



Union of the  
**EUROPEAN LUBRICANTS INDUSTRY**

Union Européenne de l'Industrie des Lubrifiants



# **Journey of the UEIL Sustainability Committee**

**June 2<sup>nd</sup> 2023**

**2023 UEIL Annual Congress**



**[WWW.UEIL.ORG](http://WWW.UEIL.ORG)**

# Agenda

## Journey of the UEIL Sustainability Committee

- Why and how it all started
- Changing Regulatory and Customer Landscape
- UEIL Sustainability Committee and Working Groups
- Corporate Carbon Footprint
- Product Carbon Footprint
- Summary



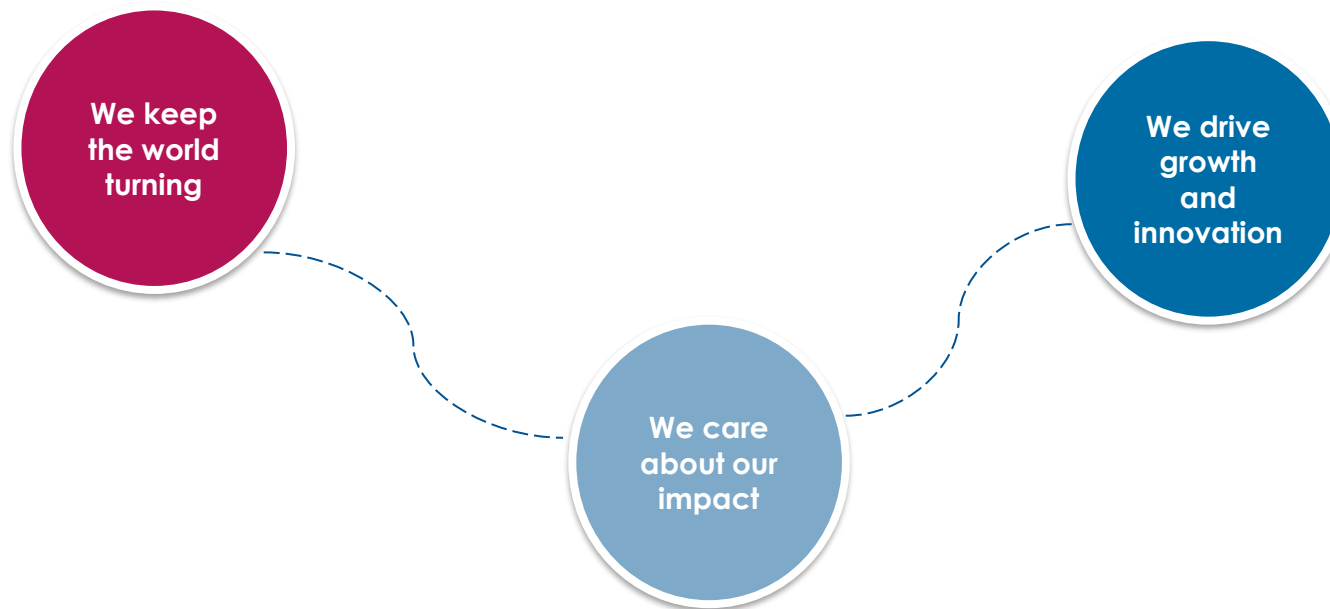
markus.garb@fuchs.com

<https://www.ueil.org/sustainability/>

# The lubricants industry

is a valuable asset to society and economy in Europe and beyond...

*Lubricants created by innovative businesses enabling the use of safe, resource saving technologies and processes which reduce the burden on the planet, local environments and benefit people and society.*



<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE 	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
<b>13</b> CLIMATE ACTION 	Take urgent action to combat climate change and its impacts
<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION 	Ensure sustainable consumption and production patterns
<b>17</b> PARTNERSHIPS FOR THE GOALS 	Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

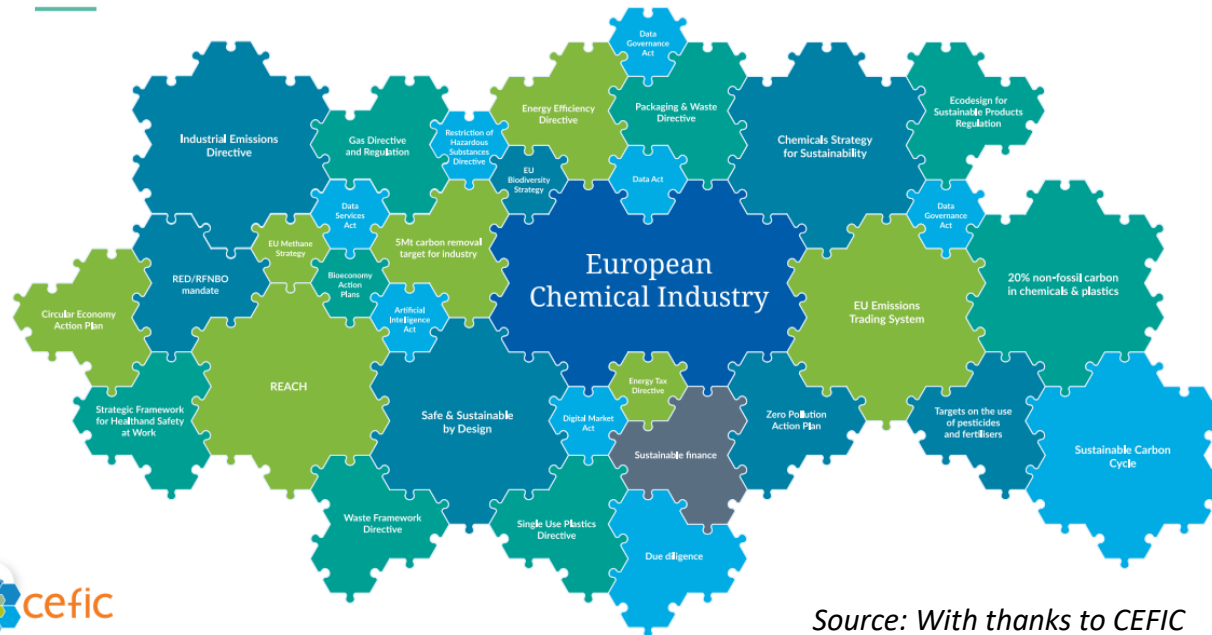
**Problem: we know – but who else knows?**

→ *Founding of the UEIL Sustainability Task Force in 2019 – inclusive to the wider industry and associations*

# Changing Regulatory and Customer Landscape

Growing customer and market needs for sustainable solutions

The Transition Pathway aims to put together all the pieces of the EU regulatory agenda



Source: With thanks to CEFIC



## Increasing legislative requirements

- EU Green Deal (2019-2020)
  - Chemicals Strategy for Sustainability
  - Sustainable Product Initiative / Ecodesign for Sustainable Product Regulation
  - Safe and Sustainable by Design
  - Green Claims Directive
  - Transition to Circular Economy
- REACH revision and other global chemical regulations
- Global emission reduction climate targets

## Customers setting sustainability targets

- Pushing demand for sustainable and innovative solutions
- Supply chain transparency and certification

## Conscious consumers

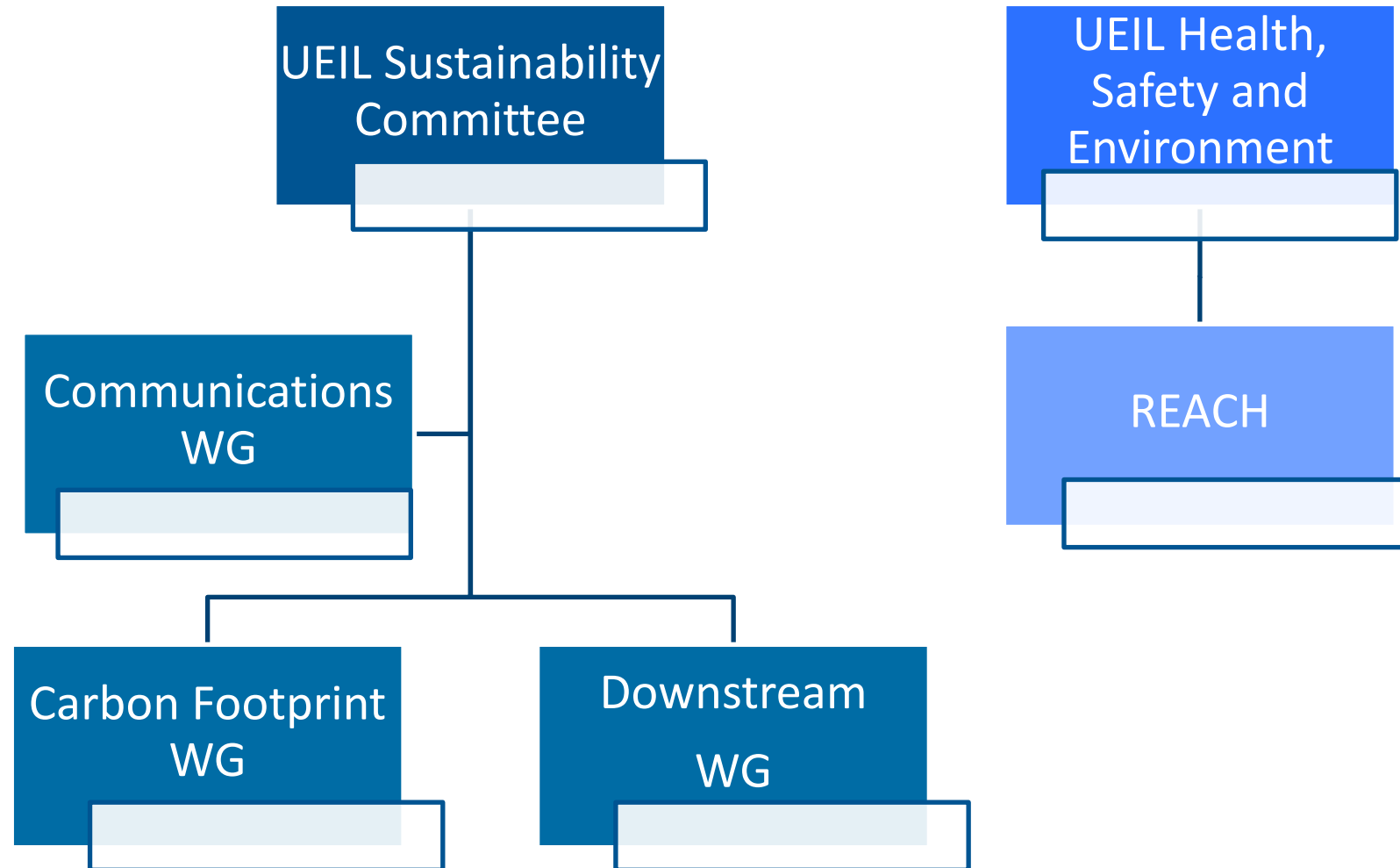
- Growing population that consciously wants to purchase sustainable products

**Problem: too much to solve for a single lube manufacturer**

→ Permanent UEIL Sustainability Committee since 2020

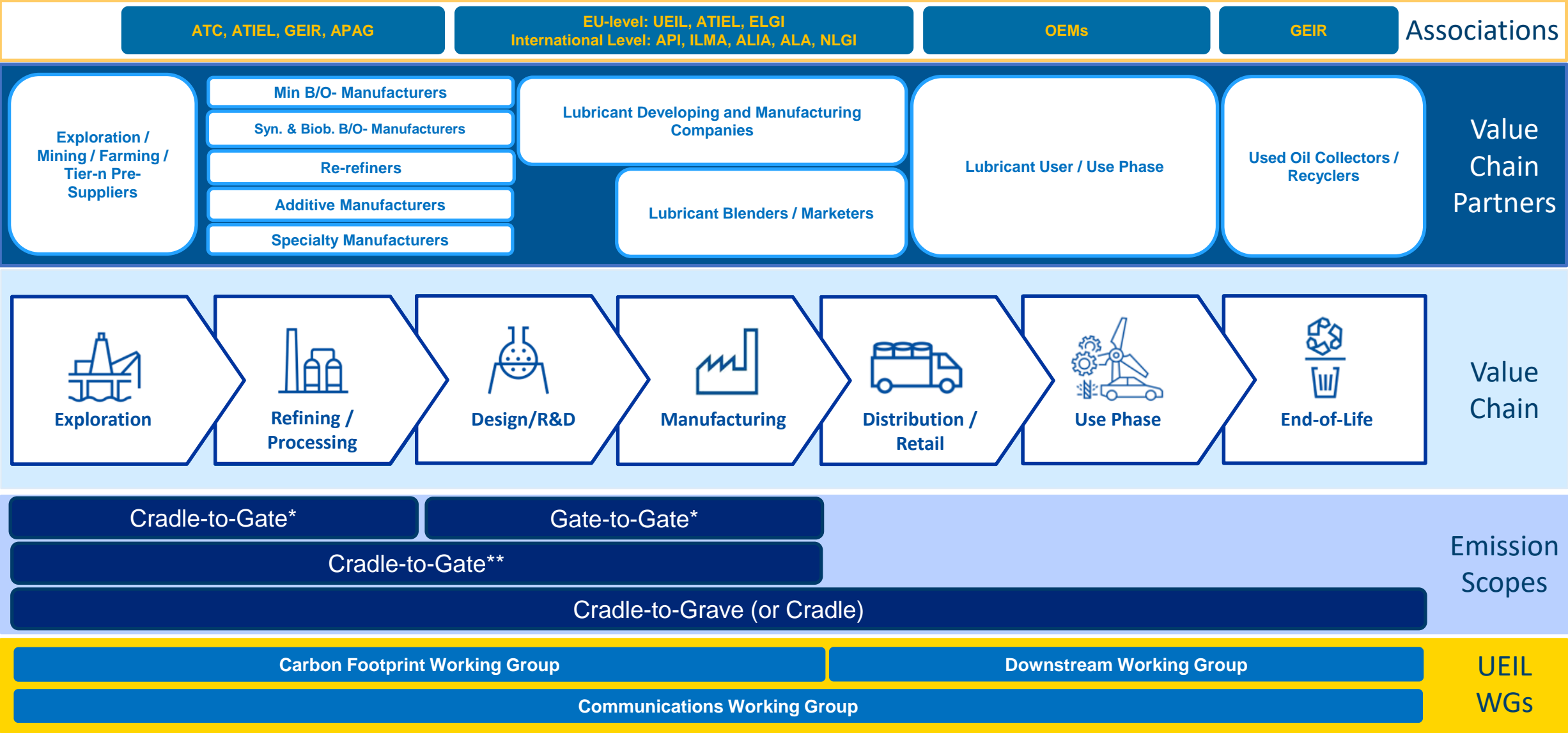
# Addressing the Changing Regulatory Environment

UEIL SC (future organization) + UEIL HSE Working in Partnership



# Carbon Footprint Scopes in the Lubricant Industry

Partnering with the complete value chain



\* Gate-to-Gate scope includes GHG-Protocol Scope 1, 2 & selected Scope 3-emissions (Water, Waste, Business Travel, Commuting) for all units/companies in a lubricant company  
\*\* Cradle-to-Gate scope includes Gate-to-Gate Scope PLUS purchased raw materials, goods, packaging etc.

# Corporate Carbon Footprint

or

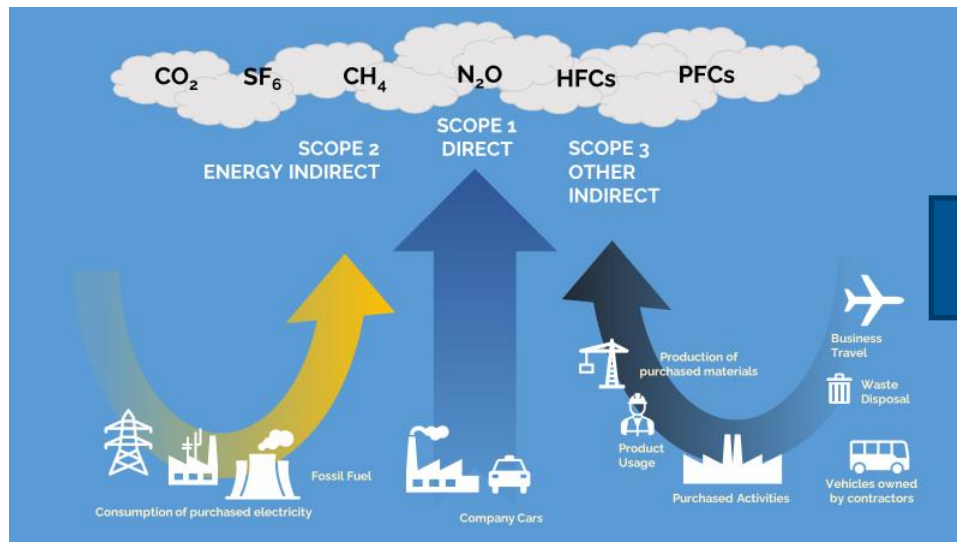
How do companies or organizations influence  
climate change?

# Corporate Carbon Footprint – Greenhouse Gas Protocol

- Corporate Carbon Footprint is the sum of all emissions associated with an organisation
- Raw materials' emissions can typically account for 70 – 90% of an organisations corporate carbon footprint (GHG Sc. 3.1)

- Greenhous Gas Protocol defines emission scopes

Scope 1 (Direct emissions from owned or controlled sources)	Scope 2 (Energy indirect emissions from the generation of purchased energy consumed)	Scope 3 (Other Indirect)
Fuel combustion Heat Generation Company vehicles Fugitive emissions	Purchased electricity, heat, steam and cooling	<b>3.1 Purchased goods and services</b> 3.2 Capital Goods ... 3.4/9 Transportation & distribution (up- and downstream) 3.5 Waste disposal 3.6 Business Travel ... 3.11 Use of sold products 3.12 End of Life Treatment ...



Source: Carbon Trust



# Corporate Carbon Footprint Toolbox

Fictitious Company CO2e value spreadsheet - Reporting &amp; Reducing sheet

9. Reporting period 2021

[illegible]

Grand total CO2e emissions 11.925 tonnes CO2e

[https://www.ueil.org/wp-content/uploads/2022/12/2022-05-24\\_UEIL\\_Company-CO2e-value-spreadsheet-Live-version1.05-mod-ME-2022-10-0522.xlsx](https://www.ueil.org/wp-content/uploads/2022/12/2022-05-24_UEIL_Company-CO2e-value-spreadsheet-Live-version1.05-mod-ME-2022-10-0522.xlsx)



**Developed by Production & Logistics Working Group:**

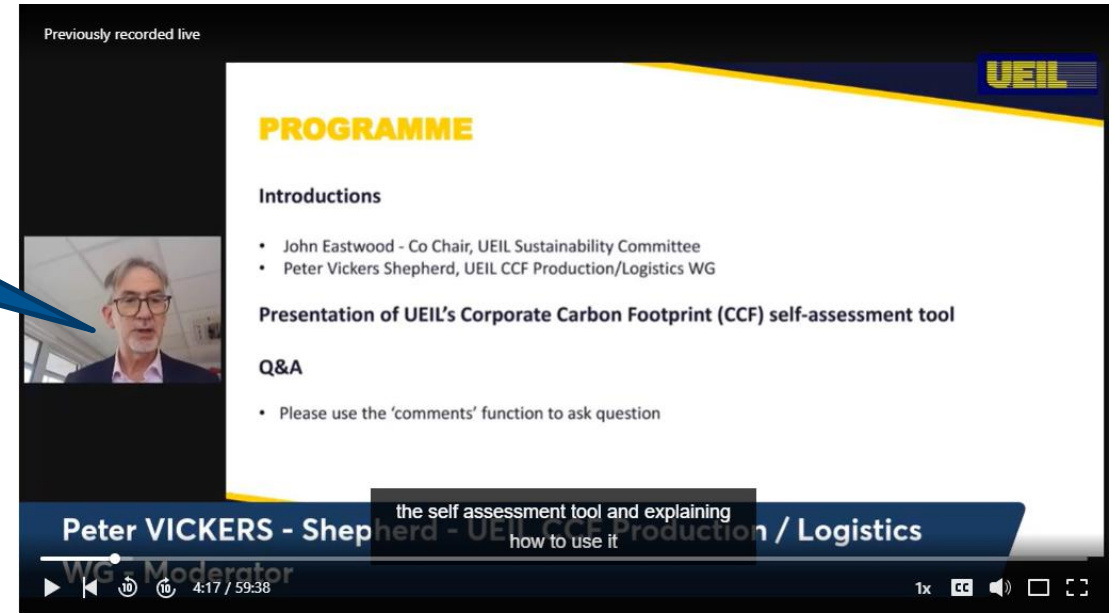
- Freely available xls-based tool
- Target is to give guidance on how to get started and identify
  - Which data to record
  - Which emission sources to focus on
- Tool is NOT meant to replace professional counsel or emission accounting!

# Corporate Carbon Footprint Toolbox – Live Presentation Oct. 2022

*'Only by understanding where carbon emissions come from can lubricant blenders put in place a well-defined strategy, identify key performance indicators and take action to reduce their overall carbon footprint.'*

## Toolbox contains:

- **Guidance notes** to explain what data you need and where to find it
- A **“fictitious company”** to use as an **example** and guide, to help you think about your own emissions
- A **spreadsheet** with clear places to enter your data
- **Formulae** to automatically calculate your Scope 1, 2 and 3 emissions from your data



Introduction to the Corporate Carbon Footprint self-assessment tool

Event by UEIL (Union of the European Lubricants Industry)

Tue, Oct 4, 2022, 1:00 PM (your local time)

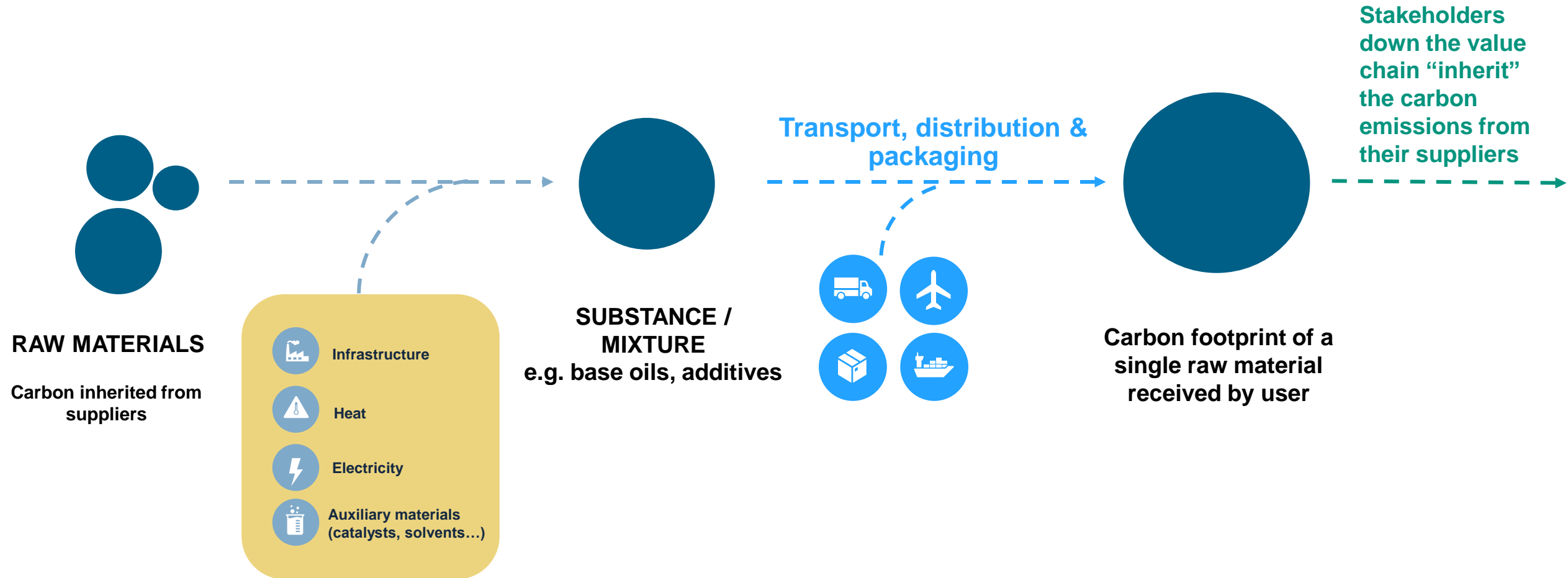
<https://www.linkedin.com/video/event/urn:li:ugcPost:6976523372180480000/>

# Product Carbon Footprint

or

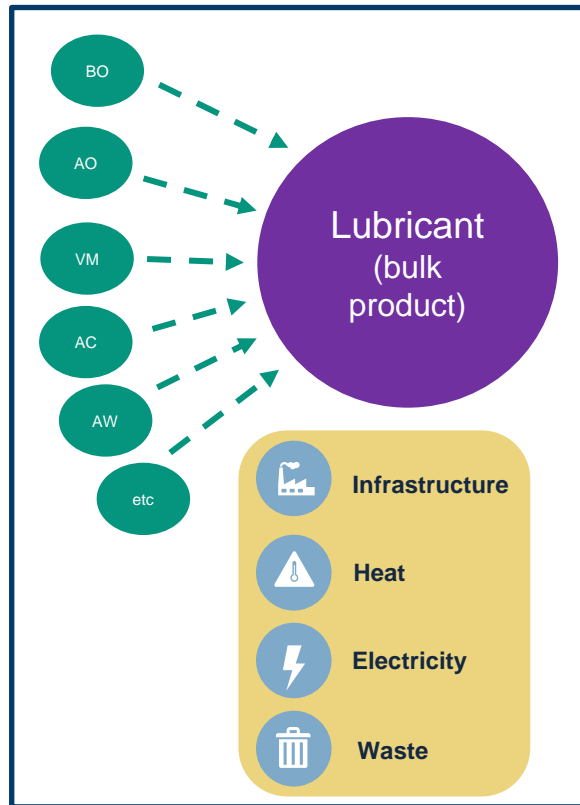
## How do products influence climate change?

# Visualising Carbon Footprint of a 'Substance/Mixture' - Upstream

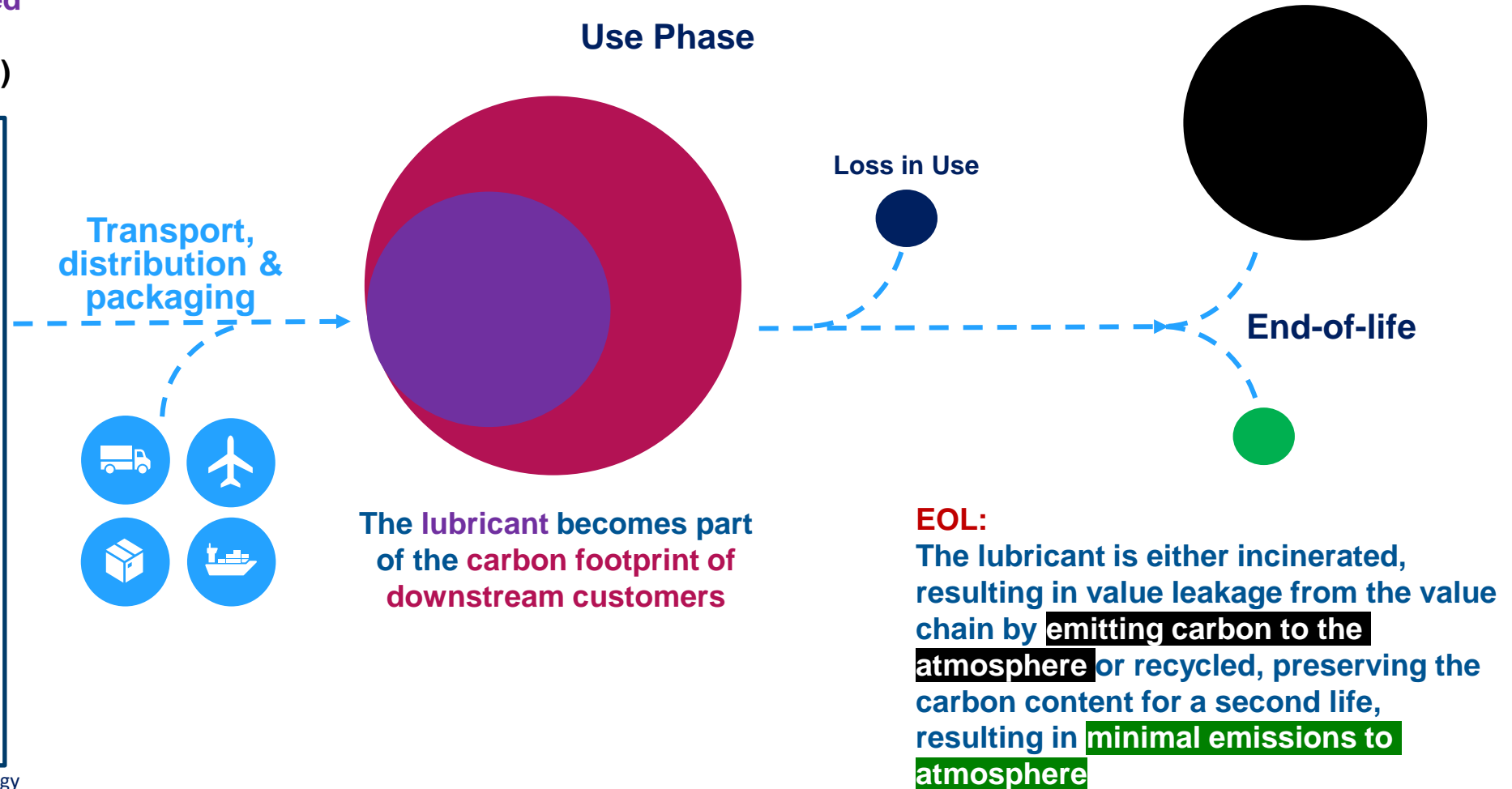


# Visualising Carbon Footprint of a 'Lubricant' - Downstream

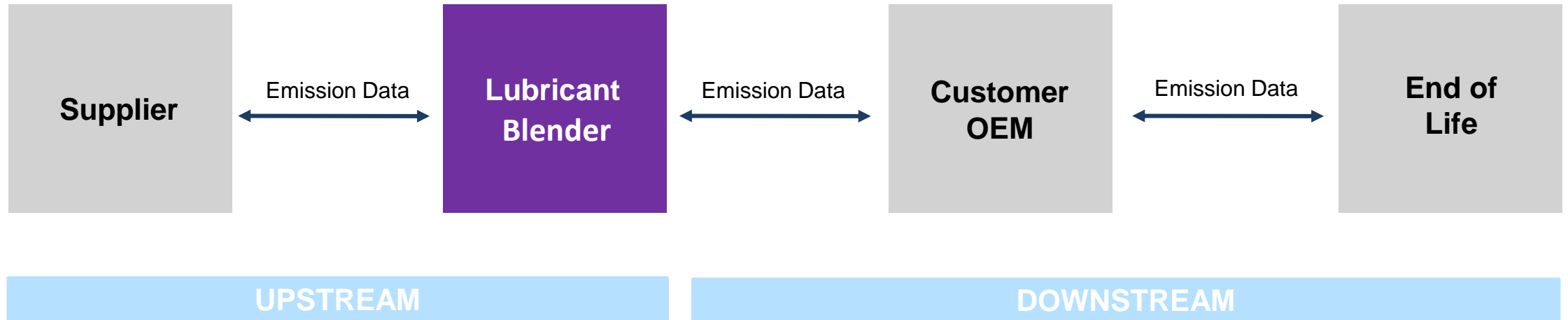
Carbon footprint of a **compounded lubricant or grease, unpacked**  
(base oils+additives+processing)



Scope for UEIL/ATIEL-PCF-Methodology



# Target: Transparency and Traceability along the value chain



- **Transparency cannot be a one-way-street!**
- **ISO 14067 is not precise enough** to be able to assure compatibility of PCF-calculations in a specific sector like the lubricants industry
- Therefore there is a **need for harmonization and clear definition how to calculate the PCF for lubricants**

# Product Carbon Footprint for Lubricants

## Together for Sustainability

- Chemical Industry

**Document:** [The PCF Guideline for the Chemical Industry](#)

**Published:** November 2022

### Scope:

- Methodology
- Product Carbon Footprint
- **Cradle-to-Gate** (suppliers exit gate)



### Under Review by:

- Fuel Additive and Lubricant Additives  
→ ATC
- Oleochemical and Allied Products industry  
→ APAG

[MoU between TfS and Catenax](#)  
[Catenax Vision-goals](#)

## UEIL/ATIEL

- Lubricants Industry

**Document:** [draft]

**To be Published:** 2. HY 2023

### Scope:

- Methodology
- PCF for Lubricants (incl. Greases) and other specialities
- **Cradle-to-Gate** (lube manufacturers exit gate)

### Status:

- Work in progress
- Addresses EU requirements
- Target: harmonise with existing methodologies (TfS/API)



## American Petroleum Institute

- Oil & Gas Industry

**Document:** API 1533

**Published:** 2nd May 2023

### Scope:

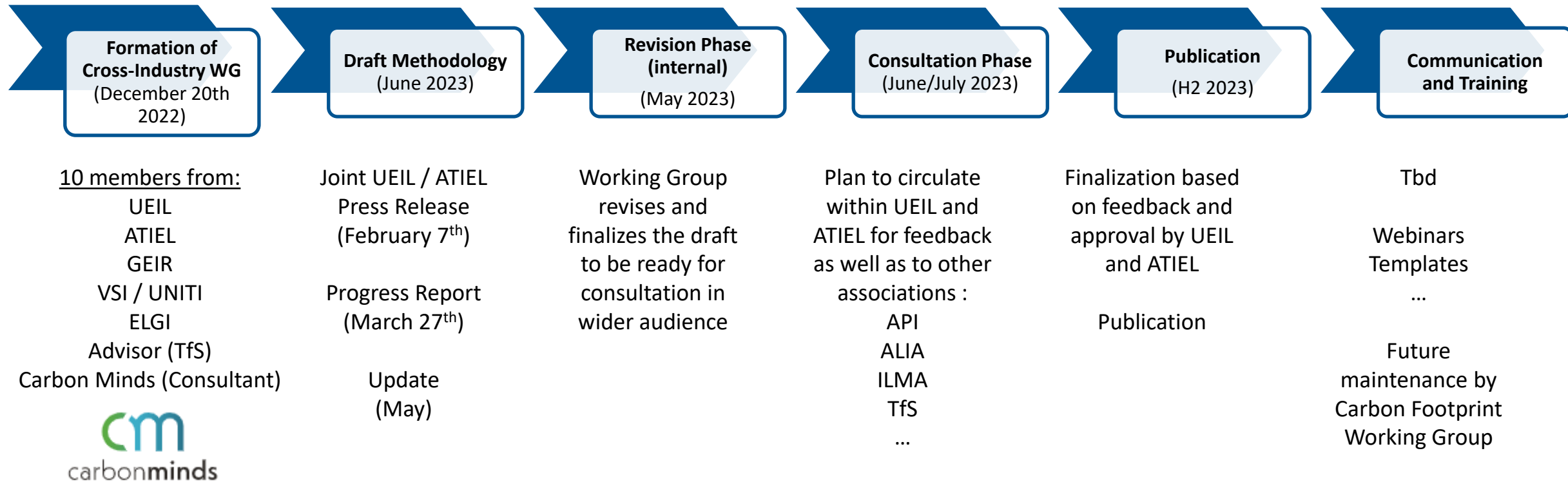
- Technical Guidance Document
- PCF / LCA
- **Cradle-to-Grave/EoL**

International ballot phase concluded in February 2023



# UEIL / ATIEL PCF for Lubricants Timeline

## Cradle-to-Gate (lubricant / grease / speciality manufacturers exit gate)





# Conclusion PCF for Lubricants

- **ISO 14067** is not precise enough to be able to assure compatibility of PCF-calculations in a specific sector like the lubricants industry
- There is a **need for harmonization** and clear definition how to calculate the PCF for lubricants
- The Chemical industry has already started (TfS) and API has published a Technical Report; together we strive for a **PCF-methodology for lubricants which is compatible**, but narrowing options down as needed for lubricants
- The UEIL/ATIEL-methodology development has achieved an intermediate goal with methodology **publication expected for 2<sup>nd</sup> half of 2023**

Contents	
1	Terms and Abbreviations .....
2	Intention of methodology document .....
3	Goal and scope definition for PCF calculation .....
3.1	Goal for PCF calculation .....
3.2	Scope for PCF calculation .....
3.2.1	Declared unit and reference flow .....
3.2.2	Product system .....
3.2.3	System boundary.....
4	Life Cycle Inventory for PCF calculation .....
4.1	Data requirements.....
4.1.1	Data collection principles.....
4.1.2	Data quality requirements .....
4.1.3	The data quality rating (DQR) .....
4.2	Cut-offs .....
4.3	Allocation .....
4.4	Modeling of waste, wastewater, and recycling .....
4.4.1	Waste and waste treatment .....
4.4.2	Recycling .....
5	Life Cycle Impact Assessment for PCF calculation .....
6	Sensitivity analysis, quality checks, and interpretation..
7	Reporting requirements .....
7.1	Additional reporting requirements for suppliers .....
8	Sources and valid documents .....

Sneak Preview: Table of Contents

# Summary

- Lubricants industry is in a dynamic period regarding sustainability
  - Consumer and Customer pull for more **'sustainable' products**
  - Regulatory push
- Sustainability journey will not stop at carbon footprint
  - **Selecting products only by PCF will NOT be necessarily sustainable!**
- EU Green Deal means we are in for a long period of activity to become ever-more sustainable and transparent as an industry
- Continued collaboration within the entire lubricants value chain is fundamental to becoming more 'sustainable'
  - PCF-Task Force shows that **collaboration between associations adds value: 1+1=3**
- The **Lubricant industry is in a unique position:**
  - We provide solutions that drive **improvements in energy efficiency** and support the trend towards renewable energy, and we will **enable the transition to net-zero carbon emissions**
  - But we also recognise that we **must continually adapt and innovate**, and increasingly move towards a larger **circular economy**





Union of the European Lubricants Industry

THANK YOU!

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