



Environmental

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Our current target

Carbon – own operations refers to a company’s management of risks related to its own operational energy use and GHG emissions (Scope 1 and 2). It also includes part of Scope 3 emissions, such as transport and logistics. It does not include emissions in the supply chain or during the use phase/end-of-life cycle of a product.

Our ambition

Our CO₂e emissions reduction goal, working with the ESG Steering Committee, was updated in 2021. Our target is a 37.5% reduction by 2039 for our Scope 1 and 2 emissions compared to 2019 levels on a like-for-like basis. The following interim milestones have been established to track progress towards the target by 2039:

- **2029** – reduce Scope 1 and 2 emissions by 16% compared to 2019
- **2034** – reduce Scope 1 and 2 emissions by 26% compared to 2019
- **2039** – reduce Scope 1 and 2 emissions by 37.5% compared to 2019

Our current reduction target is based on absolute contraction consistent with the Paris Agreement ‘Well Below 2°C’ scenario and in support of SDG 13: Climate action. This firm approach means that we will compare our actual mass of emissions in 2039 to the baseline year of 2019, without adjustment for expected growth and increased production levels between 2019 and 2039.

In connection with our next (2022) Sustainability Report to be published in April 2023, we are evaluating the potential to revise our GHG reduction target in line with a 1.5°C model and consistent with the SBTi (science based targets initiative).

Link to SDGs



Link to strategy



Reduction in energy consumption

We have experienced a net reduction in the consumption of electricity over the last three years. The vast majority of this reduction is related to the COVID-19 pandemic and the microchip shortage, while a smaller portion is related to energy efficiency projects that have been completed worldwide.

Greenhouse gas emissions

Our GHG emissions have decreased from our 2019 baseline year significantly. This is due in large extent to volume reduction related to COVID-19 and the microchip shortage. We have also reduced emissions through the procurement of renewable energy, particularly in the UK and Spain.

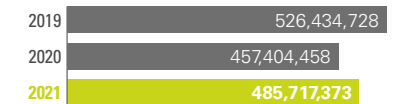
Energy intensity

Intensity factor (CO₂eT per €m revenue)



Electricity consumption

Global electricity consumption (kWh)



Scope 1 emissions

Global Scope 1 emissions (CO₂eT)



Scope 2 emissions

Global Scope 2 emissions (CO₂eT)



CASE STUDY

MIGREENPOWER RENEWABLE ENERGY PROGRAMME

The MIGreenPower initiative is one of the largest voluntary renewable energy programmes in the US.

It enables customers of DTE Energy in Michigan to attribute a greater percentage of their electricity usage to DTE's wind and solar projects, contributing towards a cleaner future for all as part of its wider strategy to reduce its global carbon footprint by investing in green energy and other sustainable solutions. We have committed to purchasing 100% renewable power for three manufacturing locations, two test centres, and corporate offices in Michigan. Our contract with DTE will begin in January 2024, with approximately 19% of its electricity use in North America being attributed to DTE's renewable energy projects.

Over the year, we will use an estimated 22m kWh of renewable energy under this initiative. This will have a significant impact on our greenhouse gas emissions – reducing our annual CO₂e emission by 15,600 metric tonnes, which is equivalent to eliminating more than 7.8m kg (17.2m lbs) of burned coal. More than 44,000 residential and 450 businesses subscribe to MIGreenPower, including prominent automotive players such as Ford Motor Company and General Motors. Since its launch in 2017, MIGreenPower subscribers have supported the transition to clean energy and improving the environment.



In addition to the many improvements we are making through the lightweight and energy efficient product lines we supply to our automotive customers, we have made a firm commitment to decarbonising our manufacturing and support business, reducing global greenhouse gas emissions and investing in green energy. Working with a renewable energy pioneer like DTE Energy, we can make significant strides towards our goals in North America, while also supporting community projects in Michigan. I look forward to seeing the positive benefits our enrolment will have in the future with all of our facilities in Michigan powered 100% by green energy.

Hans Dieltjens, President and CEO of TI Fluid Systems

Carbon – products and services

Carbon – products and services refers to a company's management of the energy efficiency and/or GHG emissions of its services and products during the use phase.

Our ambition

We provide product offerings to help reduce exhaust and evaporative emissions, as well as reduce the weight of material in the vehicle. Reducing weight directly affects the fuel efficiency for ICE powered cars and allows EVs to go further on a charge.

Link to SDGs



Link to strategy



Reduction in energy requirements of products and services

The Company has been awarded the London Stock Exchange's Green Economy Mark in recognition of the positive environmental impact our product technologies have by helping make cars greener. We are proud that our technology and products support the green economy, and that we deliver safety-critical technology for the environmental benefit of vehicles.

These products include lightweight pressure-resistant fuel tanks, lightweight plastic lines and connectors for coolant and refrigerants.

We also manufacture high-pressure fuel rails that allow for the optimisation of internal combustion engines and increased fuel efficiency.



Products for electric vehicles

Chassis thermal plastic manifolds, battery thermal plastic lines and connectors, aluminium lines and connectors, rubber lines.

€1bn
2021 BEV products lifetime revenue

30%
of 2021 awards

Our products are on
37%
of BEVs for nameplates launched during 2021



CASE STUDY

LIGHTWEIGHT PRESSURE-RESISTANT FUEL TANK

Proprietary design and manufacturing process for tank pressure resistance enables OEMs to reach partial zero evaporative emissions, and for hybrid applications, retain pressure build-up of fuel vapour when the vehicle is in hybrid electric mode and the engine is shut off.

Our 2009 Automotive News PACE award-winning ship-in-a-bottle (SIB) fuel tank changed the way plastic fuel tanks were made. By integrating the fuel system components into the tank via a preassembled carrier, TI Fluid Systems was able to develop the world's first plastic partial zero emissions vehicle (PZEV) fuel tank. Today, our new tank advanced process technology (TAPT) marks the next step in plastic tank production innovation for component integration in new tank solutions.

Our 2014 Automotive News PACE award-winning TAPT innovation is an adaptable blow molding manufacturing process that makes it possible to produce multiple types of fuel tanks for all types of powertrains – diesel, petrol, flex-fuel, PZEV and hybrid – from a single blow molding tool set design.

During TAPT, the parison is separated into two halves while a robot inserts the fuel system components into designated gripper areas of the tank assembly. The mold then closes to optimise the pinch joint flange. This process has fewer limitations as to size and complexity of shape.

These advanced methods enable TI Fluid Systems to set new standards in lightweight, flexible packaging technology with emissions integration.



Water use

Water use focuses on water scarcity and how effectively a company uses its water supply.

Our ambition

Reduce water use, especially in areas with high water scarcity risks. Protect the quality of the water in the communities that we operate and live in.

Link to SDGs



Link to strategy



Water recycled and reused

We are implementing a strategy to reduce the use of water and increase our conservation efforts, particularly in areas that have water scarcity issues. In 2021, the following water conservation targets were established for us to achieve by 2030:

- FCS Process Plants: 25% reduction from 2020 baseline (3.00% annual reduction)
- FCS Thermal Plants: 10% reduction from 2020 baseline (1.25% annual reduction)
- FCS Systems, FTDS Pump and FTDS Tank Plants: Change to 100% low-flow fixtures by 2030

Water recycled and reused

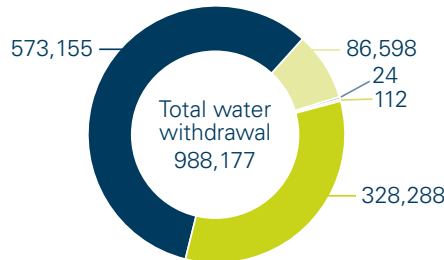
The majority of the water that we use is related to non-contact cooling. As such, much of this water is discharged to local sanitation departments.

We have several initiatives used to minimise the volume of water that we use in our production environment.

Water sources significantly affected by withdrawal of water

None.

Water withdrawal by source



● Groundwater ● Municipal water supplies or other water utilities
● Purchased water ● Rainwater collected directly and stored by the organisation ● Wastewater from another organisation

Total water withdrawal

by source in m³



Water consumption – FCS

in m³



Water consumption – FTDS

in m³

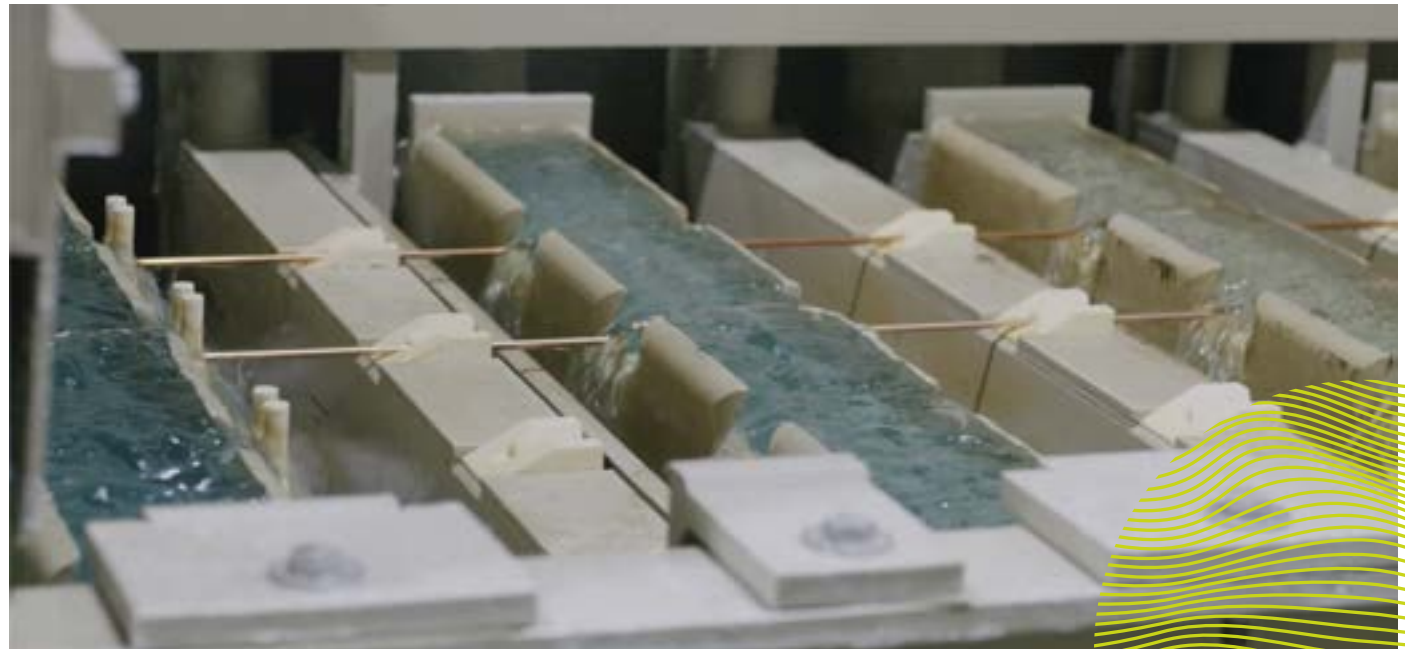


CASE STUDY

TUBE COATING TECHNOLOGY IN MICHIGAN

New high-speed zinc electroplating line installed in our Marysville, Michigan plant.

We continue to work diligently in the specification and commissioning of state-of-the-art technologies when making asset purchases. This strategic approach has resulted in a reduction of energy and water consumption, as well as waste generation. The recent installation of cutting-edge tube coating technology in our facility in Marysville, Michigan, USA, exemplifies our deliberate commitment to established ESG initiatives. This significant, critical investment improves product quality for our OEM customers and provides measurable reductions in several environmental-critical areas. We are now recognising zero solid waste and near-zero wastewater generated by this process. Compared to prior technology, a 35% reduction in chemical consumption and a 60% reduction in rinsing water significantly reduce resource consumption, a 30% reduction in the required electrical energy load yields a notable reduction in CO₂e emissions.



This new line, when fully functional in 2022, will reduce our plating chemical consumption and raw material purchase by approximately 35%, reduce our water consumption by 60%, and lower our electricity consumption for this process by 30%.