

**flow
technology™**

Sustainability
Statement





Climate change is potentially the biggest challenge facing human-kind today. The World Health Organisation estimates that between 2030 and 2050 approximately 250,000 additional deaths per year will be associated with impact of climate change, and threatens to undo the last fifty years of progress in development, global health, and poverty reduction, and to further widen existing health inequalities between and within populations.

Throughout the last 45 years, Flow Technology has always believed that we have a responsibility to our customers, our employees, and to the communities in which we operate. Our business strategy is deliberately designed to ensure that we have a robust business that will continue to serve our growing customer base both in Ireland and abroad, to create local and long-term employment for our staff, and where practical to support our local communities and suppliers.

In 2023 the business generated 186 tonnes of CO₂e from our scope 1 and 2 emissions and as the business grows we expect these emissions will grow concurrently unless we take action. The growing significance and acceleration of the threat of climate change has motivated us to reexamine our business practices and develop this ambitious Sustainability Strategy to reflect our commitment to three ESG principles.

At Flow Technology, we acknowledge the threat of climate change, and we are committed to:

- Integrating sustainable practices into our business strategy and everyday business practices.
- Evolving our service and products to meet the changing needs of our customers.
- Reducing our scope 1 and scope 2 carbon emission intensity by 51% by 2030.
- Evolve our business and HR practices to ensure we are creating sustainable and diverse local employment and opportunity.
- Supporting our local communities, charities and suppliers.

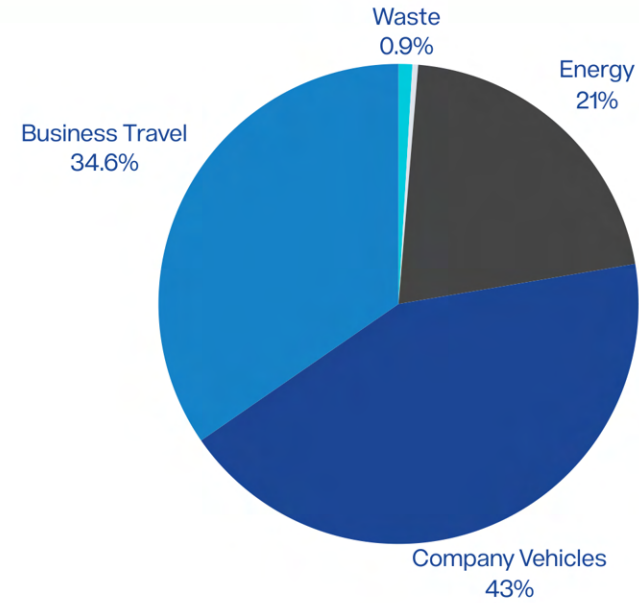
Kevin Whooley
Managing Director



2023 Carbon Footprint

2023 Emissions in Tonnes of CO₂ equivalent (tCO₂e)

■ Company Vehicles	121.4
■ Business Travel:	97.7
■ Energy:	59.3
■ Waste:	3.9
■ Water:	1.1
Total:	<u>283.4</u>



Scope 1: 140 tCO₂e



Scope 2: 46 tCO₂e



Scope 3a*: 98 tCO₂e

*Flow Technology is in the process of identifying and calculating the emissions in our wider Scope 3 supply chain.

**Scope 1&2
Emissions Intensity
tCO₂e/€m revenue**



7.8
tCO₂e/€m

2023 Carbon Footprint



A world class process engineering solutions business

What we do

From our beginnings in the Dairy industry, we have grown and diversified to become one of Ireland's leading process engineering specialist companies providing the following range of services into the Biotechnology, Pharmaceutical, Distillery, Food and Beverage Industries.

- Turnkey Process Engineering Systems
- Site Support Services
- Process Equipment Solutions



2,600m2
Workshop &
Office



1000+ projects
completed



45 years in
business



96 Staff



16% Women
84% Men



Trusted by:
8 of the World's
top 10 Biotech
Companies



8 ISPE FOYA
Category
Winning
Projects



9 Nationalities
represented



Flow Technology's Responsibility

Climate change is the defining issue of our time.

The climate crisis is causing natural disasters that have already resulted in billions of dollars in damage and mass population migrations. It is jeopardising access to basic needs and services such as health, food, water and energy for billions of people – generating further social inequalities. The biodiversity crisis, driven by changes in the usage of land and sea, direct exploitation of natural resources, pollution, climate change and invasive species will further destabilize our economies.

In 2015, in response to these challenges, the world leaders adopted the Sustainable Development Goals (SDGs). Seventeen goals address the global challenges we face, to eradicate poverty, promote peace and equality, allow sustainable prosperity and protect the environment.

For business, there is a clear imperative to play a part in delivering the SDGs. Pressure is growing on companies from their employees, their customers and their investors to address sustainability and to identify the positive and negative impacts of activities on immediate stakeholders and wider society.

At Flow Technology, our aim is to ensure our activities benefit our employees, stakeholders, and customers, while improving the quality of life within our community, and doing our part to conserve the world's natural resources. We are just starting out on our sustainability journey. We have some work done, a lot more to do!

We are making sustainability central to our strategic purpose. We have developed a sustainability charter which we believe is a realistic and considered roadmap aligned with the UN Sustainable Development Goals (SDGs) and Irish and European Union (EU) climate policies. The SDGs will require us to adapt, be innovative and accept some changes. However, we are passionate about playing our part in the shift towards a cleaner, safer and fairer world.

If we are to succeed, we recognise that building a culture of sustainability within FT will be crucial.

Leadership buy-in is critical and must be both vertically and horizontally imagined. Our employees will play an essential part in delivering our sustainability strategy. We hope to achieve this by supporting and empowering employees, by the establishment of a Sustainability Working Group with members drawn from across the organisation, by building awareness, by knowledge sharing and by providing education and skill development opportunities.

We understand that an effective sustainability strategy will drive the company's competitiveness, innovation and resilience for years to come!

Sustainability Strategy



Our sustainability strategy is centred around the three ESG principles (Environment, Social, Governance) and is aligned with the United Nations Sustainable Development Goals (SDGs). Our targets and sustainability initiatives are framed within 4 key pillars, namely:

1

Climate Action



2

Biodiversity & Caring for the Environment



3

Employee Welfare



4

Empowering Local Communities



#1 Climate Action

Flow Technology will instigate a range of realistic and achievable measures to reduce our carbon emissions intensity by 51% by 2030, and lead us towards 'net zero' as soon as is practicably possible. These measures include:

1. Establishment of Scope 1, 2 & 3 Greenhouse (GHG) emissions:

- Scope 1 direct GHG emissions from all sources controlled or owned by Flow Technology (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles).
- Scope 2 indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling (i.e. Flow Technology's energy use).
- Scope 3 emissions that occur because of Flow Technology's operations, but from sources not owned or controlled by the company.

2. Incorporating 'sustainability by intent' into our projects:

- Develop cleaner technologies & solutions which reduce the environmental impact of not just ourselves but our customers as well.
- Measurement of the embodied carbon of typical process skid systems.
- Employ energy efficient innovations wherever the opportunity arises.

3. Adoption of Energy Monitoring and Energy Reduction Technologies:

- Procure & install Energy Metering systems.
- Installation of preferred renewable energy solutions.
- Installation of water saving devices, solutions, rainwater harvesting tanks.
- Electrification of company fleet.

4. Management of Supply Chain:

- Carefully choosing partners who share sustainability values.
- Assist suppliers in transitioning to zero carbon fuels & responsible sourcing.

5. Offsetting unavoidable emissions:

- Through internationally accredited carbon reduction schemes.

Our Decarbonisation Toolkit



SEAI Energy
Reduction Schemes



Water - Reduce,
Reuse, Recycle



Heat Recovery
- Heat Pumps



Low emissions
Fleet



Renewables
- Solar/PV



Green Electricity



Carbon off-setting
- certified forestry
schemes



Installation of
Power Metering



Supply Chain
Analysis



Energy Efficient
Design



2030
Targets

Reduce Carbon
intensity by 51%



Commit to 100%
renewable energy
for all operational
electricity



Reduce our
potable water use
intensity by 51%



#2 Biodiversity & Caring for the Environment

Biodiversity, often referred to as the ‘web of life’, is declining at an alarming rate with some scientist predicting mass extinction events on a scale not seen since the last ice age. Flow Technology knows it has a moral and vested interest in protecting this crucial but vulnerable asset that delivers wide ranging benefits to societies and economies alike. The measures we aim to take to protect, restore and promote the sustainable use of ecosystems are as follows:

1. Waste Reduction

- Promoting a culture of recycling & reuse & waste avoidance through continuous education, messages, toolbox talks etc.
- By targeting the largest waste streams generated.
- By embedding circular economy principles into our planning and operations.
- Reduce food waste; source local (reduce # of miles the food has travelled)

2. Protection and Enhancement of Biodiversity:

- Engagement with organizations such as National Biodiversity Data Centre, Business in the Community Ireland (BITC), Irish Wildlife Trust, Leave No Trace Ireland.
- Sponsor a 'Grow at School' programme <https://giy.ie/>
- In lieu of Christmas Corporate Gifts, continue Native Tree planting initiative with registered/certified body (HomeTree.ie)
- Offsetting our unavoidable emissions through internationally accredited carbon reduction schemes.
- Offsetting of embodied carbon through accredited native tree planting schemes, and other sequestration techniques.
- Deploy local biodiversity conservation and restoration programs at our site. Utilize FT lands to create 'bug hotels', bird boxes, beehives/apiary (pollinators) and wildflower meadows.
- Identify additional lands to use for diversity.

Our Biodiversity Toolkit

Circular Economy



Source Local



Continuous Education



Waste Reduction Schemes



Irish Wildlife Trust



National Biodiversity Data Centre



Carbon Off-Setting



Leave No Trace Ireland



All-Ireland Pollinator Scheme



Native Tree Planting



2030 Targets



30% Reduction in waste to landfill



Biodiversity Targets to be established following consultation with national representative bodies.



#3 Employee Welfare



Flow Technology Team at a resilience seminar held in our workshop

Flow Technology's most important resource is our employees. Therefore, through a commitment to 'Diversity and Inclusion', Flow Technology aims to create a work environment that:

- Contributes to the physical and psychological wellbeing of everyone.
- Fosters a culture where our colleagues & clients feel valued, respected and supported.
- Achieves representation within our leadership that reflects the gender & racial distribution of our employee populations.



Diversity, Equality and Inclusion

FT's Employee Handbook contains an 'Equality Statement' which spells out the company's commitment to equality of opportunity for existing and potential employees and promotes a work environment that is free from discrimination

in the following areas: gender, marital status, family status, sexual orientation, religious belief, age, disability, race, membership of the travelling community.

We believe that everyone within the Company should be treated with dignity and respect and thus are committed to providing a workplace free of bullying, harassment and sexual harassment.

FT aims to engage with the Irish Centre for Diversity to develop our diversity and gender balance strategies and to ensure our recruitment, retention and progression processes are inclusive.



Sustainability Statement



Employee Wellbeing & Development

As a responsible employer, Flow Technology is committed to taking a proactive approach by creating the environment and providing resources for staff to maintain and improve their health and wellbeing. Flow Technology's employees can avail of the following benefits & supports:



Flexible working hours and blended remote working opportunities.



Further education and training support through FT's 'Educational Assistance Programme'.



Graduate Mentorship Programme & Leadership Development for Engineers and Senior Craft personnel.



Maternity, Adoptive, Paternity, Parental, Carers and Compassionate Leave entitlements.



Active sports & social club.



Employee Assistance Programme (Employee Wellbeing Services).



Physical & Mental Health Screening programmes.

#4 Empowering Local Communities

Flow Technology is committed to supporting local and regional development by creating jobs and supporting the local economy in which we operate. The community where we live and operate are key stakeholders for Flow Technology. Working with local suppliers, engaging with schools and donating time and money to community organizations helps improve these communities.

Flow Technology regularly donates to sports associations, charities, events and the local cultural landscape with the objective of supporting worthy social causes and protecting and preserving local culture.

Flow Technology is actively involved in the promotion of engineering in local schools through the provision of technical equipment & scholarship programmes.

Flow Technology has an active Charity Group which enables our employees to give back to their communities through various charity fundraising and sponsorship opportunities. We place a particular emphasis on supporting the following charities, sports organizations and schools;

St. Joseph's Foundation



Irish Men's Shed Association



St. Vincent DePaul



Lions Club



Gaelic Athletic Association



Football Association of Ireland



St. Mary's Secondary School



Charleville CBS Secondary School



Sustainability Statement



Sustainability Road Map Timeline

2024

LET'S DO IT

- Installation of renewable energy system.
- Monitoring of GHG/Water/Waste emissions.
- Focus on Scope 3 GHG emissions.
- Publication of 1st Sustainability Report.
- Calculation of embodied carbon in all process skids.
- Biodiversity improvements through accredited native tree planting and other employee-driven biodiversity initiatives.
- Waste monitoring & waste segregation initiatives.
- Delivery of Buffer Stock Blending offering.
- "Energy Efficient Design", "Circularity by Design".
- Engage with Irish Centre for Diversity

2026

FURTHER REDUCTIONS

- Achieve ISO 14001 status.
- Reduce potable water use intensity by 51%.
- Achieve Irish Centre for Diversity Bronze standard.

2030

A BETTER TOMORROW

- Reduce carbon intensity by 51% by 2030.
- Commit to 100% renewable energy for all operational electricity needs.
- Eliminate the use of fossil fuel in all company vehicles.
- Achieve Irish Centre for Diversity Silver Standard.

2023

FIRST STEPS

- Adoption of the Sustainability Strategy.
- Establishment of Sustainability Working Group.
- Basic Sustainability Training for all
- Establishment of Total Baseline GHG/Water/Waste Emissions.
- Tender for renewable and metering solutions
- Installation of Energy Metering devices.
- Introduction/continuation of Biodiversity Initiatives.

2025

STAY THE COURSE

- 30% reduction in waste to landfill.
- Investigate elimination of single use plastic.
- Endeavor to ensure 50% of fleet vehicles low/zero emissions.
- Embed circular economy principles into strategic business planning.



Our targets



Sustainability Statement

Action	Impact Target	Who	How will we achieve this	Target Completion Date	UN Sustainability Goals
Development of Flow Technology Sustainability Roadmap	Clear strategy, communicated to all stakeholders, on how Flow Technology will meet it's sustainability responsibilities.	Senior Management Team (SMT)	<p>Generation of S.M.A.R.T. Objectives</p> <ul style="list-style-type: none"> Buy-in from Senior Management Team (SMT) and key stakeholders. Appointment of Flow Technology Sustainability Champion Establishment of Flow Technology Sustainability Working Group (SWG) Staff Training on sustainability (Climate Ready Academy - Sustainability Pass); Explore Sustainability courses/qualifications for members of SWG. 	End 2023	
Establishment of Scope 1 and Scope 2 Emissions	<p>Establishment of Scope 1 direct greenhouse (GHG) emissions that occur from all sources controlled or owned by Flow Technology (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles).</p> <p>Establishment of Scope 2 indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling (i.e. Flow Technology's energy use).</p>	Flow Technology Sustainability Working Group (SWG)	<ul style="list-style-type: none"> Assign Internal/3rd party resources to establish baseline GHG emissions using available calculation tools Procure and install Energy Metering systems 	End 2023	
Establishment of Scope 3 Emissions	Establishment of Scope 3 emissions that occur because of Flow Technology's operations, but from sources not owned or controlled by the company.	Flow Technology SWG	Assign Internal/3rd party resources. (Note: Data for Scope 3 emissions can be difficult to obtain & quantify).	2024	
Calculate Embodied Carbon in in our process 'skid systems'	Establish the amount of carbon emitted during the construction of a typical process skid system. Embodied Carbon emissions are all greenhouse gas emissions that are released as part of making a product or service ready for consumption or use.	Flow Technology SWG	Assign Internal/3rd party resources (or combination of both) using available calculation tools	Start 2024	



Our targets

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Action	Impact Target	Who	How will we achieve this	Target Completion Date	UN Sustainability Goals
Reduce FT's carbon intensity	Reduce our potable water use intensity by 51% by 2026 (from baseline 2023 levels) <ul style="list-style-type: none"> Reduce carbon intensity by 51% by 2030 (from baseline 2023 levels) Commit to 100% renewable energy for all operational electricity needs by 2030 	Flow Technology SWG	Report on sustainability; Incorporate climate change as part of risk management; consider sustainability as a part of the organisations vision and mission. <ul style="list-style-type: none"> Continue to measure and report GHG emissions. Installation of preferred renewable energy solutions. Installation of water saving devices, solutions, rainwater harvesting tanks Employ energy efficient innovations wherever the opportunity arises. Conversion of company fleet to low/zero emissions. Carefully choosing partners who share sustainability values. Work with our supply chain to assist them in transitioning to zero carbon fuels. By offsetting our unavoidable emissions through internationally accredited carbon reduction schemes. 	2026 onwards	
Reduce waste levels	30% reduction in waste to landfill (from baseline 2023 levels)	Flow Technology SWG	<ul style="list-style-type: none"> Promoting a culture of recycling & reuse & waste avoidance through continuous education, messages, toolbox talks etc. By targeting the 5 largest waste streams generated. By embedding circular economy principles into our planning and operations. Reduce food waste; source local (reduce # of miles the food has travelled) 	2025	
Protection and Enhancement of Biodiversity	Targets to be established following consultation with national representative bodies.	Flow Technology SWG	Engage with organizations such as National Biodiversity Data Centre, Business in the Community Ireland (BITC), Irish Wildlife Trust, National Biodiversity Data Centre (NBDC), Leave No Trace Ireland. <ul style="list-style-type: none"> Sponsor a 'Grow at School' programme https://giy.ie/ In lieu of Christmas Corporate Gifts, continue Native Tree planting initiative with registered/certified body (HomeTree.ie) Offsetting our unavoidable emissions through internationally accredited carbon reduction schemes. Offsetting of embodied carbon through accredited native tree planting schemes. Utilise FT lands to create 'bug hotels', bird boxes, beehives/apiary (pollinators) and wildflower meadows. 	2023 onwards	



Our targets

Sustainability Statement

Action	Impact Target	Who	How will we achieve this	Target Completion Date	UN Sustainability Goals
Invest time and resources in developing cleaner technologies and solutions	<p>Become a leader in developing cleaner technologies and solutions.</p> <p>Development of 'green options' portfolio to offer clients/end-users showcasing the emissions reductions, pay back period etc.</p>	Process Engineering Team	<ul style="list-style-type: none"> Development of 'green procurement' policy Use of embodied carbon calculator Delivery of Buffer Stock Blending offering to the BioPharma marketplace (this technology results in significant reduction in energy/water/manpower requirements in a typical BioPharma facility). Communication to customers of other 'Green Design' initiatives e.g. adoption of heat pump technology for sanitary storage and distribution of Purified Water/WFI; e.g. adoption of 'single use' technologies Use of water saving cleaning technologies e.g. rotary jet and rotary spray cleaning devices Quoting customers 'green options' e.g. green steel premium 	2024 onwards	
Achieve gender equality and ensure we have a diverse & inclusive workforce.	Targets to be established following consultation with national representative bodies.	All	<ul style="list-style-type: none"> Targets to be established following consultation with national representative bodies. 	2024 onwards	
Promote good health & well-being for all our staff and the wider Charleville community	Not Applicable	All	<ul style="list-style-type: none"> Promotion of Engineering in local schools - provision of tech. equipment. Active FT Sports and Social club Active FT Charity Group (part. emphasis on supporting local charities & sports organizations) <ul style="list-style-type: none"> St. Joseph's Foundation www.sjf.ie, Irish Mens Shed Association https://menssheds.ie/, St. Vincent DePaul https://www.svp.ie/, Lions Club https://lionsclubs.ie/ 	2023 onwards	



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