Sustainability Plan 2023







1. Morchem Strategy

Our sustainable pillars

2. Current Situation

Starting Point – Legislative Framework – Circular Economy



Morchem Strategy

Our sustainable pillars

Our sustainable pillars

MORCHEM



Our commitment is to reduce the industrial activity impact on the environment. Our vision, in four pillars: **PEOPLE, PLANET, PROFIT and PRODUCTS**

PEOPLE: SOCIAL COMMITMENT



PLANET: ENVIRONMENT



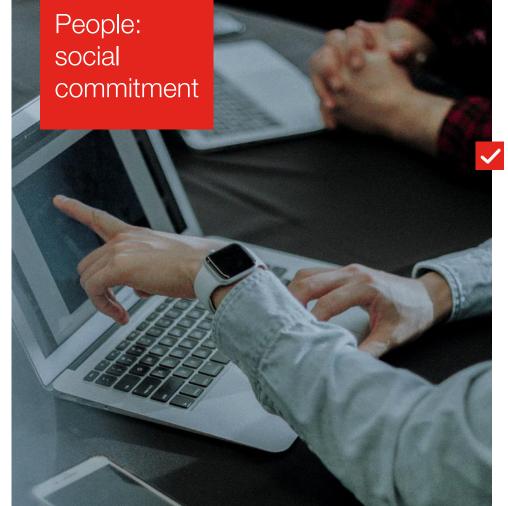


PROFIT & PROSPERITY: SUSTAINABLE ECONOMICS



PRODUCTS: SUSTAINABLE SOLUTIONS



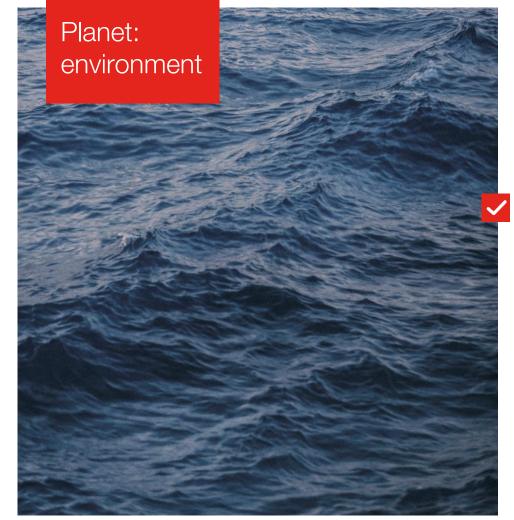






We care about our employees and society...

- "Always and continuously improving" program: we promote the participation of all our employees in a continuous improvement program by awarding and implementing the best ideas.
- Social benefits advantages and health insurance aids for all employees.
- Continuous training plan and internal promotions.
- Safety is a must: Latest fire protection systems in all our sites, chemical handlings trainings and risk and exposure measurements and assessments.
- Member of Sedex the leader of ethical trade's organization to improve working conditions in global supply chains.







We care about the energy impact and waste...

- Reduced water usage and consumption.
- Environmental and Quality Certifications: ISO 9001 / ISO 14001.
- Installation of new regenerative thermal oxidizer (RTO); one of today's most advanced air pollution control technology designed to treat volatile organic compounds (VOCs) via thermal oxidation.
- Fire protection systems and prevention of leakages protocol.
- Waste separation and collection for a proper recyclability.
- Waste appreciation (recycle and reuse).

Profit & prosperity: sustainable economics





No business is lasting possible without being responsible with environment and reducing the energy impact...

- Efficient Production: With the new plant in Guadalajara, we are reducing the energy impact (CO₂ footprint) on the manufacturing processes of our products.
- Efficient logistics.
- Increased efficiency of the energy input for heating and cooling of our processes.
- Solar Energy: 10% of the energy demand in Fontanar plant comes from solar energy (226 solar panels). Our target is to be able to increase it with new solar panel installations in both plants within the next years.







R&D activity is focused in creating new and more sustainable solutions by adding value to the end product...

- We are deeply working to find sustainable solutions: barrier solutions, adhesives and coatings for recyclable laminates and compostable adhesives.
- Friendly environmental solutions: Reduced VOC emissions adhesives with high solid content applications adhesives, low solvent content in our recipes, high performance solid free adhesives.
- Renewable raw material in our products: More than 20% of our raw materials are coming from renewable resources.
- Morchem is Platinum member in RecyClass



MORCHEM is focused in creating new and more sustainable solutions by adding value to the end product...

ENERGY IMPACT:

Sustainable adhesives without compromising performance.

RECYCLABILITY:

Adhesive and coatings for recyclable laminates with barrier properties.

Membership:

RecyClass



Current Situation

Starting Point / Legislative Framework / Circular Economy

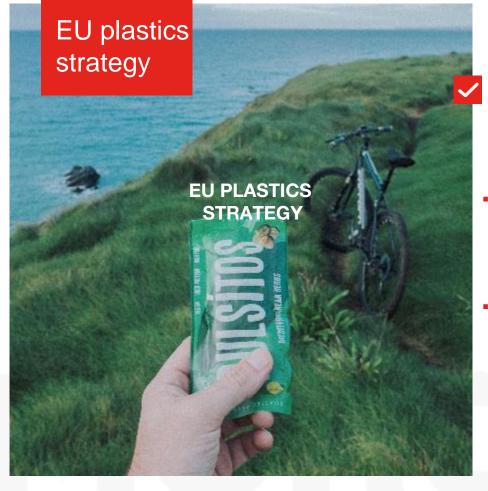
MORCHEM – SUSTAINABILITY PLAN 2023 10

Current situation

Big pressure on media

CIRCULAR ECONOMY: THE 2030 STRATEGY FOR PLASTICS





EU PLASTICS STRATEGY:

Packaging and Plastic Waste Directive (PPWD)

All packaging to be recyclable by 2030 incl.performance grades A>95%, B>90%, C>80%, D>70% and E<70%, with E non-recyclable and non-allowed to be placed on the market.

All plastic packaging to contain a minimum amount of recycled plastic by 1st January 2030 (from 10 to 35%).



EU PLASTICS STRATEGY:

New requirements of recyclability:

New design of the packaging & new challenges for the adhesives

All plastic packaging to contain a minimum amount of recycled plastic by 1st January 2030 (from 10 to 35% by 2030, even when contact sensitive plastic packaging.





MORCHEM is Platinum member of:

RecyClass

Recyclass is a consortium of companies working in a common initiative aimed to encourage plastic packaging recyclability, by developing the correct procedures for packaging design, with the objective of improving its recyclability.

RecyClass works on the development of scientific testing methods for innovative materials. The testing results are incorporated into the Design for Recycling Guidelines.

https://recyclass.eu/

Where we are





- Guidelines are <u>living documents</u>, as they are continuously updated based on new laboratory findings. The RecyClass Guidelines are based on a traffic-lights system.
- With regards laminating adhesives, the following guidelines have been published in January 2023 for the PE stream:

	YES - FULLY COMPATIBLE	CONDITIONAL - LIMITED COMPATIBILITY	NO - LOW COMPATIBILITY
Natural PE films	Laminating adhesives <u>approved as fully compatible</u> by RecyClass; To be tested if in combination with a barrier material	Aliphatic polyurethanes <= 2.5%; Laminating adhesives approved as limited compatible by RecyClass; To be tested if in combination with a barrier material	Aliphatic polyurethanes >2.5%; Aromatic polyurethanes & Water-based acryilics Laminating adhesives specifically developed for PET and/or Aluminium in combination with PE; Any other laminating adhesives (Epoxy, etc.)
Coloured PE films	Polyurethanes and water-based acrylics <= 3%; Laminating adhesives approved as fully compatible by Recyclass; To be tested if in combination with a barrier material	Polyurethanes and water-based acrylics 3-5%; Laminating adhesives approved as limited compatible by RecyClass; To be tested if in combination with a barrier material	Polyurethanes and water-based acrylics >5%; Laminating adhesives specifically developed for PET and/or Aluminium in combination with PE; Any other laminating adhesives (Epoxy, etc.)

MORCHEM has received the **FULLY COMPATIBLE APPROVAL** for a Recyclable SF Adhesive: MORCHEM PL 2727 AR + CF-740 R, when representing up to 4% of the total weight of the film.

MORCHEM – SUSTAINABILITY PLAN 2023 15

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Your Innovation Partner

thanks for your attention