



SUSTAINABILITY AND DIGITALIZATION

Progress in Sustainability from a Refiner's Perspective – Ergon's Journey

Dr. Kristie Armstrong

June 7, 2023



- Ergon Overview
- Ergon's Sustainability Journey
- Ergon's Path Forward



MEET NEEDS.
SUPPORT FAMILIES.
SERVE CUSTOMERS.





4 segments.
60+ companies.
Meeting a
wide variety of
market needs.



Energy & Specialty Solutions

We transform molecules that would otherwise be used as transportation fuels into noncombustible specialty naphthenic and paraffinic products for niche markets. We also manufacture resins, agents, additives and modifiers for specialty applications.

Ergon Refining, Inc. | Ergon International, Inc. | Ergon - West Virginia, Inc.
Process Oils, Inc. | Resinall Corp

Pavement & Coating Resources

Our asphalt solutions extend the life of roadways around the world.

Ergon Asphalt & Emulsions, Inc. | Ergon Asfaltos México HC, LLC | Ergon Asphalt Partners, LP
Bryan & Bryan Asphalt, LLC | ErgonArmor | Paragon Technical Services, Inc. | Crafcro, Inc.

Integrated Services & Logistics

Our logistics companies are essential to North America's manufacturing supply chain and construction industry.

Ergon Oil Purchasing, Inc. | Ergon Terminaling, Inc. | Ergon Trucking, Inc.
Magnolia Marine Transport Company | Ergon Marine & Industrial Supply, Inc. | Lampton-Love, Inc.
Ergon Construction Group, Inc. | Ergon Properties, Inc.

Exploration & Production

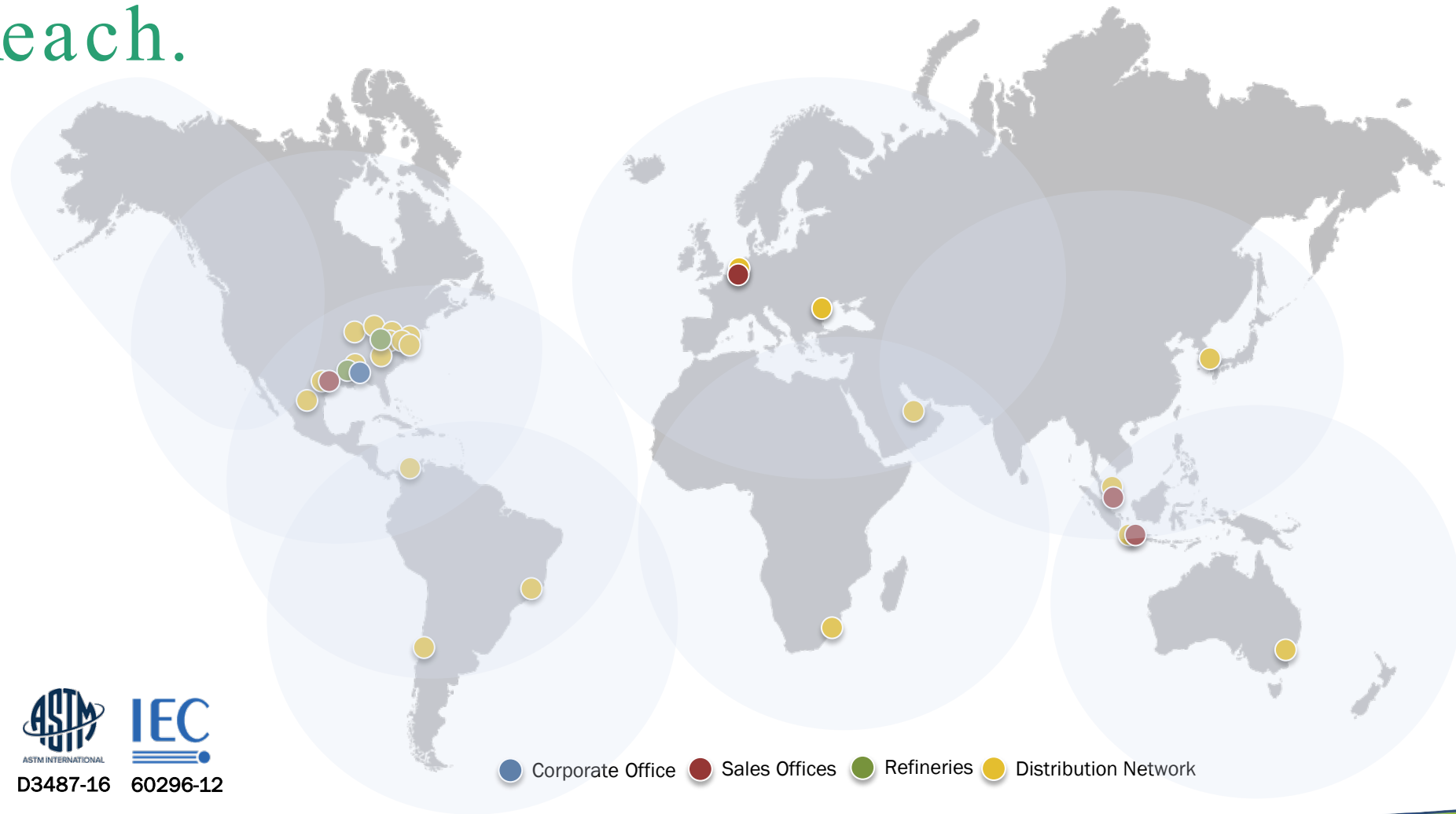
Ergon companies have been involved in oil and gas exploration and development since the 1970s.

Ergon Exploration, Inc. | Ergon Energy Partners, LP





Our Reach.



C50-14



D3487-16



60296-12





Our Core Values.



Empowered Service

Together, we are committed to delivering unparalleled service. We do what's right, provide solutions and foster stronger relationships with our teams and customers. Employee safety is our top priority and the first consideration in all aspects of our service.



Selfless Leadership

We lead with compassion and put those around us before ourselves. We don't say we're the experts; we demonstrate it through technical expertise, category innovation and genuine care for what we do.



Purposeful Growth

Employee growth and company growth go hand in hand. We build our legacy together to ensure future success.



Respectful Relationships

Together, we foster a culture of respect, acceptance and diversity of ideas and of people. Our differences make us stronger, and we are united by our shared values.





“Sustainability

is no longer about doing less harm. It’s about doing more good.”

—Jochen Zeitz, President and CEO of Harley-Davidson





Sustainable Development is the idea that human societies must live and meet their needs without compromising the ability of future generations to meet their own needs.

Brundtland Report, 1987

Sustainability's Evolution

- ✓ 1970s: Concept of sustainable development coined
- ✓ 1987: Brundtland Report defined sustainability
- ✓ 1994: Introduction of the "triple bottom line" clarified sustainability as integration of social, economic, and environmental value
- ✓ 1999: The global sustainability index is launched, tracking leading corporate sustainability practices worldwide
- ✓ 2005: Term ESG is coined in landmark study entitled "Who Cares Wins" by the U.N. Global Compact
- ✓ 2015: U.N. Sustainable Development Goals launched
- ✓ 2020: COVID-19 crisis accelerates ESG issues and related global consequences
- ✓ 2022: Inflation Reduction Act (IRA) signed marking the most significant action Congress has taken on clean energy and climate change in the nation's history





ERGON'S SUSTAINABILITY JOURNEY





On the Path to Excellence



Adapted from the PWC Sustainability Maturity Path





Sustainability Statement

Ergon is a relationship-driven, global organization comprised of a wide array of businesses committed to *DOING RIGHT*:



WITH OUR PRODUCTS.

As we develop innovative, quality products and solutions produced in an environment of impeccable compliance standards and ethical business practices.



FOR OUR PLANET.

As we work to define and measure our emissions, environmental and energy impacts, set realistic goals and implement solutions to achieve those goals.



BY OUR PEOPLE.

As we respect the dignity of every team member and encourage and foster career as well as personal growth in an environment that promotes safety, diversity and equality.



THROUGH OUR PRINCIPLES.

With an unwavering commitment to our core values which reinforces the focus on sustainability, health and safety, compliance with company policies, and the investment of our time and resources to serve our communities throughout the global Ergon organization.

We encourage our partners and suppliers around the world to uphold these same standards.





Ergon Energy & Specialty Solutions

To Our Valued Customers:

Ergon Refining & Marketing (ERM) remains committed to meeting the sustainability needs of the market, and your voice is an important consideration as we establish our path forward. This report provides an update on our efforts to meet your sustainability needs as well as steps already underway and those we have planned to further reduce the environmental impact of our facilities and products.

While sustainability may seem like a new concept to some, it has always been part of Ergon's DNA. Our facilities, products and supply chains have all been influenced by efforts to exceed strategic objectives associated with a greener, cleaner landscape. Investments are made with an eye toward our company's mission – meeting needs, supporting families and serving customers. And we are committed to offering you a competitive advantage through reliable, high-performing specialty products with service that exceeds expectations.

- Over the past 15 years, ERM has invested more than \$300 million to reduce the environmental impact of our facilities and to improve safety for our employees and the communities where we operate.
- Through energy efficiency projects in our supply chain, we have decreased transportation by more than 90,000 miles – a reduction of 7,500 tonnes of CO₂e emissions per year.


LANCE RUCKETT
President
Ergon Refining Inc.
Ergon - West Virginia Inc.
Process Oils Inc.



Beyond protecting our environment, renewable and recycled components give our customers competitive advantages for the future. We have numerous projects and resources pointed toward bringing more recycled products into specialty applications, and we are committed to being a major contributor in this space.

During the past 10 years, Ergon R&M has launched numerous renewable products that have displaced as much as 1.4 million gallons of traditional mineral oils, an equivalent volume of more than 150,000 barrels/year of crude oil processed for base oil purposes. We expect that volume to more than double by 2030.

Ergon is known around the world as a reliable, consistent partner, and looking forward, we will strive to protect the strengths that contributed to our brand. Our goal is to advance sustainability through facility responsible modifications to our products and operations through well-planned projects pointed at meeting the needs of our global customer base.

Our Commitment to Reducing Our Carbon Emissions

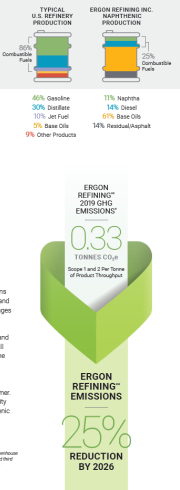
PLANNED PROJECTS
We are committed to decrease ERM's carbon emissions by 25% by 2026 at our naphthenic refinery. Efficiency and energy savings projects are already in the planning stages to meet this goal.

As Ergon continues on its path to doing right, current and future initiatives, along with emerging technologies, will further drive emissions reductions at our facilities in the coming years.

FUTURE LCA REPORTS
Watch for full life cycle assessments (LCAs) this summer. We are currently working with a third-party sustainability consultant to conduct cradle-to-gate LCAs for naphthenic products at Ergon Refining, our naphthenic refinery in Vicksburg, Mississippi, in accordance with ISO 14044.

Calculation of Life Cycle Assessments (LCAs) has required energy consumption and greenhouse gas emissions for the facility and the past year's operations. The development of a third-party verified carbon footprint for the facility is in progress. The development of a third-party verified carbon footprint for the facility is in progress.

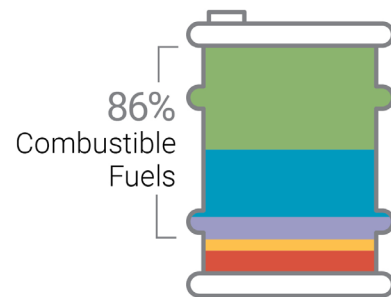
©Ergon Refining is a naphthenic refinery in Vicksburg, Mississippi.





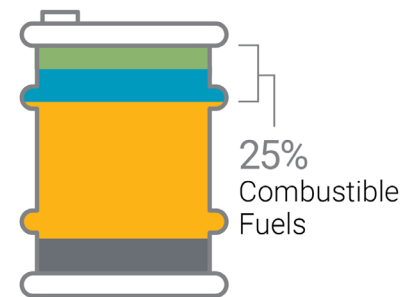
We transform molecules that may otherwise be combusted into high-value solutions our customers utilize to improve the performance of products people use every day around the world.

TYPICAL
U.S. REFINERY
PRODUCTION



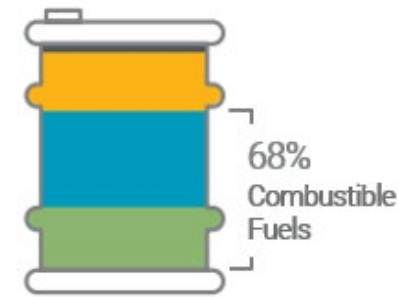
46% Gasoline
30% Distillate
10% Jet Fuel
5% Base Oils
9% Other Products

ERGON REFINING INC.
NAPHTHENIC
PRODUCTION



11% Naphtha
14% Diesel
61% Base Oils
14% Residual/Asphalt

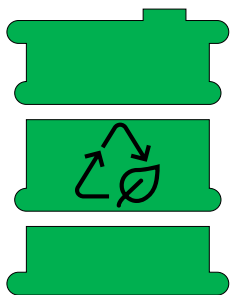
ERGON – WEST VIRGINIA
PARAFFINIC
PRODUCTION



26% Gasoline
42% Diesel
29% Base Oils/Waxes
3% Residual

Ergon products are designed to reduce friction

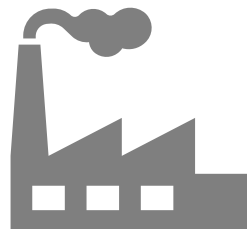




Over the past 10 years, Ergon R&M has launched numerous **renewable** products that have displaced as much as 1.4 million gallons of traditional mineral oils, an equivalent volume of more than 150,000 barrels/year of crude oil processed for base oil purposes. This volume is expected to double by 2030.

E&SS recently launched **HyVolt Natural** and **Synthetic Esters** to its portfolio. These **biodegradable** oils have been engineered with high fire point for applications where fire safety and increased biodegradability are critical.





Capital Investments

Over the past 15 years, E&SS has invested more than **\$300 million** to reduce the environmental impact and to improve safety for our employees and the communities where we operate



Supply Chain Projects

Energy efficiency projects in our supply chain has reduced our transportation miles on exported barrels by >90,000 miles per year.

Efficiency = reduced energy consumption = reduced GHG emissions





Community Outreach

E&SS headquarters pledges
400 community service hours
and **\$25,000 in charitable giving!**





Ergon Refining 2019 GHG Emissions *



0.33

Tonnes CO₂e

Scope 1 & 2 per Tonne of
Product Throughput

*Scope 1 & 2 emissions models validated by third-party sustainability consultant





Sustainability Path Forward





Ergon Refining Carbon Emissions Reduction Commitment



COMMITMENT

25%

Reduction
by 2026





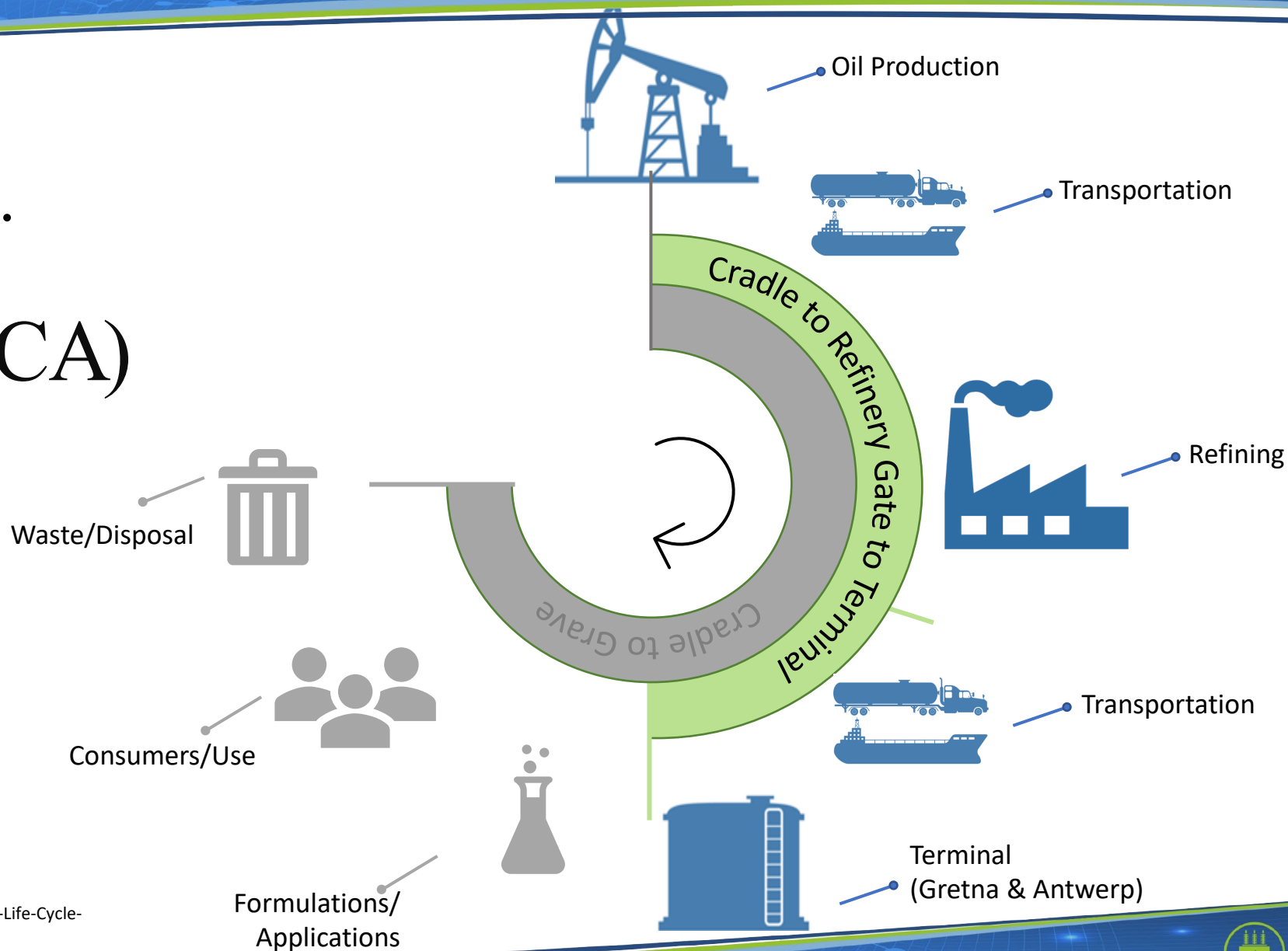
- Offer our customers a competitive advantage through reliable, high-performing specialty products with **service** that exceeds expectations
- Bring more **recycled** and **renewable** products into specialty applications
- Leverage **emerging technologies** to further drive emissions reductions at our facilities in the coming years





Ergon Refining, Inc. Life Cycle Assessment (LCA)

- Scope 1 & 2 emissions
- Cradle-to-gate
- Transport to Gretna and Antwerp terminals
- Standardized by ISO 14040/44



Adapted from <https://khni.kerry.com/wp-content/uploads/2022/08/What-is-a-Life-Cycle-Assessment-LCA-Kerry-Health-and-Nutrition-Institute.jpg>





Dr. Kristie Armstrong
Technical Projects Manager
Energy & Specialty Solutions

ERGON.
HyVolt
/ Dielectric Fluids

WHEREVER YOU POWER
HOWEVER YOU POWER

