## Re-refining success



## GEIR celebrates its 50th anniversary!

Dr Christian Hartmann, GEIR

If year 1969 remains in everyone's minds as the year of the first manned landing on the Moon and Neil Armstrong's first steps on the Earth's satellite, this year is also most significant for the regeneration industry. It is indeed in 1969 that inspired businessmen Mr. Brassart (France), Schieppati (Italy) and Haberland (Germany) decided to reach for their own European stars, by founding GEIR (le Groupement Européen de l'Industrie de la Régénération) – the European Regeneration Industry section of UEIL (Independent Union of the European Lubricants industry).

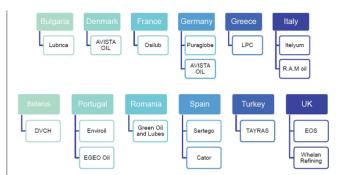
Due to its longevity and its active involvement, GEIR has been a privileged witness of all legislative and regulatory developments at European level impacting the re-refining industry. From the first Directive on waste oil giving priority to regeneration in 1975, to the 2018 revised Waste Framework Directive calling for the European Commission to assess the feasibility of a regeneration target for waste oils, not to forget the introduction of the new waste hierarchy core principle in 2004 (which translates in regeneration ranking higher than burning) – GEIR was there.

50 years later, and in spite of major breakthroughs, GEIR is still rolling up its sleeves to achieve its primary objective: promote waste oil collection and regeneration across the European Union, notably by supporting the technical development of waste oil regeneration, and the priority of waste oil regeneration over direct or indirect burning.

Regeneration to Base Oil Group III

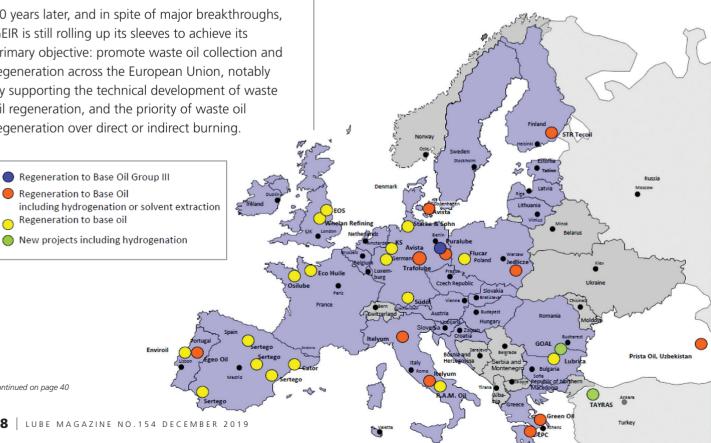
Regeneration to Base Oil

Regeneration to base oil



Along the way, GEIR membership has grown steadily; today it represents more than 2/3 of the industry active in Europe, with member companies located in ten Member States of the European Union, with Belarus and Turkey being associated members (see our full membership below).

The map below provides an excellent overview of the re-refining industry landscape in Europe and beyond, showing the sector's dynamism, the existing facilities diversity, and the upcoming new projects.



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Over the years, GEIR's focus has remained oriented towards the same objective – the promotion of waste oil collection and regeneration. The best instrument at EU level in that regard is the setting up of targets. similarly to what is already implemented for other waste streams such as paper or plastic. Targets have the two-fold advantage of guaranteeing constant supply to the re-refining sector, enabling their operational growth and development, while ensuring security of supply by avoiding the diversion of the necessary feedstock to other waste treatments not offering the same environmental performance.

## **Waste Oils in EU 28 (2018)**

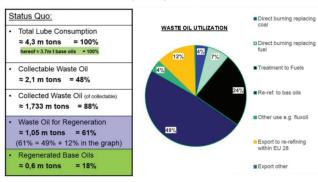
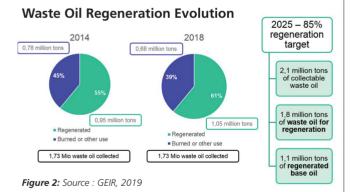


Figure 1: Source: GEIR, 2019

To demonstrate the above, GEIR showed the evolution of the waste oil regeneration market over the last years, and made projections on the market outlook in 2025 with an 85% regeneration target set at EU level.



During the revision of the Waste Framework Directive, the main EU waste legislation which notably sets recycling targets, GEIR actively met with decisionmakers so as to show them the benefits that waste oils regeneration targets would bring to the EU, not only in terms of economic growth but also on environmental protection. GEIR's points were backed by strong scientific evidence: the findings of the Institut für Energie und Umweltforschung Heidelberg (ifeu). The 2018 critical review of the Ecological

With such compelling evidence, no one could deny anymore the intrinsic circular value of waste oils! This element was therefore reflected in the 2018 revised Directive on waste, which requires the EU to carry out a feasibility assessment on setting waste oils regeneration targets. The European Commission, the EU institution in charge of the assessment, is slowly getting ready for this task, relying on the industry to provide reliable data that would complete the current fragmented picture of national waste oil collection and waste management. Once again, GEIR membership is up for the task!

We are sharing our expertise with all EU institutions and bodies involved in the assessment, mobilising in parallel other stakeholders so as to build a momentum on waste oils regeneration targets and ensure a positive outcome.

Meanwhile, GEIR has been busy with other activities such as ensuring its members' constant compliance with the EU REACH legislation – the EU regulation aimed to improve the protection of human health and the environment from the risks that can be posed by chemicals. In that perspective, GEIR members discussed on several occasions the sameness criteria, both with other industry stakeholders (notably CONCAWE and FuelsEurope), and the relevant EU authorities to ensure its continuous conformity with the existing EU framework on chemicals. Thanks to the fruitful exchanges, GEIR is now observer to the European Chemicals Agency's Petroleum and Coal Stream Substances group (PetCo group), acknowledging the relevance of GEIR's competence and voice.

In addition, we have been keeping a close eye on developments affecting the bunker market. The 2020 new caps on sulphur content in maritime fuels, as adopted by the new International Maritime Organisation (IMO) lead to many uncertainties. How will the shipping companies comply with this stricter requirement? Both obvious solutions such as the instalment of scrubbers and the purchase of

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and energetic assessment of re-refining waste oils to base oils – Substitution of primarily produced base oils including semi-synthetic and synthetic components<sup>1</sup> (initially published in 2005) clearly stated the advantaged of regeneration in all environmental categories compared to the virgin production and versus the treatment to fuel.

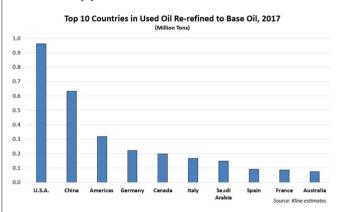
<sup>&</sup>lt;sup>1</sup> https://www.geir-rerefining.org/wp-content/uploads/GEIR-ifeu-LCA-07.09.18-SUMMARY.pdf



low-sulphur fuels, come with increased costs. GEIR is therefore highly concerned that the sector will be tempted to resort to a cheaper and easier option: Blend simple treated used oils in the fuel mix whilst diluting contaminants such as heavy metals. This is practiced if the used oil has been treated to achieve its product status, in compliance with a local end-ofwaste criteria. Unfortunately, the few existing local end-of-waste criteria for used oils are not particularly demanding in terms of requirements and therefore constitute a loophole in EU environmental legislations - diverting essential feedstock to treatments ranking low in the waste hierarchy. GEIR is maintaining regular contacts with local regional waste agencies and the European Commission to make them aware of the situation, hoping that a clarification of the existing framework on end-of-waste criteria will solve the issue.

Taking stocks of these eventful years during GEIR's anniversary on October 22nd, GEIR President Christian Hartmann reminded GEIR's international guests of the existing challenges for the sector: waste oil collection still has to be improved, while waste oils misuse has to be clearly banned. Indeed, improved collection across European Member States will open tremendous opportunities since it will translate in an additional 370 kilo-tonnes of waste oils every year. What is more, an EU regeneration target of 85% of

the collected waste oils will lead to 500 kilo-tonnes of additional regenerated base oil available on the market every year.



It has been 50 rich and colourful years, celebrated properly with representatives and friends of the sector from the entire world – from Norway to South Africa, Brazil and China, all continents were represented. It was a unique forum of exchange where all re-refining professionals could learn about its neighbours' practices, technology and perspectives.

Such joyful celebration took place in Cannes, France – who said regeneration was not glamourous?

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