

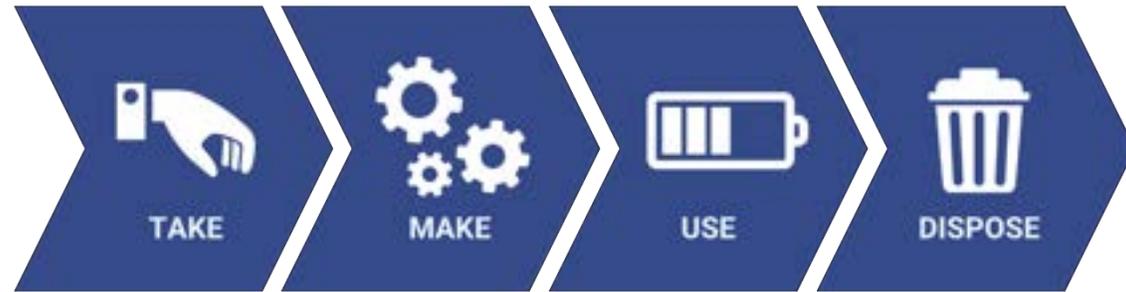


## SUSTAINABLE BUSINESS PRACTICES

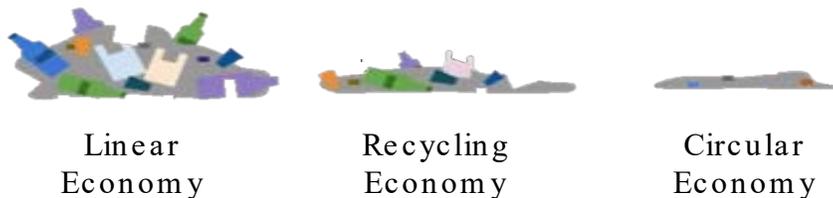
[CHEM-GROUP.COM](http://CHEM-GROUP.COM)

# IMPORTANT CONCEPTS ON "SUSTAINABILITY"

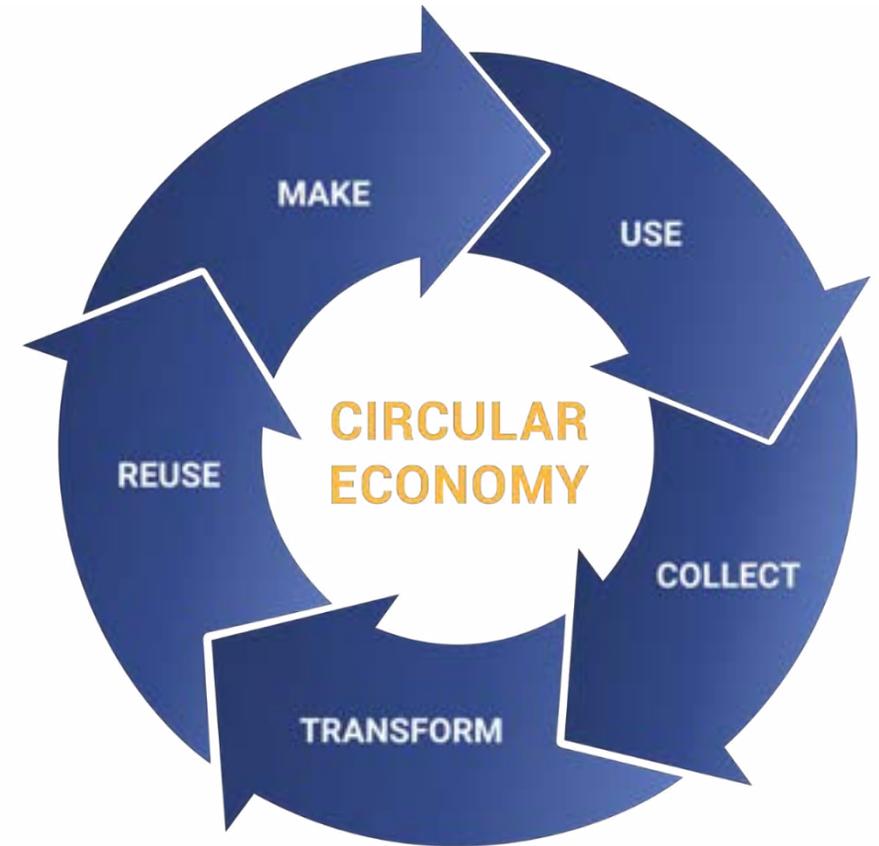
**Linear Economy:** “Take, Make, Use, Dispose” – Create waste after use



**Circular Economy:** “Make, Use, Collect, Transform, Reuse”  
- Collected and reused after each use



- Make - “Manufacture”, same as above in a linear economy
- Use - Same as above, use the product for its intended purpose
- Collect - Finding “waste” streams is essential
- Transform - Convert it back to its “like new” state
- Reuse - Within same application/industry or secondary markets



# ORG CHEM GROUP HAS ALWAYS ALIGNED OUR BUSINESS MODEL WITH THE CIRCULAR ECONOMY

CHEM Group has always aligned our business model with the circular economy. Our focus is on renewing fluids as a means of helping to improve your ESG compliance and social responsibility while positively impacting your bottom line.

Our joint success contributes to a more sustainable chemical industry.





## MISSION

CHEM Group's mission is to safely provide quality products and services that add value and improve sustainability in the chemical industry.

We reduce the environmental impact of the industry by recycling chemical streams and returning them to the market responsibly and cost-effectively.



## VISION

CHEM Group's vision is that of a chemical industry with a reduced environmental footprint. Our work facilitates sustainability by extracting residual value from materials so they can be repeatedly and sustainably returned to the market in safe, environmentally responsible, and cost-effective ways.

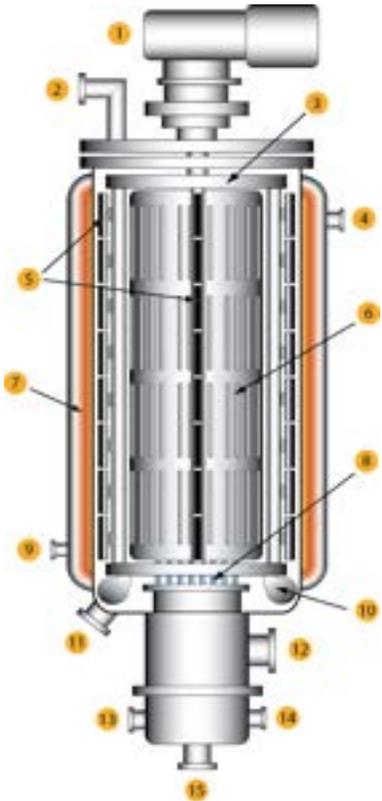


## WHO ARE WE?

As a commercial toll processor, CHEM Group offers technology and services that turn waste streams or off spec materials into profit centers that are economically favorable and environmentally responsible.

- We have over 40 Years Operating Experience with Distillation at 3 Plant locations, specializing in Short Path Distillation (SPD)
- Technology and Processes for the recovery and renewal of chemicals – Reinventing Molecular Reclamation for the Circular Economy
- Proven processes, proprietary know-how, technical experts, extensive R&D lab capabilities to support the distillation of heat sensitive and high boiling materials.

# TECHNOLOGY – WIPEDED FILM EVAPORATOR



1. Drive Motor
2. Feed Inlet
3. Distributor Plate
4. Hot Oil Outlet
5. Wiper Blades
6. Entrainment Separator
7. Hot Oil Jacket
8. Internal Condenser
9. Hot Oil Inlet
10. Extruder Blades
11. Residue Discharge Outlet
12. Vacuum Outlet
13. Cooling Water Inlet
14. Cooling Water Outlet
15. Distillate Discharge

Process using short-path distillation to remove impurities from a process stream (FEED) at reduced temperature and pressure (vacuum) so the remaining “usable” product (distillate) may be returned for continued use

## Benefits

- Removes light ends and high boilers
- High yield of return (70-95%)
- Directly impacts company sustainability initiatives
- Saves on EPA reporting
- Reduction of chemical footprint and landfill waste participation

## WE ARE A RESPONSIBLE CARE® ORGANIZATION.

Our policies, systems, and practices protect the safety, health and security of our communities, and the environment.

We employ the principles of continuous improvement throughout our organization and comply with all local, state, and federal regulations.



AT CHEM GROUP, **WE TAKE RENEWABLE CHEMISTRY SERIOUSLY. THAT'S WHY WE'RE RANKED IN THE TOP 12% OF ALL CHEMICAL COMPANIES.**

Our sustainability initiatives offer our customers:

- sustainability programs custom tailored to your applications
- reporting greenhouse gas emissions
- company-specific emergency preparedness and response procedure regarding local pollution
- measures to detect and/or eliminate accidental water contamination (groundwater, surface water)
- employee awareness or training program on transportation of hazardous materials
- resource consumption transparency
- endorsement of the Responsible Care Global Charter
- Participant in EcoVadis Sustainability Rankings

When it comes to sustainable business principles, we believe in moving our clients from best practices to even better practices.



ecovadis

# OUR HISTORY:

CHEM Group has been purifying, recycling, and recovering chemicals in key sectors of our industry since 1979.



# PLANT CAPABILITIES

	EVANSVILLE, IN	HOT SPRINGS, AR	TROY, IN
Simple Distillation	●	●	●
Vacuum Distillation	●	●	●
Atmospheric Fractionation	○	●	●
Vacuum Fractionation	○	●	●
Short Path Distillation	●	●	●
Reaction Capability	●	●	○
Filtration	●	●	●
Pastillation	●	○	○

CHEM Group has proprietary technology, distillation expertise, quality products and everything you need to renew chemicals sustainably.



# BUSINESS UNITS



Polyflo &  
Aromatic  
Oil Pitch

Amines

Custom  
Tolling

Heat  
Transfer  
Fluids

Antifreeze  
&  
glycols

## Product Lines

- Marlotherm®
- Thermaflo®
- CG Virgin Equivalents
- Calflo®
- Flushing Fluid

## HTF Five Levels of Service

1. Analytical testing
2. Product Supply
3. Molecular Management
4. Technical Support
5. Fluid Changeout and cleaning





# VALUE TO OUR CUSTOMERS

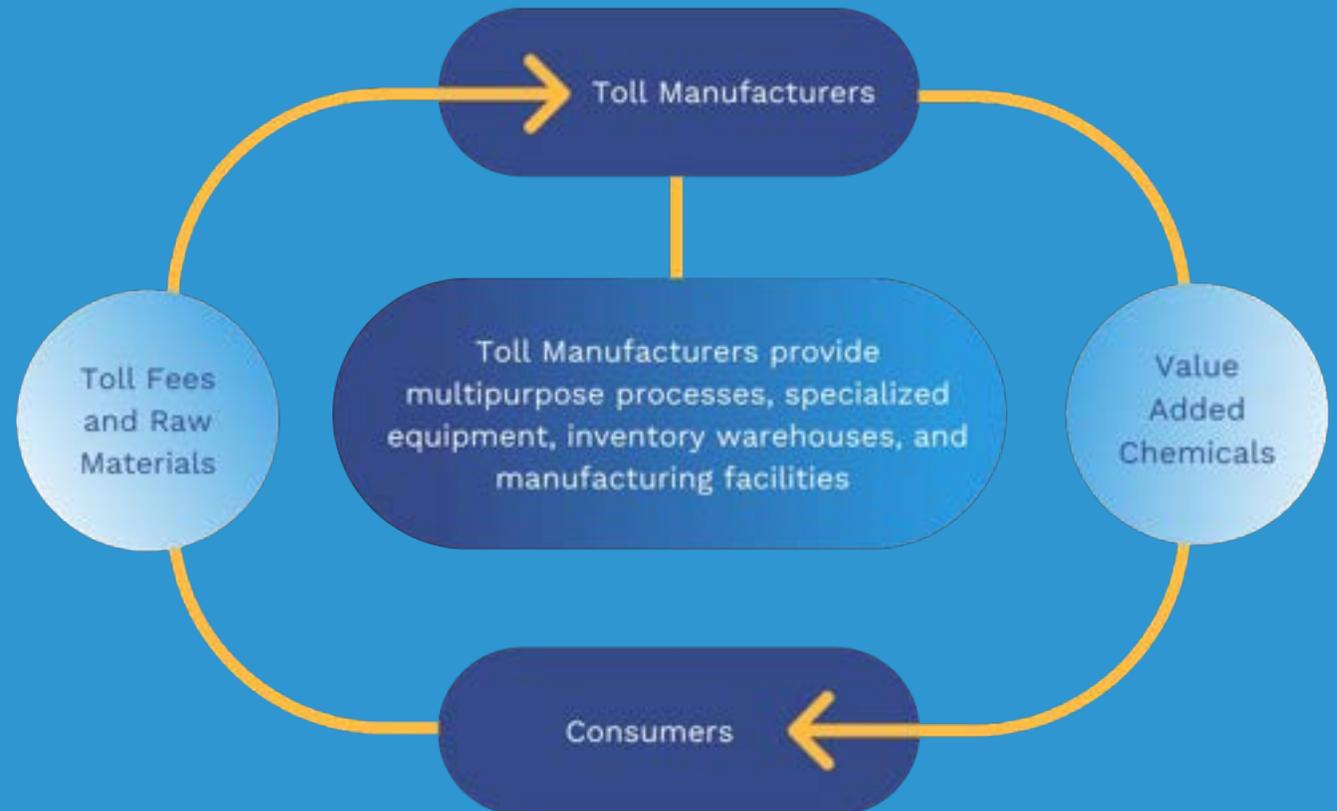
## 1. Chemical Manufacturer

- OEM Standard Automotive Antifreeze (Polyfreeze)
- Polyflo – Aromatic Oils

## 2. Product Distribution

- Marlotherm
- Calflo
- Sulfolane
- Sodium Nitrite
- Recycled Products

## 3. Toll Manufacturer



# CONTRACT | TOLLING BUSINESS

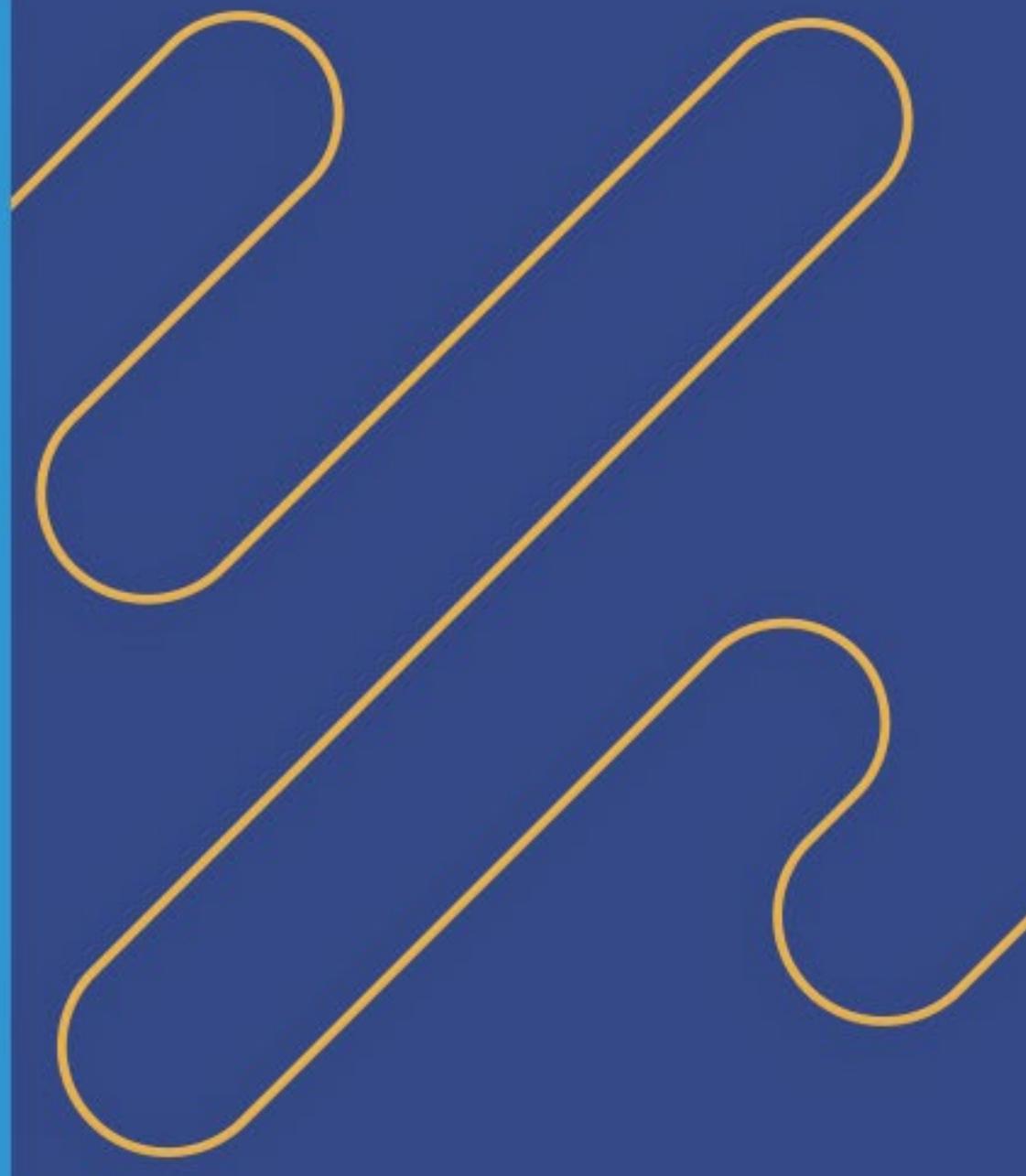
## APPLICATIONS

Recovery and Purification of High-Boiling Materials Heat-Sensitive Materials, Viscous Liquids, Hi-Vacuum Distillations

- Acrylates
- Catalyst Recovery
- Column Bottoms Recovery
- Deodorization
- Drying Applications
- Ethanolamines (DEA, MDEA, DGA)
- Fats and Oils
- Fatty Acids/ Amines/ Esters
- Glycerin
- Glycols, Diols, Glycol Ethers
- Heat Transfer Fluids
- Herbicides
- Isocyanate Recovery
- Lubricants (Rolling Oils, PolyolEsters)
- Pesticides
- Pharmaceuticals
- Plasticizers
- Solvents (DMF, NMP, THF)
- Monomers, Polymers, Resins
- Vitamin Feedstocks
- VOC Stripping of Urethanes/ Phenolics/ Polymers

# WHY REPLACE WHEN YOU CAN RENEW?

CHEM Group's custom tolling technology renews chemistries sustainably and increases operational savings over traditional chemical expenditures. In addition to custom tolling services, we offer high-quality products including Heat Transfer Fluids, Glycols and Aromatic Oils.





# RECONDITION

# RENEW

# RESTORE

CHEM Group's tailored approach to your chemical and operational needs benefits both your bottom line and sustainability initiatives.

For more information, contact us at: [support@chem-group.com](mailto:support@chem-group.com)



**CHEM**  
**GROUP**

VISIT US AT BOOTH 210 FOR MORE INFORMATION  
ABOUT OUR SERVICES:

[CHEM-GROUP.COM](http://CHEM-GROUP.COM)