



Biobase
Sweden

Changing Lubricant Landscape -Sustainability & Innovation

Per Wiklund, September 2022



Biobased Functional Fluids

- R&D
- Marketing
- Sales



Market Segments

- Construction
- Industry
- Lubricants



The perfect lubricant base oil

Does it exist? Has it ever existed?

- High VI
- Low pour point
- Excellent oxidation stability
- High solvency
- Hydrolytically stable
- Wide range of viscosities
- Low in polyaromatics
- High lubricity
- Low volatility
- Biodegradable & Biobased
- Globally available in large scale
- Cheap



Changing Market

- Technical context decides what is desirable properties
- Combustion engine lubes has been the major context for a long time
- Electrification brings change

CONTEXT
MATTERS



Changing Production Economics

- Lubes have always been riding piggy-back on fuels production
- When fuels go down cost of production of conventional lubes will go up
- Advantage on price and availability diminishes for conventional lubes
- Time Scale 5-10 years



Innovation

- There are extremely good sustainable alternatives already available today
- Expect more innovative products
- Recyclability will be King
- “Unconventional” solutions may come to dominate the future market



A photograph of a narrow cobblestone street in a European city, likely Stockholm, during the "golden hour" of sunset. The street is flanked by tall, colorful buildings in shades of yellow, orange, and red. A black bicycle is parked on the right side of the street, leaning against a metal fence. The sky is a mix of blue and orange. A faint, semi-transparent logo of a globe with a network of lines is visible in the upper left portion of the image.

Thank you!

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