

Driving change in the lubricants industry: turning regulatory challenges into sustainable opportunities

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Today's session - what we will cover

01

ATIEL mission
and activities

02

The
regulatory
landscape

03

Action: from
challenges to
opportunities

01

ATIEL mission and activities

Introduction to ATIEL

- A non-for-profit association representing the combined knowledge and experience of leading European and international engine oil manufacturers and marketers
- ATIEL promotes consensus on key technical, product stewardship and sustainability issues
- Monitors current and future technical trends and regulatory programmes
- Acts as a focal point for technical issues relating to the performance and environmental demands of engine oils.



QUALITY

- Developing **guidelines** and **best practices** for formulation of engine lubricants
- Promoting **superior quality** products in the market
- Supporting auditable **Quality Management Systems**, carrying out **quality surveys** to assess levels of **quality compliance** in the marketplace
- Contributing to development of industry engine and laboratory **tests**.



PRODUCT SAFETY

- Developing **generic exposure scenarios** and guidance to assist lubricants companies to **comply with EU's REACH regulation**
- Developing **common practices** on health, safety and environmental issues

SUSTAINABILITY

- **Carbon Footprint** and renewable carbon content
- **LCA** greenhouse gas accounting methodology
- **Recyclability- RRBS** (re-refined base stock)
- **In use benefits**

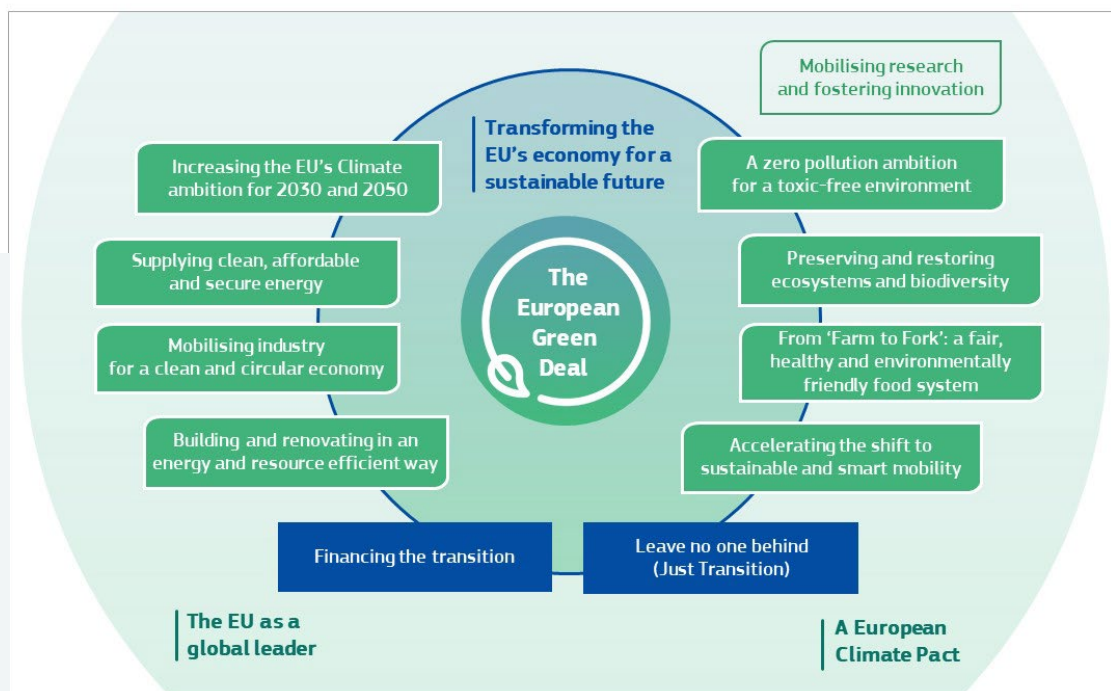
02

The regulatory landscape

A turning point for the industry

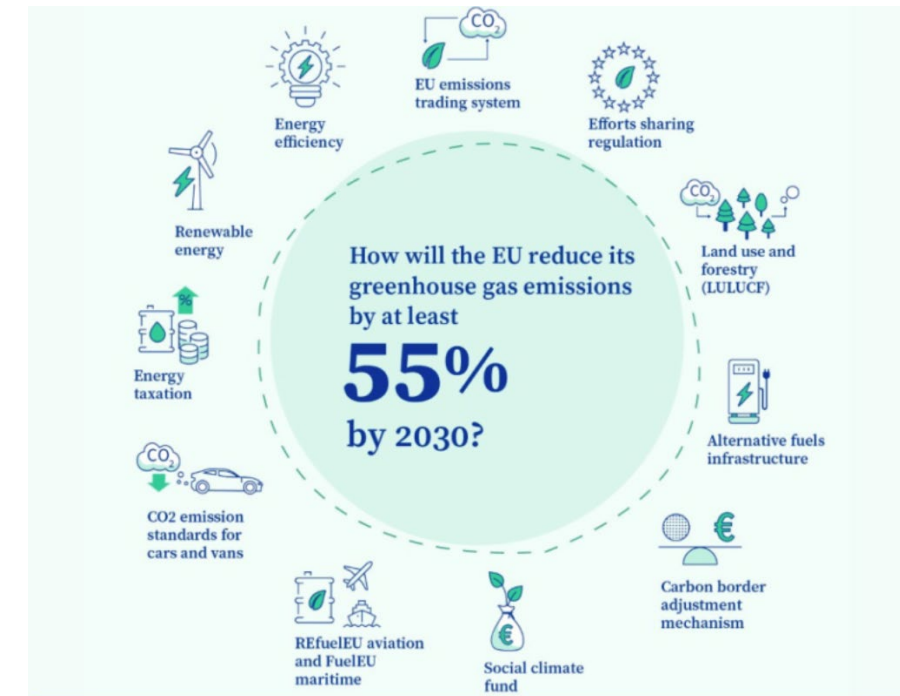
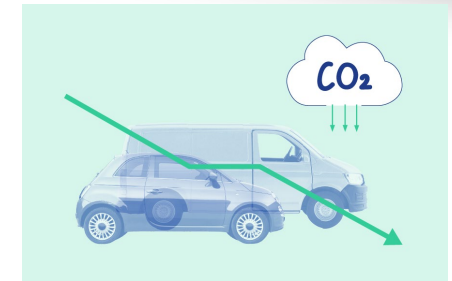


Complexity and ambition



Decarbonizing road transport

- Average CO₂ emissions from new cars/vans and lorries reduction...
- EC legislation on CO₂ emissions from HD (-90 % emissions by 1 Jan 2040)
- EURO 7 standard
- ICE ban for new cars and vans from 2035 (....)
- Greening Freight Transport proposal, Greening Corporate Fleets..





- EU REACH
- EU CLP
- PFAS
- SDPA
- Eco-design for sustainable products (ESPR)
- Safe and sustainable by design (SSbD)



- ❖ Carbon border adjustment (CBAM)
- ❖ Corporate Sustainability Reporting Directive (CSRD)
- ❖ Green Claims Directive



03

Action: from challenges to opportunities

Engine Oil Specifications **driven by Emission Legislation**

Initially focus on SO₂, NO_x and PM emission reduction

Now more focus on CO₂ Emission Reduction

Evolution main Viscosity Grades

15W-40

10W-40

5W-30

0W-20

Implications for base oil requirements

Group I

Group I
Group II
Group III

Mainly
Group III

Group III/III+
Group IV

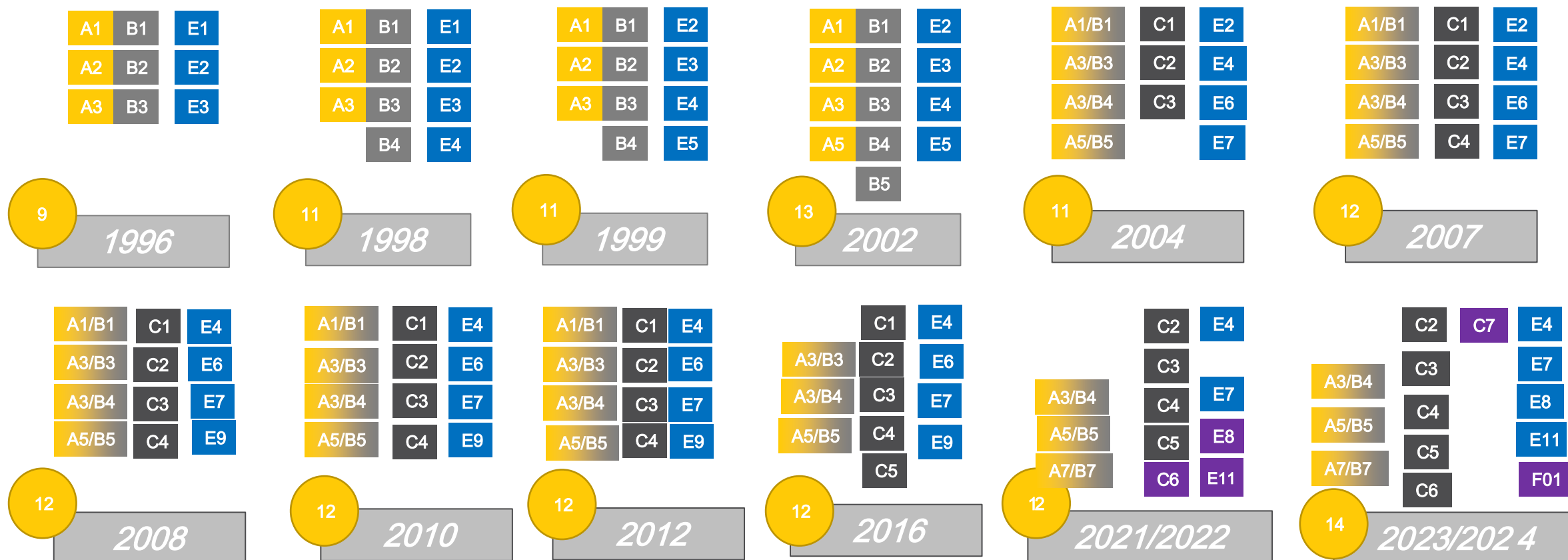
Increased use of Group II and III base oils in Light and Heavy Duty

- Very limited BOI (Base Oil Interchange) guidelines for Group II and III
- Current guidelines focused around Group I base stocks

Interchange Guidelines did not hold pace with specification evolution

The Complexity Challenge

From 9 to **14** categories



Effective Navigation

- Proactive approach
- Compliance
- Optimization
- Adaptation

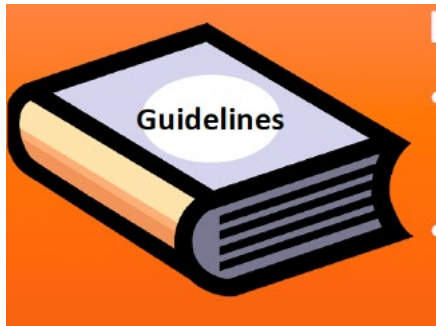


The industry response

Work in AAA (ACEA ATIEL ATC)- ATIEL ILC Committee- HD and LD groups

- existing and emerging technical issues and trends impacting engine design and use their potential effects on lubricant performance and formulation.
- development of specifications that lead to fit-for-purpose lubricants

ATIEL is a stakeholder member of the European Coordinated Council for the development of performance test fuels, lubricants and other fluids (CEC).



ATIEL Interchange Guidelines help to manage increasing complexity. They help reduce the number of engine tests needed to validate the use of alternative base stocks and viscosity grades when formulating engine oils meeting the latest performance specifications set out by the ACEA Sequences.

The ATIEL Code of Practice

For Developers, Marketers and Manufacturers
of Engine Lubricants Meeting the Requirements
of the ACEA Oil Sequences



EELQMS
EUROPEAN ENGINE
LUBRICANTS QUALITY
MANAGEMENT SYSTEM

Product Carbon Footprint for Lubricants – Why?

WHY do we need a lubricants sector specific standard methodology?

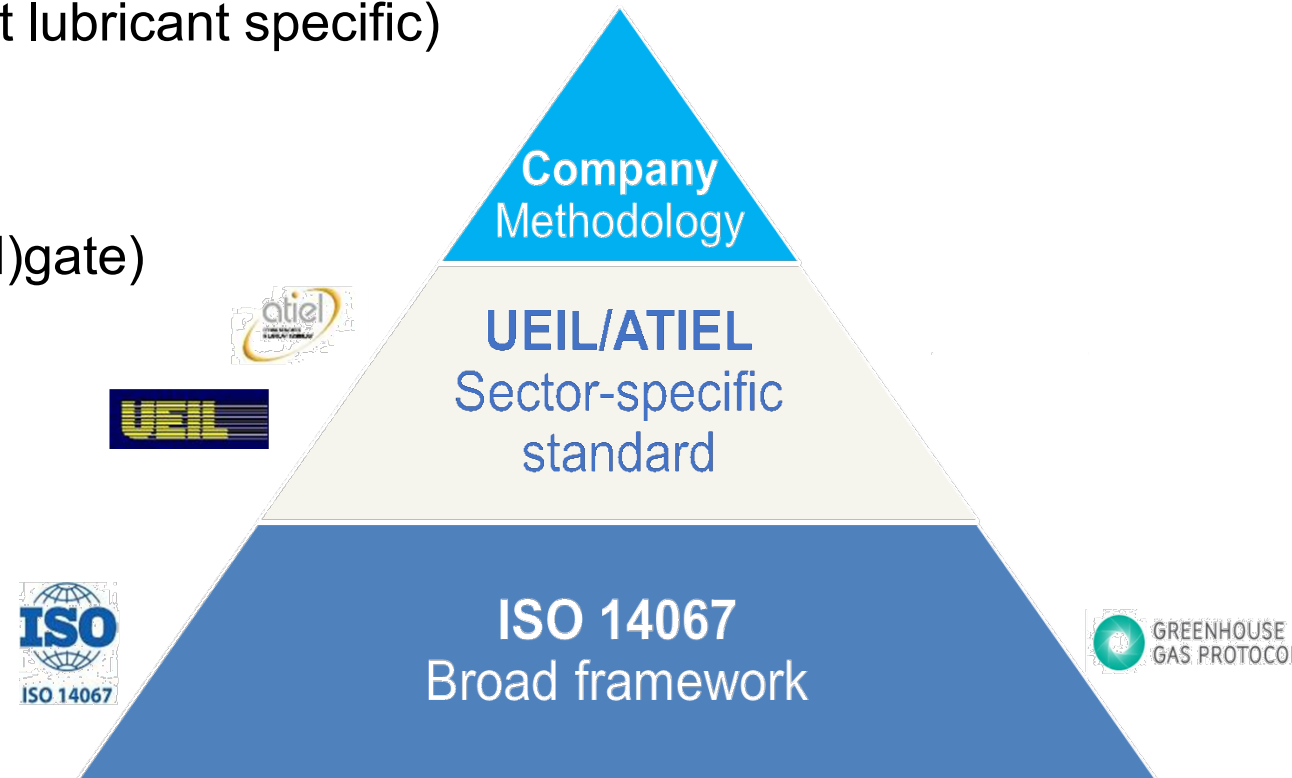
- ISO 14067 only provides broad framework (not lubricant specific)
- Transparency of PCF Calculation

WHAT does it describe?

- Scope of PCF calculation (cradle-to-(outbound)gate)
- System boundaries for PCF calculation
- How the PCF should be calculated
- How the PCF should be reported

HOW does it help the lubricants industry?

- **Transparency** → 3rd party reviewed
- **Harmonization** → **ONE** methodology
- **Pressure** on stakeholders → **ONE** voice



(2023)

- Harmonised approach to calculating PCFs across the lubricants, greases and specialties sectors



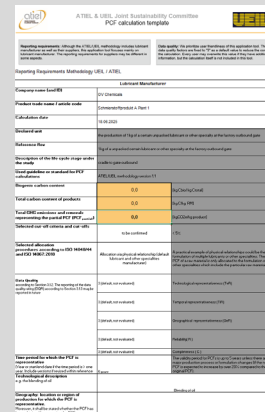
Certified Calculation
Method
Regular
Surveillance

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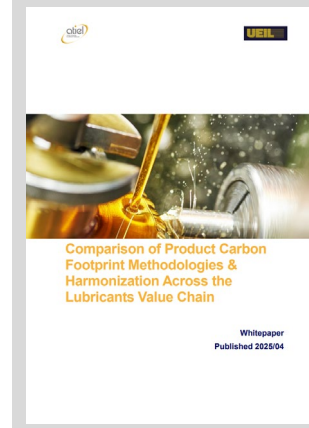


- Practical guide of how lubricant manufacturers can start assessing their product-related emissions



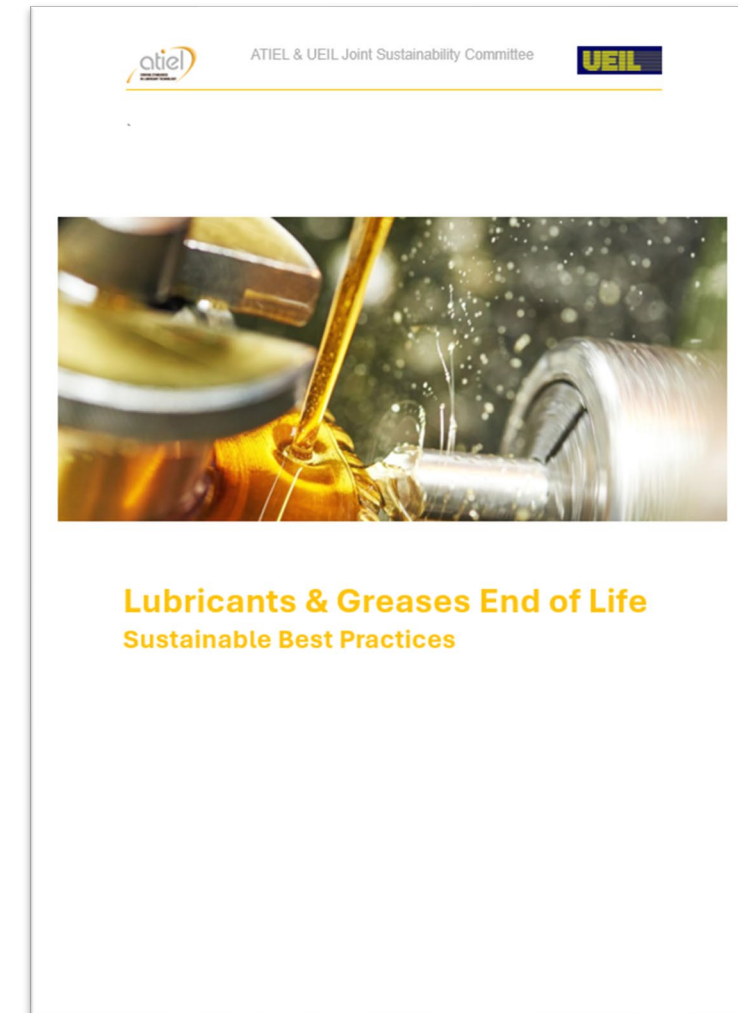
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- Detailed comparison of PCF-Methdologies for the Lubricant Industry aiming for harmonisation (Catena X, TfS, ...)



Circularity

- New JSC **Circular Materials** Working group
- **End-of-Life** white paper published
 - Objective: to provide ATIEL and UEIL members with practical guidance and best practices to enhance lubricant end-of-life management and promote circularity within the lubricants industry.
- *..A lot in the pipeline (stay tuned!)*



Lubricant HSE and regulatory compliance: industry work

EU CLP



- ATIEL actively participate in the **Partner Expert Group (PEG)** working on the EU CLP guidance for labelling
- Engage with EC representative on examples of practical implementation challenges of label format changes
- work with **DUCC Platform, UEIL..**

EU REACH



- GCC (Global Chemical Compliance)*** with **ACEA** and **ATC** **improve the communication in our supply chain**
- REACH revision: work with DUCC, UEIL..

EU ESPR



ATIEL member of the **Ecodesign Forum**.

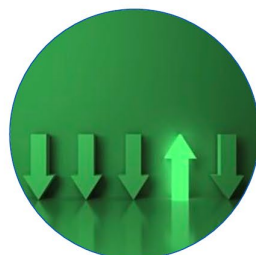
- Lubricants excluded from the 1st work plan and considered again in the drafting of the 2nd work plan-mid term review
- ESPR TF ATIEL-UEIL**



ESPR



Broad scope
Moving beyond energy-related products to a **wide product scope**



New sustainability & ecodesign aspects
e.g. **performance requirements** - durability, CO₂ footprint, recycled content



Horizontal measures
Common ecodesign requirements for products with similarities



Strong focus on product information
Digital Product Passport, labels & information requirements



CountEmissionsEU



EU CLP“Stop the Clock” - signed off by EU Council on 17 November 2025



➤ Planning compliance



Engagement at all stages of the legislative process: *from the early stages of policy formulation.....*

1. Monitor policy developments
2. Engage with policy makers - Establish communication with regulatory authorities to provide technical input → ensure sustainability goes hand in hand with performance
3. Response to be based on sound science and apply full LCA where appropriate; take a global-not just a regional- view of supply and demand balances; be **technologically neutral** and performance driven

...to adoption.

1. Compliance Assessment
2. Reaching out to authorities for harmonized interpretation and compliance
3. Testing
4. Upgrades
5. Training and Education
6. Monitoring and Reporting
7. Performance Optimization
8. Culture of continuous improvement in lubrication practices

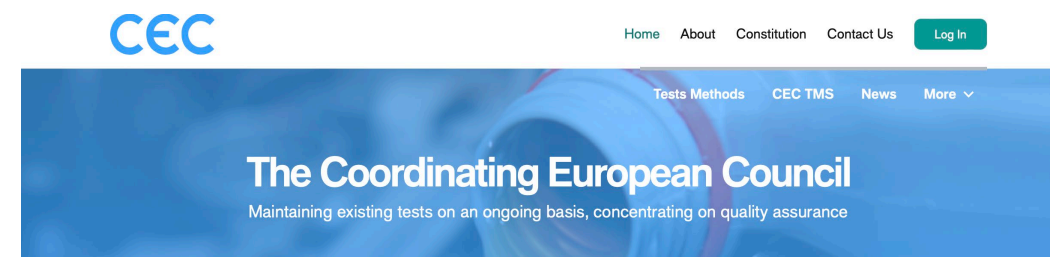
Opportunities

1. Drive the process
2. Encouraging innovation
3. Green Transportation
4. Specialized Lubricants
5. Growth and jobs
6. Circular economy.

Summary

1. Lubricants industry is in a **dynamic period...**
2. We have to continuously **adapt and innovate**
3. **Complex and ambitious regulatory framework** emerging, EU Green Deal means we are in for a long period of activity to become **ever-more sustainable and transparent** as an industry
4. We have the technical expertise to **advise** the regulators → “**deciding together to decide better**”
5. Continued **collaboration** within the entire lubricants value chain and other relevant stakeholders is key
6. A **proactive approach** is key to effectively navigate.
7. **The industry is providing solutions to the green transition....**

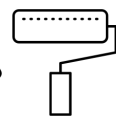
.....together.



A.I.S.E.



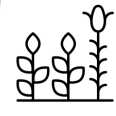
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CEPE



Cosmetics
Europe



CropLife
Europe



EFCC



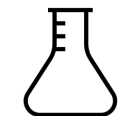
FEA



FECC



FEICA



I&P Europe



IFRA



cefic

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