

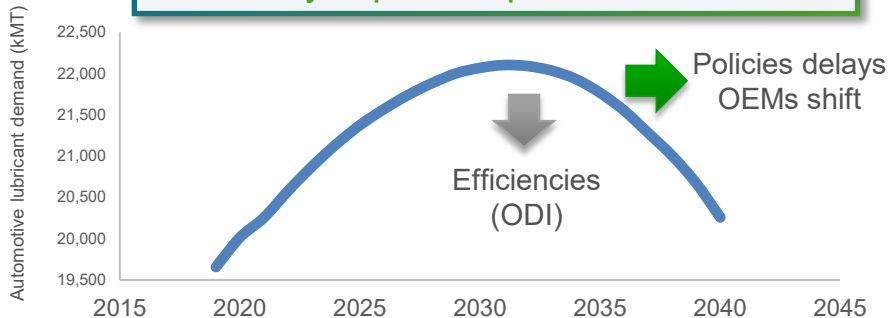
Value creation in the lubricants sector

Philippe Yannic
VP EMEA
Afton Chemical

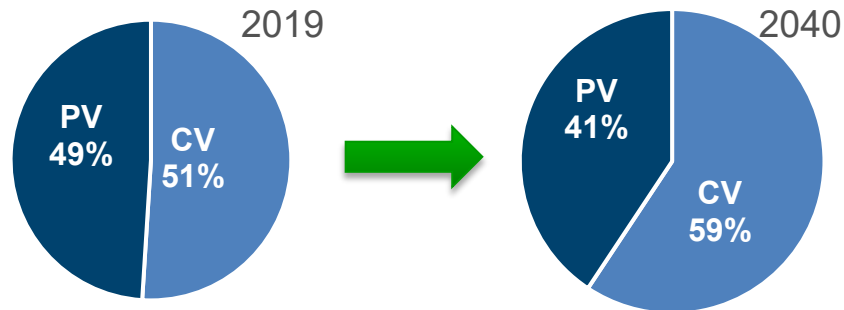
Passion for Solutions[®]

Landscape – key market changes to 2040

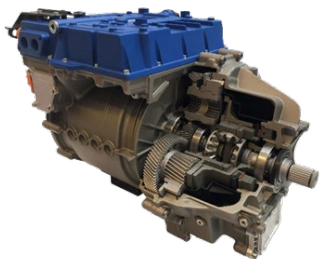
Efficiency impact >> policies on demand



Traditional to “e”
PV to CV transition ✓



eAxle additive demand = large “niche”



x 2

From West to East to North to South

50% to 39% of global demand (1.2%) CAGR

50% to 61% of global demand 0.9% CAGR

How additives keep things moving and the impact they have...



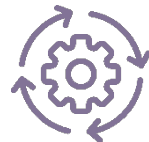
EMISSIONS REDUCTION

Enables new OEM hardware required to meet emission regulations



IMPROVE FUEL ECONOMY

Helps equipment / vehicles to run cleaner and more efficiently



EXTEND EQUIPMENT LIFE

Extend end users' equipment life, reduce downtime, increase lubricant life and increase productivity



ENHANCE PERFORMANCE

Deliver tangible performance to improve operator / driver experience



LOWER TOTAL COST OF OWNERSHIP

Help end users reduce their overall equipment and running costs whilst improving productivity



Customers



Society

Deliver emissions improvements beyond today's hardware

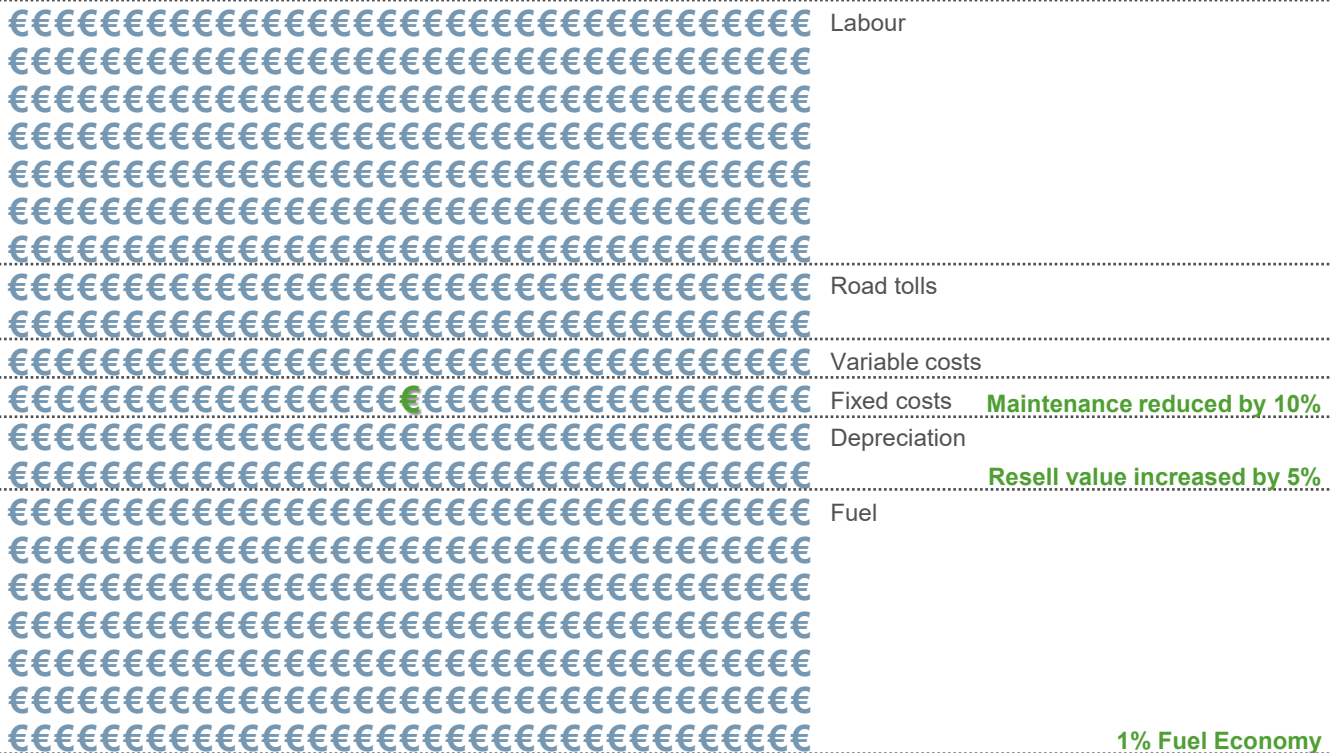
Lower emissions
= cleaner air
= lower consumption
= lower cost of goods

Less equipment produced
=
less waste and less energy needed to manufacture new equipment

Safety, economic productivity, and environmental and societal benefits that go above and beyond what industry demands

Less waste, less energy and less fuel consumed
=
better for the environment

HDEO contribution to reducing Total Cost of Ownership (TCO)



High quality HDEO can have significant impact beyond Fuel Economy & Maintenance

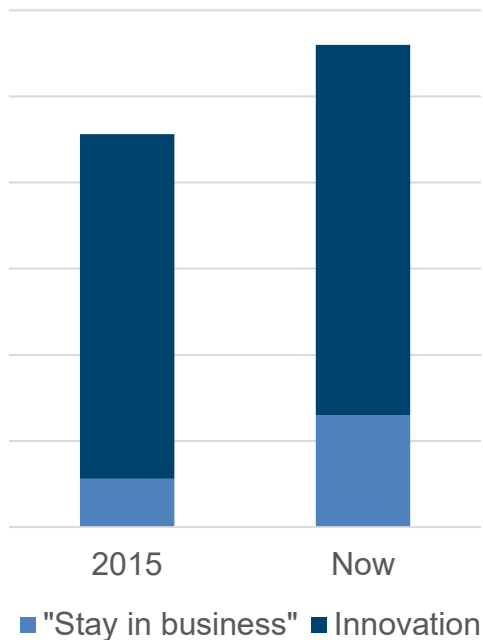
1000% ROI

€ Cost of HDEO

€ Potential saving from HDEO

Value = balance risks vs innovation opportunities

Afton R&D Activities



- Increasing investments just to “stay in business”
 - Increasing EHS constraints (molecules ban, legislation spread...)
 - Specifications updates for no added performances
 - Specifications proliferation
 - Global sourcing challenges...
- At no perceived value for end-users and consumers
- Industry MUST develop pragmatic approaches to management of changes

Goal: drive investments towards true innovation to create value for end-users and consumers

thank you