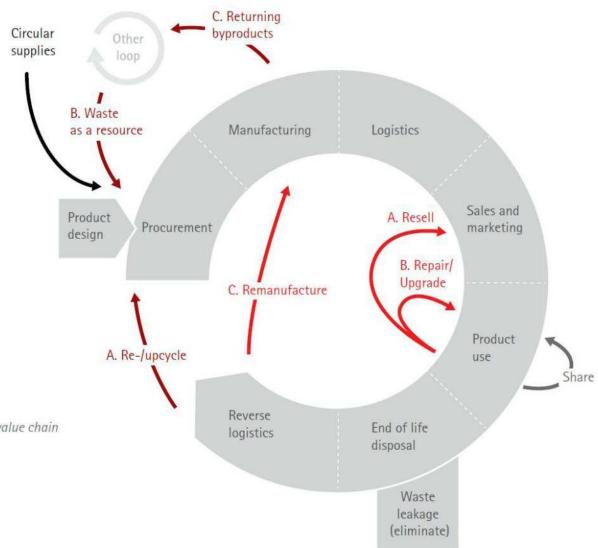
**Annual economic savings** of USD 90 mio. Annual environmental benefits 240,000 Tonnes carbon 3 mio. m<sup>3</sup> water, 30,000 Tonnes of straw converted to 5 mio. liters ethanol 150,000 Tonnes gypsum from a power plant replaces natural gypsym in plasterboards production.



#### **Business Models**

- Circular Supplies: Provide renewable energy, bio based- or fully recyclable input material to replace single-lifecycle inputs
- Resource Recovery: Recover useful resources/energy out of disposed products or by-products
- Product Life Extension: Extend working lifecycle of products and components by repairing, upgrading and reselling
- Sharing Platforms: Enable increased utilization rate of products by making possible shared use/access/ownership
- Product as a Service\*: Offer product access and retain ownership to internalise benefits of circular resource productivity

<sup>\*</sup> Can be applied to product flows in any part of the value chain



#### **Examples**



- Shift to renewable energy and materials
- Reclaim, retain, and restore health of ecosystems
- Return recovered biological resources to the biosphere



P-REX



**IBERDROLA** 



Share



- Share assets (e.g. cars, rooms, appliances)
- Reuse/secondhand
- Prolong life through maintenance, design for durability, upgradability, etc.









Optimise



- Increase performance/efficiency of product
- Remove waste in production and supply chain
- Leverage big data, automation, remote sensing and steering











Loop



- Remanufacture products or components
- Recycle materials
- Digest anaerobic
- Extract biochemicals from organic waste















Books, music, travel, online shopping, autonomous vehicles etc.





mazuma















- Replace old with advanced non-renewable materials
- Apply new technologies (e.g. 3D printing)
- Choose new product/service (e.g. multimodal transport)



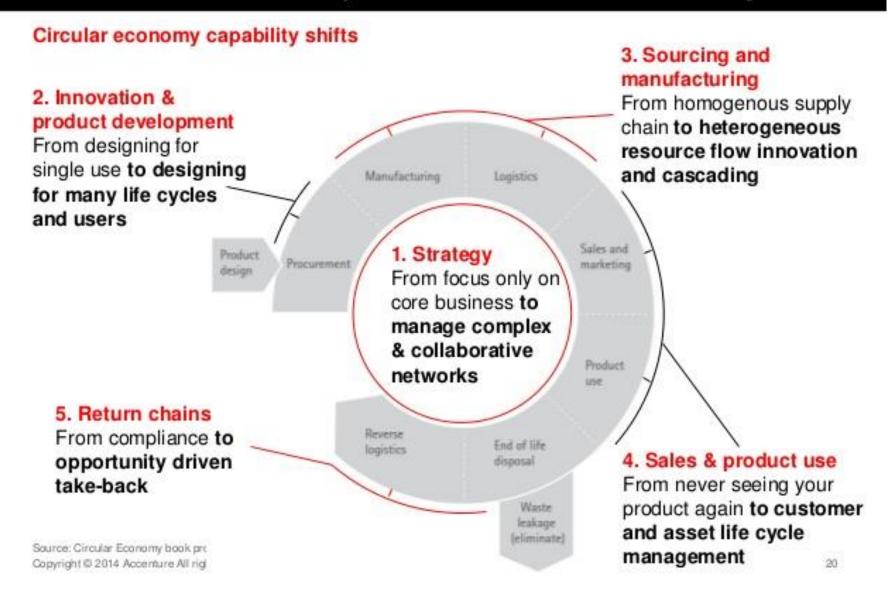








## Five major shifts in business capabilities are critical to deliver circular economy business models successfully



### Thank you!

#### ROYAL DANISH EMBASSY

### Jacob Fink Ferdinand

Green Growth Counsellor

Royal Danish Embassy 13 Runda Drive

P.O. Box 40412 00100 GPO Nairobi

www.kenya.um.dk

Tel. +254 20 425 3000

Dir. +254 724 267 137 Cell. +254 724 267 137

E-mail: jacfer@um.dk

