

### **Chemifloc Sustainability Plan**

**Evan Lawless** 

Strictly Confidential – Not for Distribution

### **Definition of sustainability**

"Meeting the needs of the present without compromising the ability of future generations to meet their own needs"



# There are compelling business reasons for our sustainability commitment



We are undertaking this sustainability initiative because it's the right thing to do, transcending the label of mere 'tree-huggers'. There are compelling business reasons for this commitment as well.

- We recognise that there is an increasing demand from our customers for sustainable practices.
- Our customers Irish Water are aspiring to be carbon-neutral by 2040, integrating sustainability plans into their tender processes.
- We are aware that, especially among younger individuals, there is a strong desire to join a company that prioritises sustainability, a goal towards which we are actively making strides.



# Sustainability encompasses these elements as well as sustaining our own business





# Its important not to get Carbon tunnel vision and miss the bigger picture

#### **Carbon Tunnel Vision**

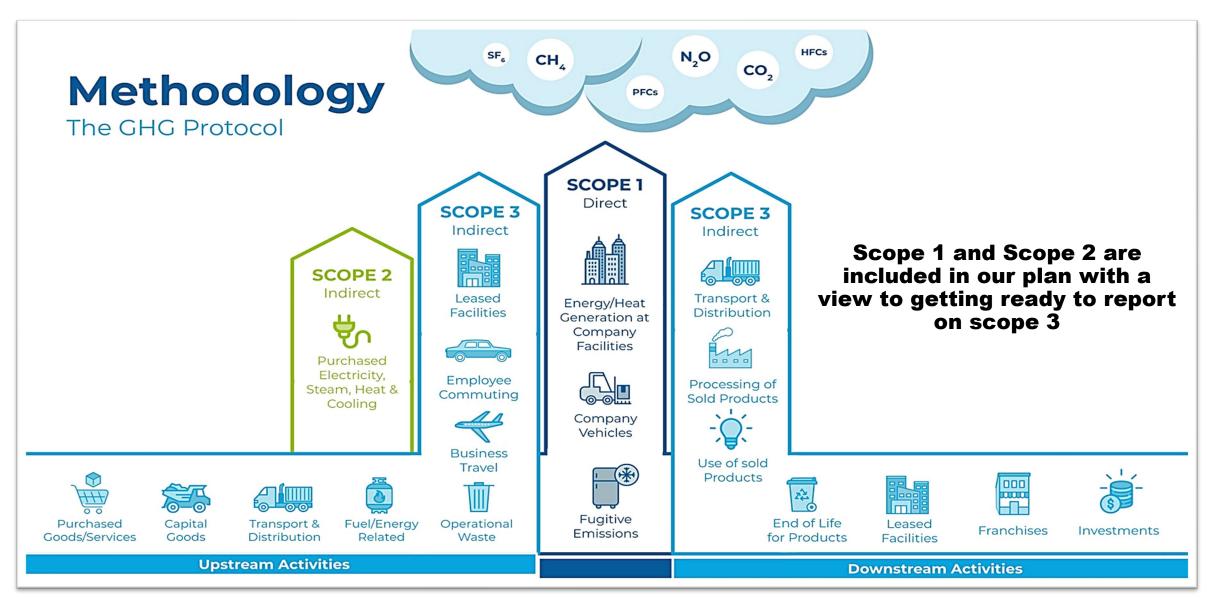
Missing the big picture

	Biodiversi	ty loss	
	Habitat destruction	Wildlife loss	
Fresh	water scarcity	Species	sloss
Air pollut	ion	E	xtinction
Water polluti	on		Widespread toxic pollutants
			Overpopulation
			Carbon emissions
			Overconsumption
$\bigcirc$		Ove	rdevelopment
Deforestati	on		
2	Zoonotic disease	Soil conta	mination
	Eutrophication	Erosion	



Declining carrying capacity

### **Carbon reporting is broken down by scope**



### The journey so far



#### The Circular Economy

- Chemifloc is a member of INCOPA (Carbon footprints of inorganic coagulants produced by INCOPA member organisations)
- Chemifloc produce aluminium-based coagulants by using an increased quota of a by-product, Aluminium Hydrate.

1	2	
0		

#### Transport

- Chemifloc have invested in a Fuel-Efficient Fleet.
- Chemifloc has implemented load size optimisation all bulk loads where applicable are now 30T (utilising split loads).
- Load efficiency has gone from 46% to 83%
- Chemifloc are making use of driver knowledge and familiarisation to optimise routes



#### **Continuous Improvement**

- Chemifloc have begun to roll out lean manufacturing and 6S
- Chemifloc are investing in energy efficient process design (Implementation of Heat Exchangers, in Foynes and Shannon, New loading gantries in Shannon and Foynes).
- Chemifloc are committed to retaining their integrated ISO management standards (ISO 14001, ISO 9001 and ISO 45001)



#### **Biodiversity**

- Chemifloc have committed to the All-Ireland Pollinator Plan.
- First action completed Promote the All-Ireland Pollinator Plan to employees.

## **The Process**

### **Chemifloc Group Sustainability Champions**





**Mike Hayes** GI Chemicals

Julita Fox Laboratory



Ronan Beaty Engineering



Evan Lawless Transport



SHEQ

Lia Sheehan





Tracy Hynes Finance

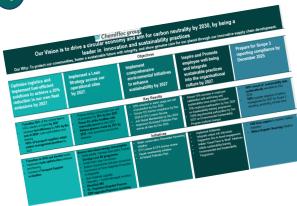
Shane Kenrick Finance



### A process to develop the objectives and key results







WHAT: Development of Strategic Objectives and key results





2

Data baseline and future estimates to lock in KPI targets



HOW: Initiatives Brainstorm; Current and New

oup

6 Project Charters developed and timeline planning 3months to 24months

## **Vision and Why**

### **Our Vision**

### Sustainability

### **Our Why**

To be part of a circular economy and strive to be carbon neutral by 2030, blending commercial success with environmental stewardship for the benefit of our stakeholders and the planet. To protect our communities, foster a sustainable future with integrity, and show genuine care for our planet through our innovative supply chain development.



### **Chemifloc Sustainability Vision**

To be part of a circular economy and strive to be carbon neutral by 2030, blending commercial success with environmental stewardship for the benefit of our stakeholders and the planet







TRANSPORTATION

**Be fuel efficient achieving** 20% reduction in emissions

• 30% of Fleet to HVO, or

Alternative by 2027

efficiency via truck route optimistation and

• 5% annual Fuel

driver training

• HVO or Alternative

Route optimistation

& refining routes

initiatives e.g., Telemetry



#### 2024 to 2030



**OBJECTIVES** 





OPERATIONAL Deliver net Zero by Implementing a Lean Strategy across our sites	ENVIRONMENTAL Be a leader in Sustainability, Implementing yearly initiatives	<b>PEOPLE</b> Champion well-being and <b>PEOPLE</b> centric sustainable practices	COMPLIANCE Be COMPLIANT in Scope Reporting
<ul> <li>20% Energy Reduction by 2027</li> <li>25% reduction in non-value add activity (Lean)</li> <li>Strive to achieve an Energy award by 2027</li> </ul>	<ul> <li>KEY RESULTS</li> <li>20% mains water reduction p/unit of production by 2026</li> <li>EPA License by Sept 2024</li> <li>Deliver the All-Ireland Pollinator Plan by Dec 2024</li> </ul>	<ul> <li>80% satisfaction from well-being and sustainability programs</li> <li>75% employee participation on Sustainability training programme by Dec 2025.</li> </ul>	<ul> <li>100% of sustainability data recorded by Dec 2027</li> <li>75%+ supplier adoption of carbon management by 2027.</li> <li>100% of transport suppliers adopt carbon management</li> </ul>
<ul> <li>Solar panels</li> <li>Lean strategy initiatives deployed across the sites e.g., Site layout</li> </ul>	INITIATIVES • Water conservation /Rainwater harvesting • EPA license review • All Ireland Pollinator Plan	<ul> <li>Environmental and Sustainability Programmes – mental health &amp; well-being</li> <li>Initiate sustainability training</li> <li>New Building for wellbeing &amp; collaboration</li> </ul>	<ul> <li>practices by Dec 2027.</li> <li>Measure Sustainability Data</li> <li>Ethical Supplier Sourcing Initiative</li> <li>Conduct a Transport Supplier evaluation.</li> </ul>







**OBJECTIVES** 





			OBCECHTVEC		
TRANSPORTATIO	N	OPERATIONAL	ENVIRONMENTAL	PEOPLE	COMPLIANCE
Be fuel efficient a 20% reduction in (	•	Deliver net Zero by Implementing a Lean Strategy across our sites	Be a leader in Sustainability, Implementing yearly initiatives	Champion well-being and PEOPLE centric sustainable practices	Be COMPLIANT in Scope Reporting
			<b>KEY RESULTS</b>		
<ul> <li>10% of Fleet mo HVO on a pilot b</li> </ul>		<ul> <li>Solar panel assessment and cost benefit analysis across all sites completed by Dec</li> </ul>	<ul> <li>Set up infrastructure to capture roof water from the Shannon site by Dec 2024</li> </ul>	<ul> <li>100% Core team trained on Sustainability By Dec 2024</li> </ul>	<ul> <li>Scope 1 &amp; 2 sustainability data recorded by Dec 2024</li> </ul>
<ul> <li>Driver training c by Dec 2024</li> </ul>	ompleted	<ul><li>2024</li><li>• a Lean Champion onboarded</li></ul>	• EPA License by Sept 2024	<ul> <li>100% of Senior</li> <li>Management trained on</li> <li>Sustainability By Dec 2024</li> </ul>	<ul> <li>Supplier Sustainability criteria to be developed by May 2024</li> </ul>
<ul> <li>Telemetry busin to be developed clients identified 2024</li> </ul>	and	into the business to help with our reduction in non- value add activity by Dec 2024	<ul> <li>Deliver phase 1 of the All- Ireland Pollinator Plan by Dec 2024</li> </ul>	<ul> <li>Sustainable employee merchandise to be purchased by Dec 2024</li> </ul>	<ul> <li>Internal review of Supplier criteria to be completed by Dec 2024</li> </ul>
			INITIATIVES		
<ul> <li>HVO or Alternati</li> <li>Route optimistationitiatives e.g., T</li> <li>&amp; refining routes</li> </ul>	ion elemetry	<ul> <li>Solar panels</li> <li>Lean strategy initiatives deployed across the sites e.g., Site layout</li> </ul>	<ul> <li>Water conservation /Rainwater harvesting</li> <li>EPA license review</li> <li>All Ireland Pollinator Plan</li> </ul>	<ul> <li>Environmental and Sustainability Programmes         <ul> <li>mental health &amp; well-being</li> </ul> </li> <li>Initiate sustainability training</li> </ul>	<ul> <li>Measure Sustainability Data</li> <li>Ethical Supplier Sourcing Initiative</li> <li>Conduct a Transport Supplier evaluation.</li> </ul>

### **Measuring Sustainability**

#### **Fueling our Transport**

- The volume of Fuel used in our trucks.
- Fuel Efficiencies
- Carbon per tonne

#### Process

- The amount of **Electricity used** in our facilities
- The amount of **process waste** we can eliminate through Lean

#### Environment

- EPA Licence compliance
- Mains Water conservation
- Implementation of pollinator plan initiative

#### People

The number of people that participate in "**Sustainability programmes**" (Wellbeing, community, training etc)

#### Compliance in sustainability reporting

• Being compliant and measuring reporting on our sustainability and carbon footprint goals.

Sustainability Area	Metric	% by 2030	
Energy Consumption KWh of energy used per tonne of product produced – Electricity usage using solar Electricity c02 carbon		B:832887kwh 20% Net Zero	
Carbon Footprint	Tonnes of CO2 equivalent emitted per product unit Tonnes of CO2 equivalent emitted per kilometer driven	Strive for 0% 30% reduction	
Water Use and Wastewater Management	Liters of Main water used per tonne of product produced – <b>Mains water usage and wastewater to drain</b>	Strive for 20% reduction <b>B:</b> 45,604 cubic M	
Supply Chain Sustainability	<b>Number of suppliers</b> compliant with our sustainability criteria	Strive for 100%	
People Engagement	Satisfaction from Employee engagement projects initiated per year	Strive for 80%+	
Environment	IED and EPA Licence compliance Implementation of pollinator plan	100% 100%	
Compliance in sustainability reporting	Fully compliant and measuring reporting on our sustainability and carbon footprint goals.	Strive for 100%	

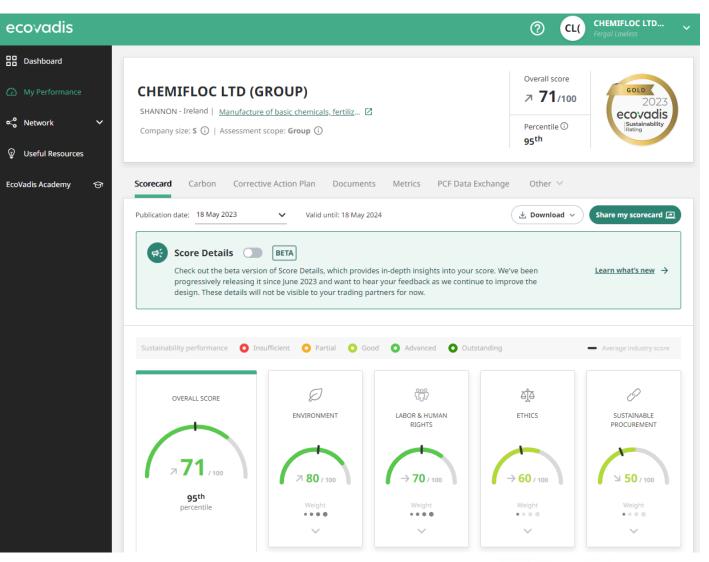


### **EcoVadis Score**

The EcoVadis sustainability assessment is a service to assess your company's material sustainability impacts based on documented evidence. The EcoVadis sustainability assessment is organized into four stages: Registration. Questionnaire. Expert analysis.

It is considered to be the standard within the chemical industry.

Chemifloc are currently in the 95<sup>th</sup> percentile.





### How we will govern this process

Each champion has been selected for their expertise and commitment to sustainability

They will **undergo specialised training** to further enhance their knowledge and leadership in their respective areas.

They will also participate in a weekly core meeting to drive and monitor progress against our sustainability plan.

#### Breakdown of responsibilities:

- **Evan** will lead our efforts in **Transport**. He will focus on making our transport logistics more sustainable.
- **Sarah Brew** is appointed as the champion for the **Environment**. Her role will cover all initiatives aimed at reducing our environmental impact.
- Lia Sheehan will take charge of integrating sustainability into our HR practices, focusing on training and employee engagement.
- Ronan Beaty, Julita Fox and Mike Hayes will jointly oversee Operations, ensuring that our production processes are environmentally friendly and efficient across all sites
- **Tracy Hynes** will be responsible for our suppliers and managing supplier adoption of carbon management by 2025 for Scope 3 reporting
- Shane Kenrick will be responsible for **Reporting**. He will maintain transparency and keep all stakeholders informed of our progress.
- The sustainability metrics will become part of our business scorecard to ensure we keep this in sight along with our business metrics.

These champions are not only responsible for their individual areas but are also key to ensuring that sustainability becomes the culture of our daily operations.



## Detailed Sustainability plans



TRANSPORTATION

**Be fuel efficient achieving** 20% reduction in emissions

• 30% of Fleet to HVO, or

Alternative by 2027

efficiency via truck route optimistation and

• 5% annual Fuel

driver training

• HVO or Alternative

Route optimistation

& refining routes

initiatives e.g., Telemetry



#### 2024 to 2030



**OBJECTIVES** 





OPERATIONAL Deliver net Zero by Implementing a Lean Strategy across our sites	ENVIRONMENTAL Be a leader in Sustainability, Implementing yearly initiatives	<b>PEOPLE</b> Champion well-being and <b>PEOPLE</b> centric sustainable practices	COMPLIANCE Be COMPLIANT in Scope Reporting
<ul> <li>20% Energy Reduction by 2027</li> <li>25% reduction in non-value add activity (Lean)</li> <li>Strive to achieve an Energy award by 2027</li> </ul>	<ul> <li>KEY RESULTS</li> <li>20% mains water reduction p/unit of production by 2026</li> <li>EPA License by Sept 2024</li> <li>Deliver the All-Ireland Pollinator Plan by Dec 2024</li> </ul>	<ul> <li>80% satisfaction from well-being and sustainability programs</li> <li>75% employee participation on Sustainability training programme by Dec 2025.</li> </ul>	<ul> <li>100% of sustainability data recorded by Dec 2027</li> <li>75%+ supplier adoption of carbon management by 2027.</li> <li>100% of transport suppliers adopt carbon management</li> </ul>
<ul> <li>Solar panels</li> <li>Lean strategy initiatives deployed across the sites e.g., Site layout</li> </ul>	INITIATIVES • Water conservation /Rainwater harvesting • EPA license review • All Ireland Pollinator Plan	<ul> <li>Environmental and Sustainability Programmes – mental health &amp; well-being</li> <li>Initiate sustainability training</li> <li>New Building for wellbeing &amp; collaboration</li> </ul>	<ul> <li>practices by Dec 2027.</li> <li>Measure Sustainability Data</li> <li>Ethical Supplier Sourcing Initiative</li> <li>Conduct a Transport Supplier evaluation.</li> </ul>







OBJECTIVES





			OBJECHVEJ		
Т	RANSPORTATION	OPERATIONAL	ENVIRONMENTAL	PEOPLE	COMPLIANCE
	e fuel efficient achieving 0% reduction in emissions	Deliver net Zero by Implementing a Lean Strategy across our sites	Be a leader in Sustainability, Implementing yearly initiatives	Champion well-being and PEOPLE centric sustainable practices	Be COMPLIANT in Scope Reporting
			<b>KEY RESULTS</b>		
	10% of Fleet moved over to HVO on a pilot by Dec 2024	<ul> <li>Solar panel assessment and cost benefit analysis across all sites completed by Dec</li> </ul>	<ul> <li>Set up infrastructure to capture roof water from the Shannon site by Dec 2024</li> </ul>	<ul> <li>100% Core team trained on Sustainability By Dec 2024</li> </ul>	<ul> <li>Scope 1 &amp; 2 sustainability data recorded by Dec 2024</li> </ul>
	Driver training completed by Dec 2024	2024 ∙ a Lean Champion onboarded	• EPA License by Sept 2024	<ul> <li>100% of Senior Management trained on Sustainability By Dec 2024</li> </ul>	<ul> <li>Supplier Sustainability criteria to be developed by May 2024</li> </ul>
	Telemetry business case to be developed and clients identified by Dec 2024	into the business to help with our reduction in non- value add activity by Dec 2024	<ul> <li>Deliver phase 1 of the All- Ireland Pollinator Plan by Dec 2024</li> </ul>	<ul> <li>Sustainable employee merchandise to be purchased by Dec 2024</li> </ul>	<ul> <li>Internal review of Supplier criteria to be completed by Dec 2024</li> </ul>
			INITIATIVES		
• 1	HVO or Alternative	<ul> <li>Solar panels</li> <li>Lean strategy initiatives</li> </ul>	<ul> <li>Water conservation /Rainwater harvesting</li> </ul>	<ul> <li>Environmental and Sustainability Programmes         <ul> <li>mental health &amp; well-being</li> </ul> </li> </ul>	<ul> <li>Measure Sustainability</li> <li>Data</li> </ul>
i	Route optimistation initiatives e.g., Telemetry & refining routes	deployed across the sites e.g., Site layout	<ul> <li>EPA license review</li> <li>All Ireland Pollinator Plan</li> </ul>	<ul> <li>Initiate sustainability training</li> </ul>	<ul> <li>Ethical Supplier Sourcing Initiative</li> <li>Conduct a Transport Supplier evaluation.</li> </ul>

Sustainability Area	Metric Description	КРІ		2022 (baseline)	2023	2024	2025	2026	2027
Carbon Footprint	Tonnes of CO2 equivalent emitted by Fuel used for Trucks	CO2 equivalent emitted by Fuel used for Trucks	Calc	1321					
Carbon Footprint Electricity usage – power emitted onsite Co2 Electricity Co2		Calc	234.8						
Carbon Footprint	Tonnes of CO2 emitted per tonne sold	Emissions per tonne sold – scope 1 & 2	Calc	0.0092					
Carbon Footprint	Tonnes of CO2 emitted per tonne sold	Emissions per tonne sold – scope 3	Calc based on assumptions	TBD					
Energy Consumption	kWh of energy used per tonne of product produced	20% Energy Reduction by 2027.	Solar panels	832887kwh					
Fleet Fuel	Transition of fleet to	30% of Fleet to HVO, or Alternative by 2027 5% annual Fuel efficiency via truck route optimistation and driver training	Fleet optimistation	16 Trucks Pilot in 2024					
Waste reduction		25% reduction in non -value add activity by 2027	Lean initiatives	TBD					
Water Use and Wastewater Management	Litres of water used per tonne of product produced	20% mains water reduction p/unit of production by 2027 through water conservation	Water management	45,604 cubic M – strive for 20% reduction					
Supply Chain Sustainability	Number of suppliers compliant with our sustainability criteria	<ul><li>75%+ supplier adoption of carbon management by 2027 for Scope reporting.</li><li>100% of transport suppliers adopt carbon management practices by Dec 2027.</li></ul>	Scope compliance 0%	TBD but Strive for 100%					
Employee Engagement	Number of employee engagement projects initiated per year	80% satisfaction from well-being and sustainability programs 75% employee participation on Sustainability training programme by Dec 2025.	Sustainable HR	0% participation – Strive for 75%+					
Social and Community Engagement		Deliver the All-Ireland Pollinator Plan	Environmental	0%					