Fitful Steps Forward

By Robert Bittner

Industry navigates uneven global standards while developing sustainability assessment and reporting processes

Within the past five years, governments and regulatory bodies around the world have begun setting ambitious goals for lowering the carbon footprint and improving the sustainability of manufacturing processes and products. These emissions-reduction goals are leading to new approaches to assessing, reporting and discussing sustainability. What is much less clear-cut, though, are the specifics regarding the best way to attain those goals.

In the U.S., the first steps toward assessing and reporting sustainability data have been driven primarily by customer demand, which naturally varies across markets and among individual customers. In the European Union (EU), regulatory requirements are providing more of the driving force, which is leading to a more consistent — and more effective — approach across the industry.

With many emissions goals set for 2045 and 2050, these are still early days in the journey. Even so, a 2022 report by Grand View Research found that lubricant manufacturers may already be falling behind expectations. While highlighting progress being made in sustainability reporting throughout the industry, the report added, "The majority of the companies within the sector have significant scope for improvement."

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THE U.S. POINT OF VIEW

"From the independent manufacturing perspective, it seems to me that people are still in the process of figuring out the best way to understand their product carbon footprint and achieve their sustainability goals — more than looking at improving overall sustainability from a Scope 1 or Scope 2 perspective," said Vbase Oil CEO Jeffrey DiMaio.

Scope 1 emissions are those produced directly from a company's owned or controlled sources. Scope 2 emissions are indirectly sourced through purchased electricity, heat and the like. Scope 3 emissions involve all other emissions associated with a company's activities. Typically, Scope 1 and 2 emissions get the most attention when discussing sustainability.

"It's difficult to focus on reducing Scope 1 and Scope 2 when you don't fully understand how that affects your carbon footprint and how that gets carried through the value chain," DiMaio noted. In addition, in his experience customers are not demanding Scope 1 and 2 emissions data.

"The only thing we've gotten specific requests for are our carbon footprint numbers," he said.

The situation will be different for manufacturers with global ties, suggested ILMA Sustainability Committee Chair Richard Camper, executive vice president of Hasco Oil. "Currently, any lubricant manufacturer tied to a multinational oil company is very likely already implementing programs to assess and track Scope 1 and Scope 2 emissions," he pointed out, "but that's probably not happening at the smaller manufacturers at this point."

Camper believes there are two main reasons for that difference — reasons that mirror the differences between the U.S. and EU lubricant sectors.

"One is investor pressure on companies that score highly on environmental, social and governance metrics focused on sustainability," which tends to be felt more strongly among EU manufacturers. "If companies want to demonstrate sustainability, the primary driver for them at this point is talking about emissions associated with making their products and getting them to market," he said. "In the EU, there are also regulatory requirements and liability issues. There have been legal actions against multinational oil companies that have forced them to reduce their carbon footprint, which has had an effect downstream."

A WILD WEST

Additional challenges arise when, without detailed regulatory guidance, not everyone agrees on what sustainability encompasses, what approaches to emissions reporting and data interpretation are truly meaningful, or even what our global carbon emissions goals should be. "It's kind of a Wild West," Camper said.

Confusion can arise as a result. For example, Camper pointed to

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the growing popularity of life-cycle assessments (LCAs), which attempt to model the environmental impact of every one of the many integrated systems that go into manufacturing and distributing a product. Not surprisingly, "This is a very complicated process," he said.

Yet the complexities of LCAs — both in their development and interpretation — may be overlooked or disregarded as LCA becomes a hot buzzword and a de facto customer request.

"I think some customers and partners are going to be requesting LCA data from independent lubricant manufacturers in cases where that information has very little value," Camper said. "Not to say that LCA data isn't important. It *is* important — for a certain subset of the lubricant value chain. To say that LCA is applicable to everyone in every part of the lubricant industry is probably not accurate. And at this point, there isn't agreement about what an LCA should include."

And that means one manufacturer's LCA may not be point-by-point comparable with another's, making it less practically useful for customer decision-making.

The situation is further complicated by the fact that customer expectations for sustainability reporting — whether appropriate or not — are driving current approaches among U.S. manufacturers.

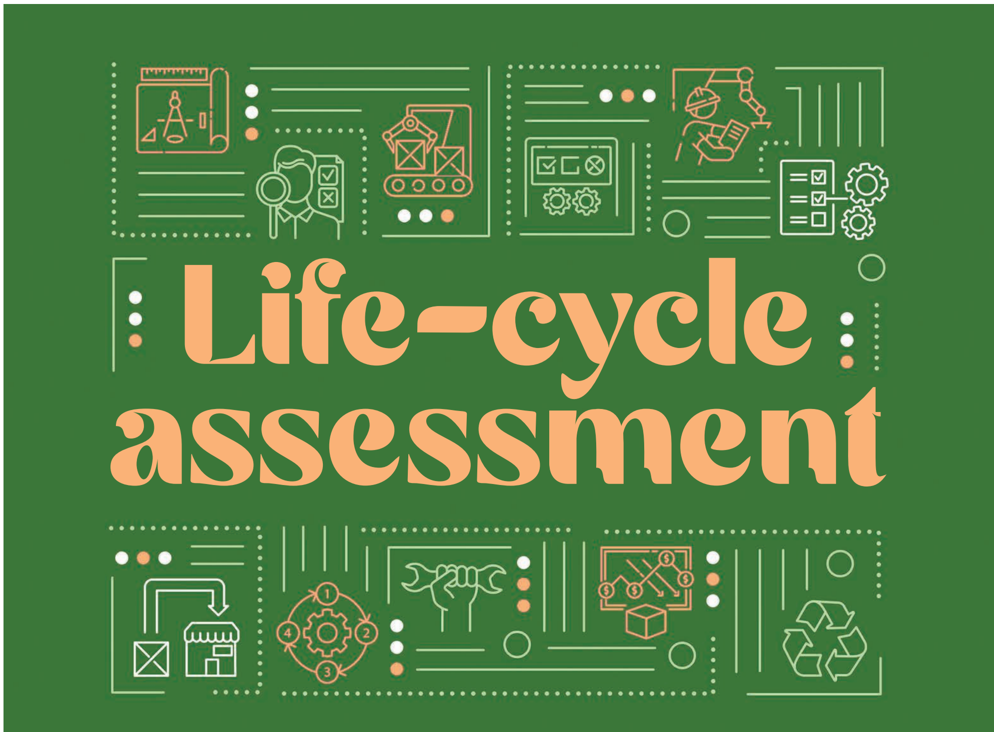
Camper does not see that situation changing without external pressures. "With small-to-medium lubricant manufacturers, I don't think there's going to be a lot of progress on actual emissions reporting until it becomes a requirement," he acknowledged. In fact, he said, "It's my opinion that mass adoption isn't going to happen until it's driven by the major original equipment manufacturers (OEMs) telling their supply base that they have to have a sustainability plan. Until they do something like that, it's going to be really difficult to talk about sustainability in a way that makes sense to everyone.

"Similarly," Camper continued, "with customers or organizations that are more consumer facing, I think mass adoption will only happen when someone figures out how to leverage sustainability into a competitive advantage in the marketplace."

THE EUROPEAN PERSPECTIVE

"Europe has made more progress because institutional and regulatory pressures in Europe have been more intense," noted Mattia Adani, president of the Union of the European Lubricants Industry (UEIL) and CEO of Italy-based Nowal Chimica. Customers, too, have been pressuring companies to contribute more significantly to their own sustainability efforts.

While Adani believes that tracking Scope 1 and Scope 2 emissions is important, he pointed out that up to 90% of a lubricant's carbon footprint is determined by the carbon footprint of the base oil being used. For many customers, that makes carbon footprint a more immediate point of discussion. And as carbon footprint



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Mattia Adani, President, UEIL, and CEO, Nowal Chimica

assessments becomes a more significant factor in customers’ decisions, he believes more and more customers will be attracted to bio-based or re-refined base oils, a segment that currently represents nearly 30% of Nowal Chimica’s cutting-fluids sales.

The EU lubricant industry currently outpaces the U.S. in terms of sustainability reporting. In large part, that’s due to the EU’s more stringent regulatory requirements, some of which have been in effect for years. Even more regulations are on the way, and Adani is uncertain about how some of the proposed and upcoming regulatory decisions will impact the industry.

“The EU policy on zero-emission passenger vehicles may imply a reduction in lubricant demand,” he said, “while new REACH and CLP regulations may restrict the substances allowed for lubricant formulation.”

REACH — Registration, Evaluation, Authorization and Restriction of Chemicals — is an EU regulation established to better protect human health and the environment from chemical risks; the CLP regulation — covering classification, labeling and packaging of chemicals — is intended to provide clear communication regarding chemicals to EU workers and consumers.

“The new Ecodesign regulation may impose constraints on formulations, and the Corporate Social Responsibility directive may introduce constraints and additional bureaucracy in supply chain selection,” Adani added.

All of these regulations apply to any products on the EU market, regardless of their country of origin.

GETTING TO ‘BEST’

Perhaps the fundamental sustainability challenge for the industry, DiMaio suggests, is that “it’s difficult right now to clearly communicate sustainability in a way that everyone is actually talking about the same things, using the same terminology and the same metrics to measure our progress.”

That may soon change. Industry associations are beginning to proactively promote a more unified approach to sustainability best practices. “Over the last two years, the industry has done a great deal to surmount the sustainability challenge,” American Petroleum Institute (API) Senior Program Manager Jeffrey Harmening said. “Publication of methodologies both here in the States and in the EU should go a long way to helping manufacturers get direction.”

In particular, he cited the API-published Technical Report (TR) 1533: *Lubricants Life Cycle Assessment and Carbon Footprinting — Methodology and Best Practice,* produced with the assistance of both API and ILMA experts, among others.

“A big focus of TR 1533 is defining terms as specific to our industry and providing a methodology,” Harmening continued. “An exhaustive list of online resources was also compiled and published to help lubes companies begin their journey. In fact, the small-and-midsize enterprises are even back at the table working on the next edition, which will address all the myriad comments and suggestions which came in from API members, interested parties and lubes organizations around the world.”

In the absence of an institutionally sanctioned standard, Adani added, companies have found themselves “exposed to competition on a fuzzy performance indicator” — how one company measures sustainability may not jibe with another’s approach — and even accusations of greenwashing. “When clear standards and metrics are not available, there is a high risk of competition on an uneven playing field,” he said.

For that reason, UEIL, in cooperation with ATIEL (the technical association of the European lubricants industry), recently developed a methodology to calculate the product carbon footprint of a lubricant. “We hope this methodology may become a self-adopted standard for our industry,” Adani said.

“Our industry is global in nature,” he continued. As such, it simply doesn’t make sense for there to be different standards and best practices established in Europe and the U.S. He is looking forward to greater collaboration between ILMA and UEIL to define global standards as opposed to regional ones.

“If we do not take the lead,” Adani said, “there is a risk that someone else may step in to do it for us.”

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