# LubAnac city

What is the **Lub Ana**lysis **c**ompared system of TotalEnergies?

**LubAnac** is a preventive maintenance tool and a fleet management system based on used oils analyses ensuring a **significant reduction of the TCO** of the customer by:

- · Preventing possible breakdowns,
- Following regularly the condition of the lubricant and the wear of the mechanical components,
- Reinforcing the lifetime and the reliability of the machines,
- Optimizing the drain intervals in a safe way.

Our professional customers are active in the automotive (on-road or off-road), industrial and marine (Inland and international) sectors. LubAnac diagnosis service is sold worldwide by TotalEnergies affiliates to end-users.

# LubAnac is a specialist of **CITY**

How does LubAnac generate the diagnosis and propose corrective actions?

The diagnosis and the corrective actions are generated by LubAnac city system based on:

- 40 years of experience and enrichment of the database LubAnac city, more than 7 million analysis on 1 million monitored components,
- Customer feedbacks on successful corrective actions,
- A comparison between the measured values and the wear references thanks to algorithms excluding variable parameters such as oil top-ups or drain intervals.



With our production, supply chain and commercial presence in more than 160 countries, we deliver a full range of lubricants.

## **Support**and partnership

Thanks to local technical presence, we provide a high level of service to optimize your Total Cost of Ownership.

#### References & OEMs

TotalEnergies Lubrifiants cooperates with equipment manufacturers to create high-technology products for optimal performance and production of your machinery.

good reasons for choosing TotalEnergies Lubrifiants

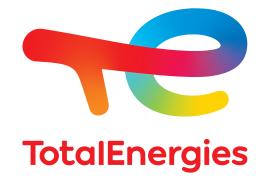
## Innovation & Research

TotalEnergies Lubrifiants invests in biotechnologies to find the most suitable components to reach energy efficiency through formulations designed in our Research Centers.



#### **Quality and environment**

TotalEnergies Lubrifiants ISO 9001 and 14001 certifications are the guarantee of a long term commitment to quality and environment. From the initial design stage, our R&D teams seek to develop products that minimize toxicity risks and environmental impact.





lubricants.totalenergies.com/business/oil-diagnosis-lubanac

# LubAnac city

# Let your oil do the talking

Preventive maintenance tool and fleet management system:

☑ Reduce the Total Cost of Ownership (TCO)

☑ Optimize reliability and performance



# LubAnac



**Reduces downtime** of your fleet.

Prevention of possible mechanical breakdowns.



Increases the lifetime of your vehicles.

Decrease of the risk of excessive wear of the mechanical component.



Optimizes the maintenance.

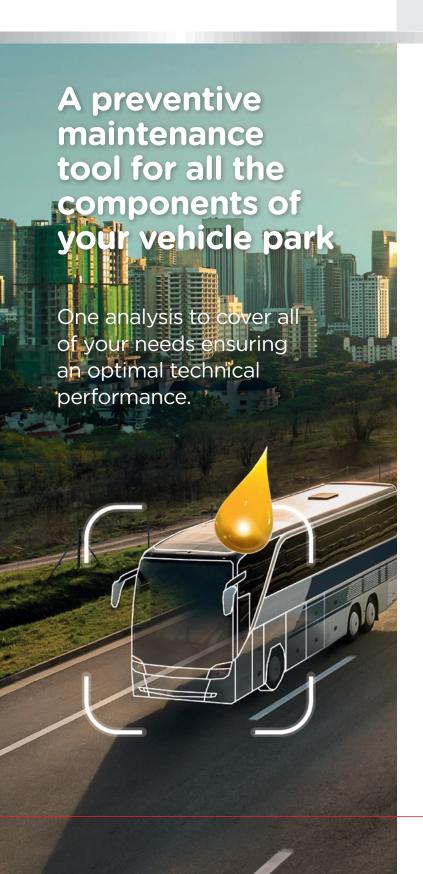
Control of your maintenance budget.

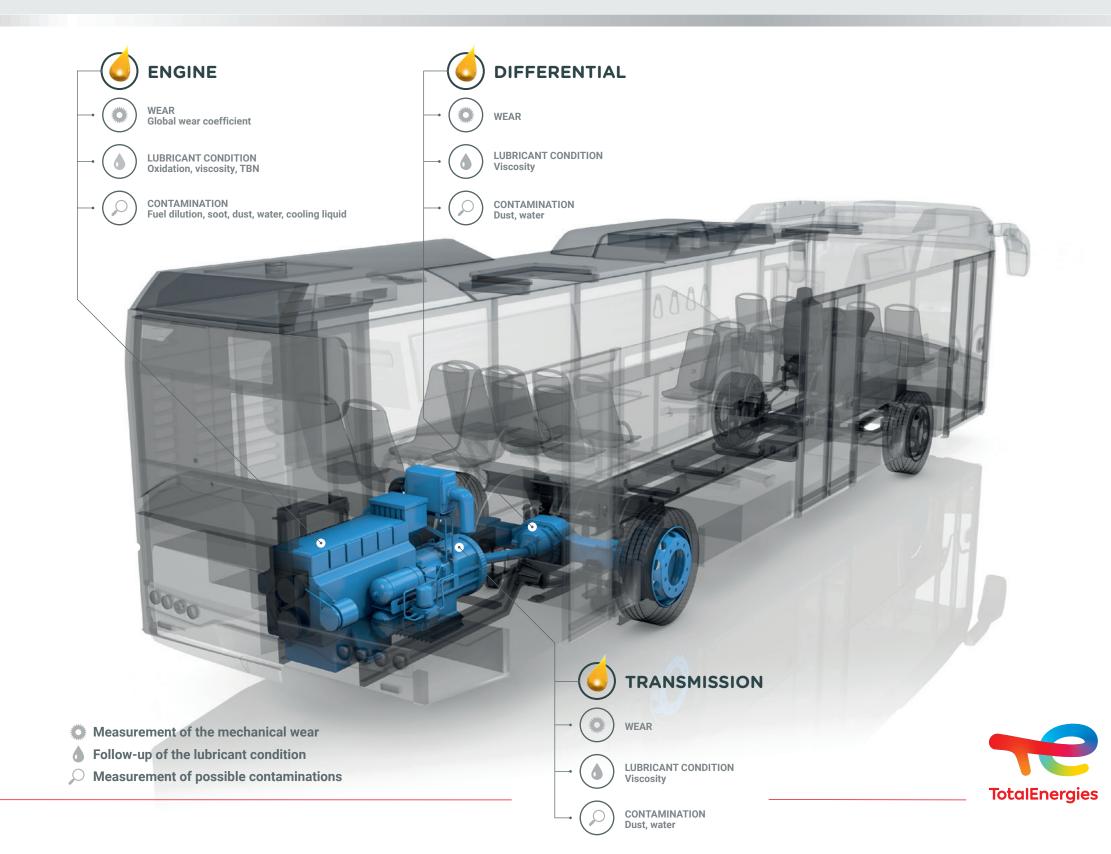


**Reduces the Total Cost** of Ownership (TCO).

Optimization of the amortization of your vehicle park.







### Technical aspect

#### Oxidation

Oxidation is a key measurement in the follow-up of an in-service lubricant. A high oxidation of the oil can increase the viscosity and the acidity of the oil, generating corrosive compounds and deposits.

This measurement allows you to reach safely the optimal drain interval authorized by the OEM.

It is extremely important to monitor the TBN when the oil is subject to severe operating conditions (low mileages applications, repeated starts,...).

An excessive decrease in TBN can lead to corrosion of mechanical parts.

**LubAnac city** applies the recommendations of the manufacturers and adapts its measurement method of the TBN according to the maker of your engine.

### lubanac.totalenergies.com

### A simple and effective tool to manage your vehicle park

A personalized and secure access to:

- consult new reports and previous sample results
- visualize the evolution of diagnoses and report colors
- go in depth with personalized requests
- download the results in excel or pdf format
- view under smartphones and tablets
- manage statistical modules
- pre-register data from new samples
- better understand through diagnostic assistance (CAPS) and Call back Button

### Our customers talk about us

#### Jean-Paul A.

**Technical manager, FAURONALP Group - France**At the recommendation of various OEMs, LubAnac has been analyzing our oil for a number of years. The analyses let us adjust how often vehicles are serviced, take any preventive measures required, and keep our drivetrains working longer. The LubAnac analyses underpin equipment reliability and our profitability.

#### Bart M.

Lead Engineer, Van Hool - Belgium

With regular monitoring through LubAnac, we work together to optimize our vehicle fleet's lifetime and reliability.









Available also via LubAnac QR App and its QR code system.





