

TRANSFORMING OIL FROM A CO2 FOOTPRINT TO AN ASSET

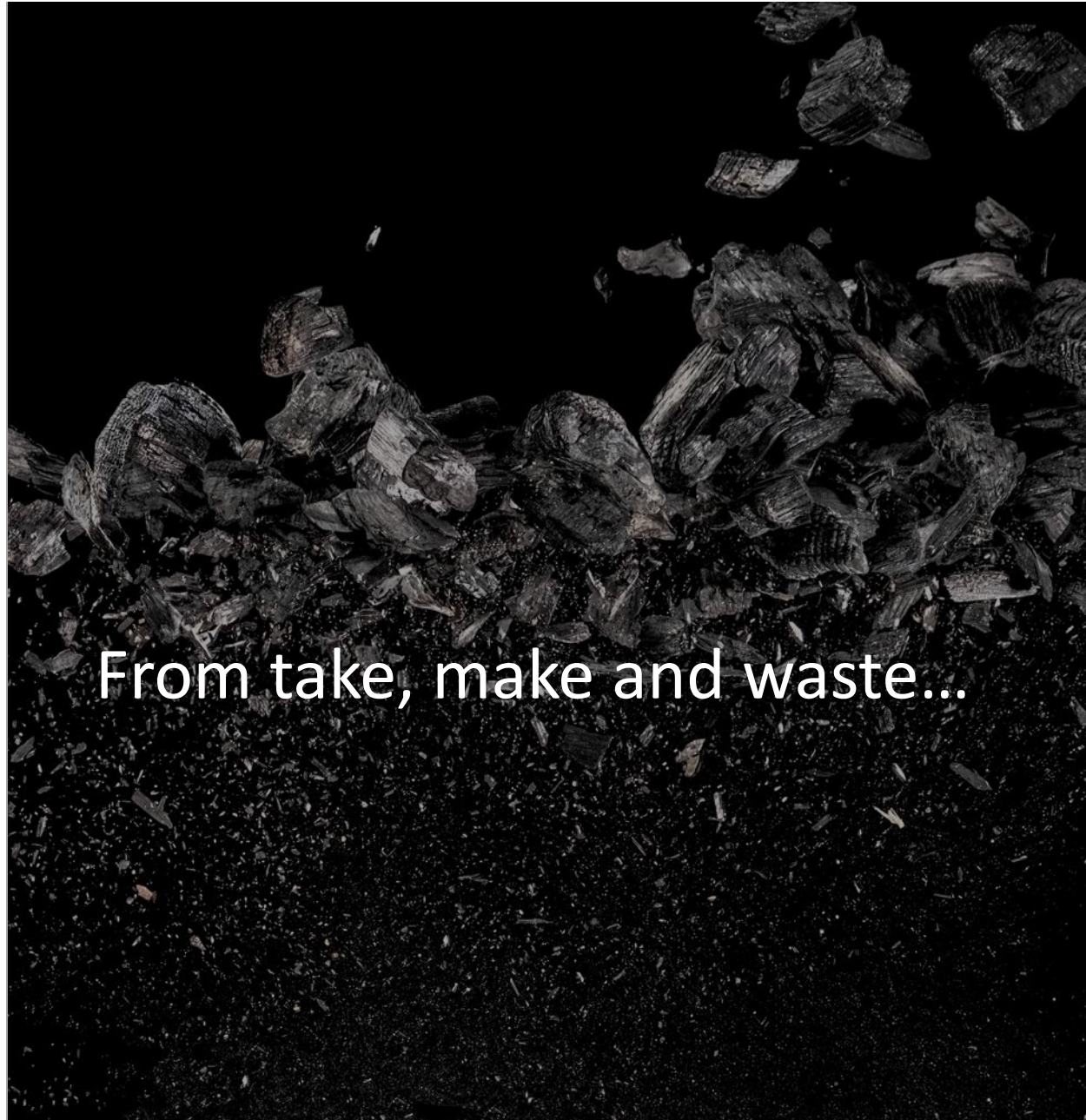
PASCAL VERHOIE

MANAGER SALES & BUSINESS DEVELOPMENT, SKF RECONDOIL

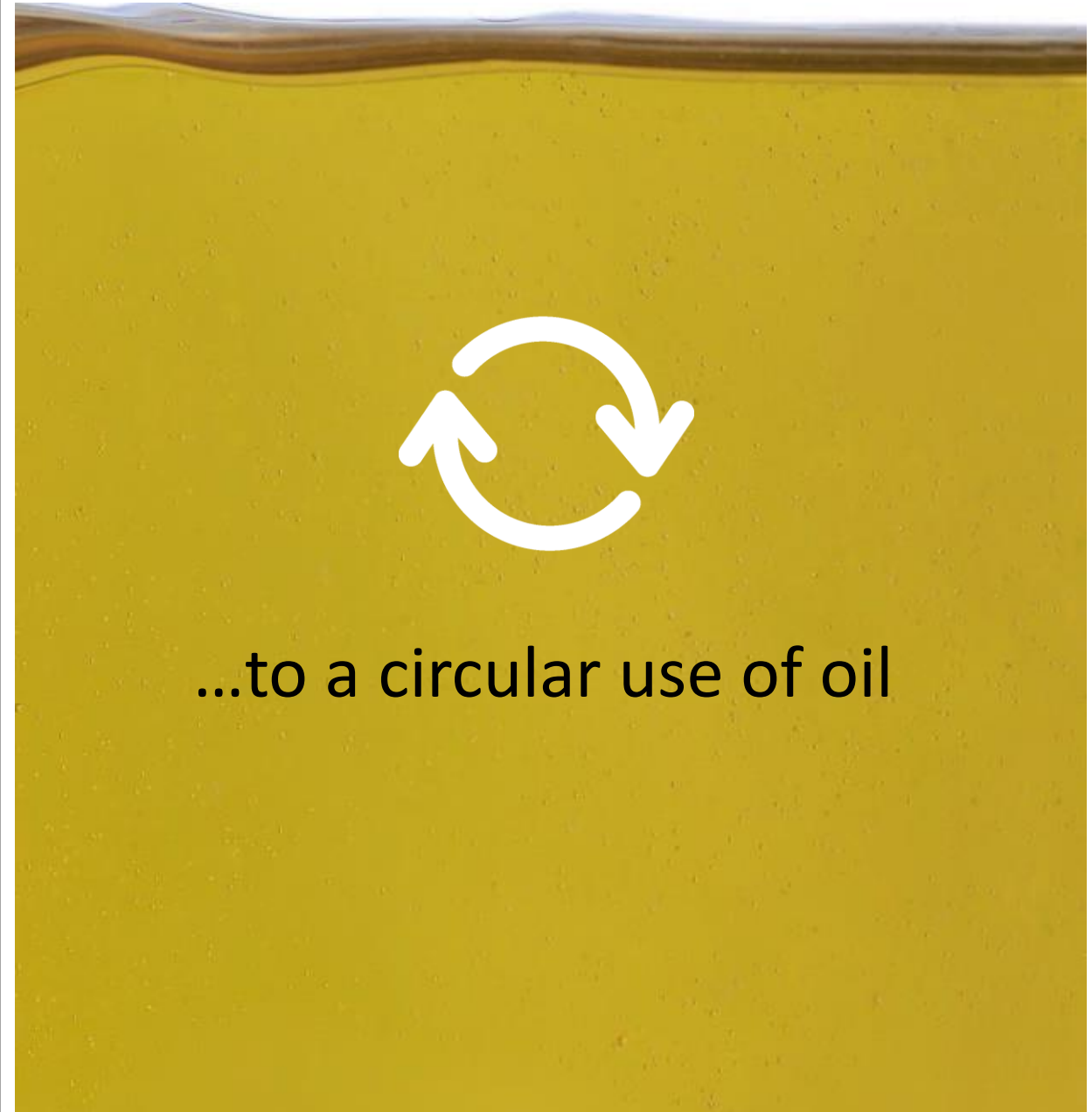


Linear use of oil

- Oil is used, discarded and replaced
- Costly and unsustainable approach
- Direct and indirect costs
- Impacts machines and processes



From take, make and waste...

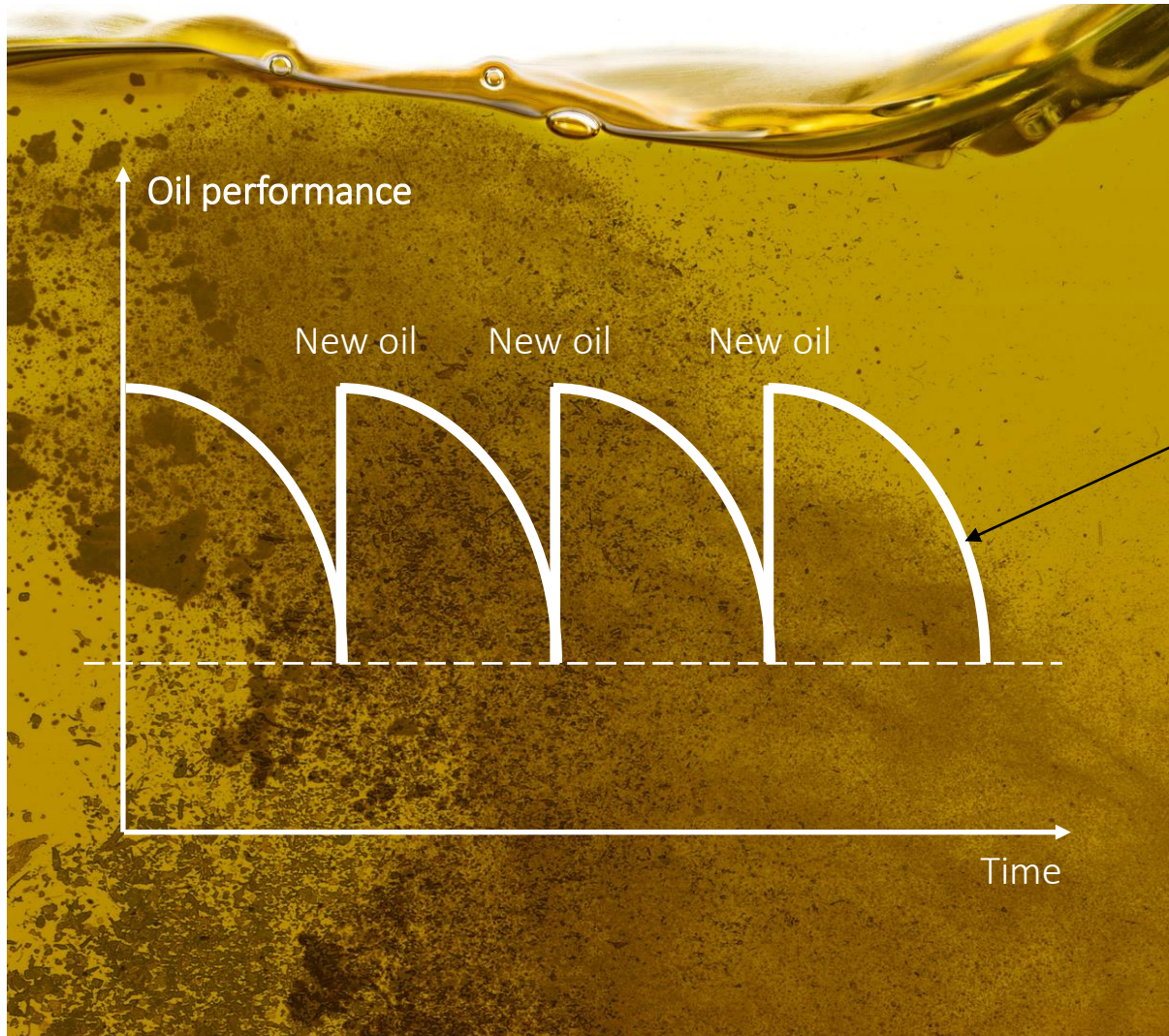


...to a circular use of oil

Imagine getting rid
of 19 million tons of
industrial oil every year.



Today



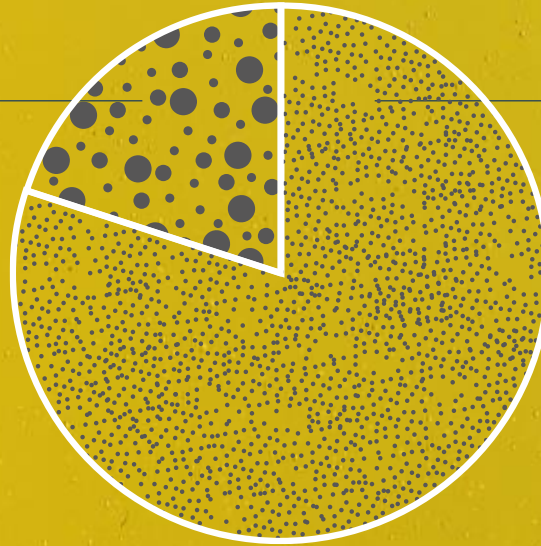
Contamination

Oxidation

Additive consumption

Conventional filters only remove the 20%...

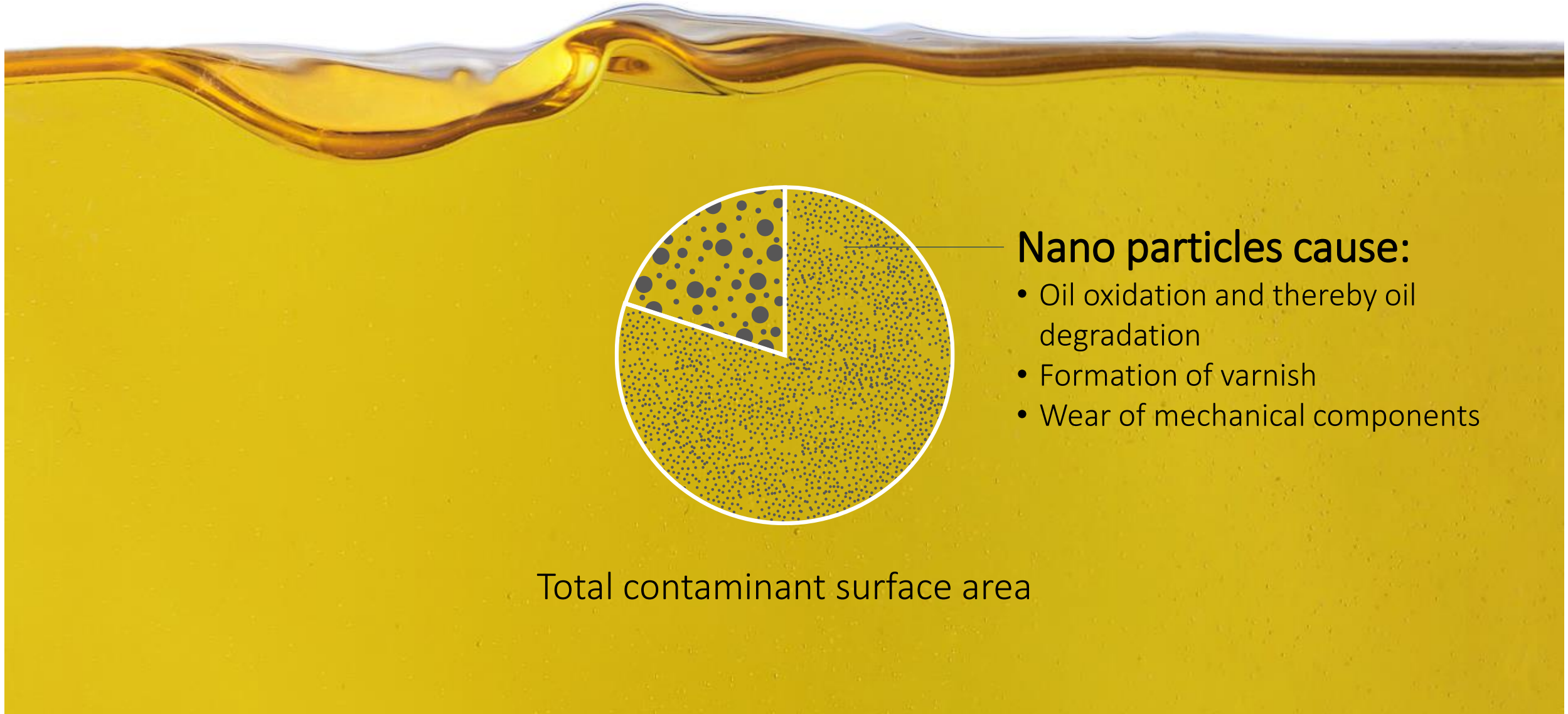
20% micro
Particles $> 1\ \mu\text{m}$



80% nano
Particles $< 1\ \mu\text{m}$
Not captured in conventional filters...

Total contaminant surface area

Nano particles – the catalyst for oxidation



DST – a combination of chemical and mechanical separation



Chemical separation (Booster)

The oil is mixed with a booster. The booster attracts all kinds and all sizes of contaminants to larger lumps – like a magnet.

Mechanical separation

The lumps are separated by sedimentation and filtering.

Ultra-clean oil

The oil is clean down to nano-level

Circular use of oil – value creation across operations



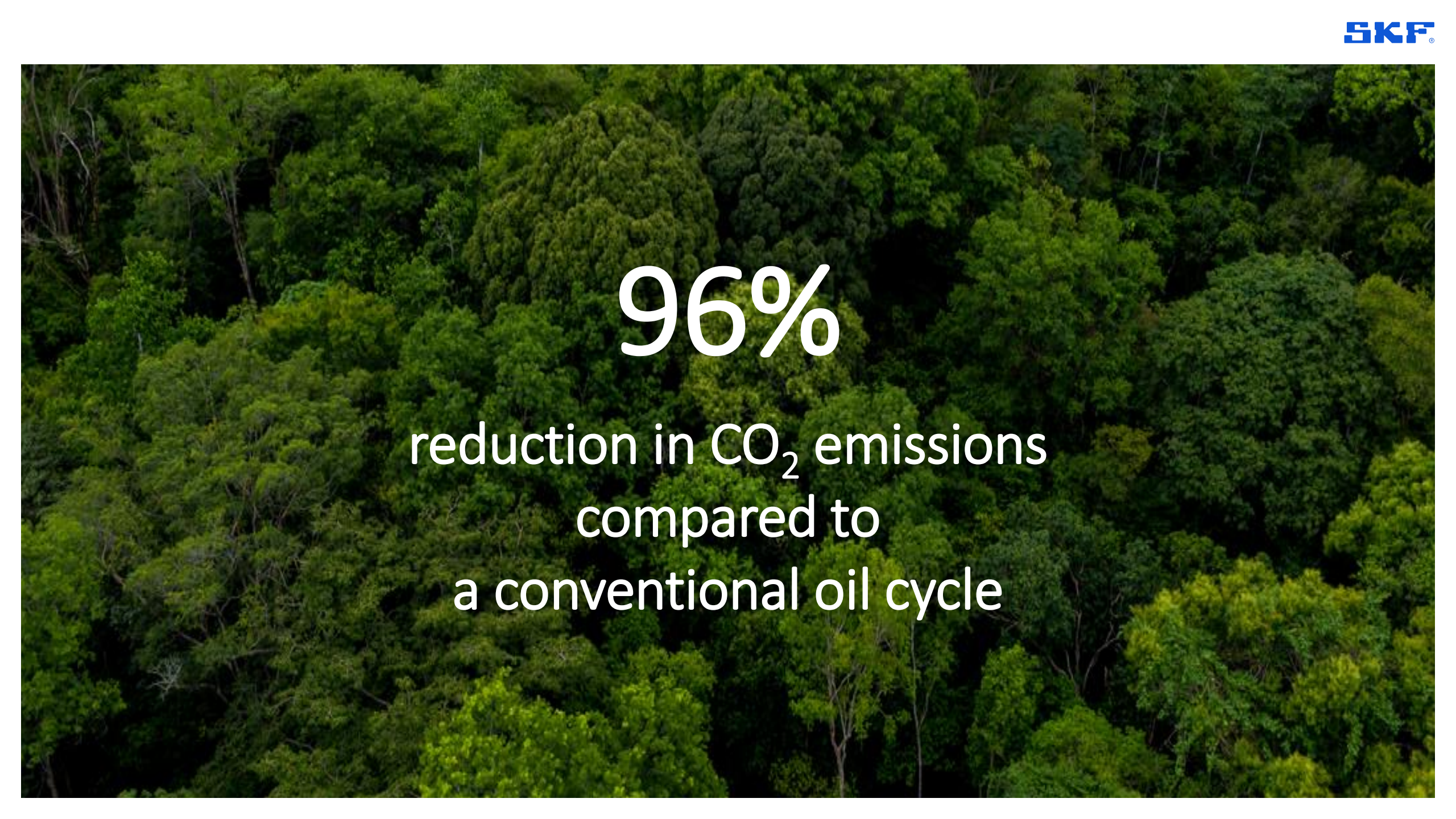
Sustainability
improvement



Total oil
cost reduction



Performance
improvement

An aerial photograph of a dense, lush green forest with many tall trees, serving as the background for the text.

96%

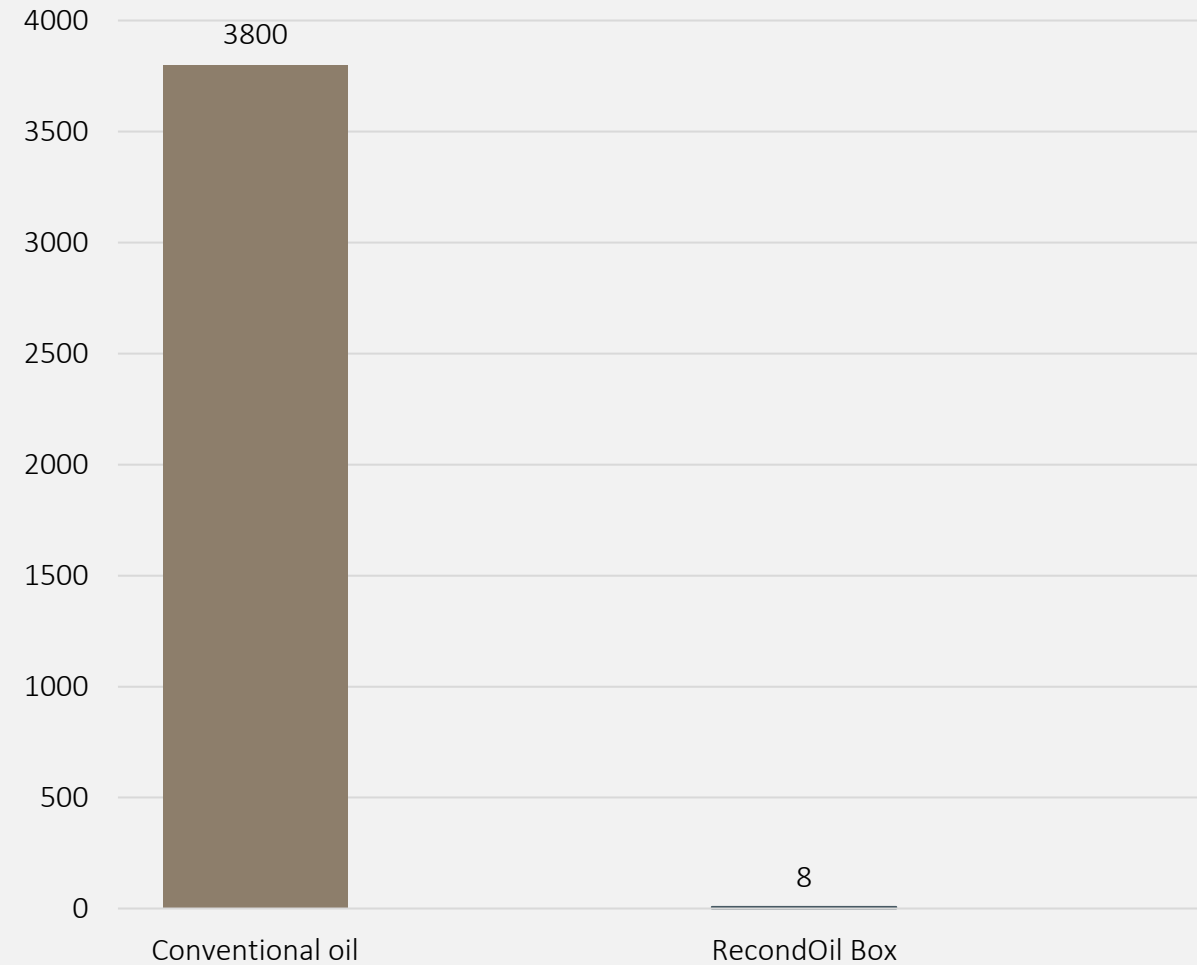
reduction in CO₂ emissions
compared to
a conventional oil cycle

Life cycle analysis: CO₂ footprint with a circular use of oil

A CIRCULAR
USE OF OIL
REDUCES CO₂
EMISSIONS BY
MORE THAN
96%.

Conventional oil
DST systems

kg CO₂-eq. per m³ industrial oil



We could get rid of
millions of tons of scrap.

Every year.



