

# PLASTIC ENERGY SUSTAINABILITY REPORT

FIRST EDITION - AUGUST 2021



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# Message from our CEO

2020 was the start of a decade that will likely define the future of our planet. Time is running out to stop the climate crisis and prevent anymore irreversible damage to the environment, meaning that the next 10 years will be critical to act and make significant progress to ensure that we can all live sustainably going forward.

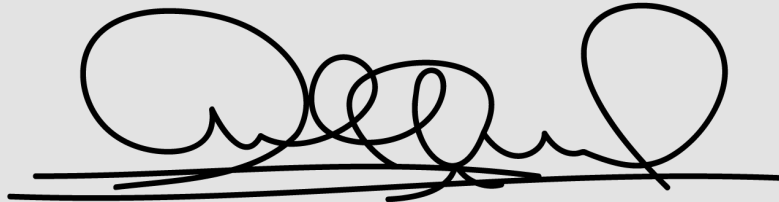
At Plastic Energy, our aim is to be part of the solution for a healthier and more sustainable planet. We are taking action to tackle a growing global crisis that has become a major threat to our ecosystem: the impact of plastic waste. Plastics can be useful in many ways in our everyday lives, but what we do with them after use has created a huge problem. Plastic Energy's goal is to redefine the plastic landscape by contributing to the circular economy and reducing the climate impact of plastic as a new resource. Our chemical recycling technology was created to help solve the problem of global plastic pollution by recycling (and upcycling!) a new range of plastic waste, so protecting our environment has always been a core motivation for our company. Now, we want to build on this, and ensure that our focus is on recycling plastics as sustainably as possible.

Plastic Energy was established 10 years ago, and we have seen major growth and development as a business since our inception. We started our journey as a small start-up developing a technology in the sustainability sector, and now we are maturing to the next stage, becoming an established and sustainable business. Good-will and trying to do something positive for the environment, however, does not automatically mean that a company is sustainable. This is a process that takes a conscious effort and a lot of ongoing and strategic work to succeed in this aspect. At Plastic Energy, we have taken the important step of adopting new sustainability values that will be rooted into every aspect of our company: environmental, social, and economic sustainability. The incorporation of these values will enable growth in a sustainable direction, which will be documented in our yearly sustainability reports.

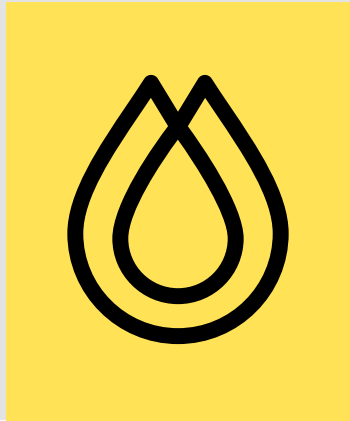
At Plastic Energy, we have learned over the past 10 years that impact takes time. Although gardens do not grow overnight, with time and dedication we will be able to reap what we sow. Our pathway to sustainability will be an ongoing journey for Plastic Energy, where there will be challenges and triumphs, and many learnings along the way. We have proved ourselves through our innovative technology, our commitment to Plastic2Plastic™ recycling, and our agreements signed with major players in the industry. Now we are advancing the delivery, construction, and execution aspects of our projects, all while ensuring that we maintain a positive climate direction in the development of our technology.

Plastic Energy is a dynamic company that is committed to putting sustainability at the forefront of our business. Our company's adaptability has never been put to the test more than during the past year of the COVID-19 pandemic. The pandemic challenged businesses around the globe, and we all had to get used to a new way of working effectively. I am proud to say that our team rose to this challenge and were spurred into dedicating even more time and energy into our company's growth and sustainability goals.

As we publish our inaugural sustainability report, I am confident that this is a positive step in the right direction for the future of Plastic Energy. As our company continues to grow and our technology evolves it will become even more important to keep sustainability firmly rooted in Plastic Energy's core values. Today, we have planted the seeds to create meaningful change.



**Carlos Monreal**  
Founder and CEO, Plastic Energy



# The Plastic Waste Problem

and current challenges



## NO TIME TO LOSE

Plastics became the king of resistant and low-cost materials **60 years ago**, and the production of plastics has increased more than 20 times since<sup>1</sup>. Our modern lifestyles thrive on the lightweight and durable protection that plastic packaging offers, improving food hygiene, reducing waste, and making packaged products more affordable. While plastic offers many benefits, the balance of the current production, consumption, and disposal levels is not sustainable.

While plastic recycling started as early as the 1970s in response to the growth in plastic waste, infrastructure to manage waste plastic across the world remains grossly inadequate. Currently, only **14% of plastic is collected to be recycled globally**, with the rest being incinerated, landfilled, or polluting the environment. Only 8% of plastic packaging waste is recycled into lower-value applications and 2% is recycled into the same or similar-value products<sup>2</sup>. Newspapers and social media for the past 3 years have shown the disaster of plastic pollution and its impact on wildlife and humans. The Ellen MacArthur Foundation report has highlighted that **every year, 8 million tonnes of plastics end up in our oceans**<sup>3</sup>. Pollution and its consequences affect us all, and in recent years, governments, media outlets and the public are all demanding a move towards a circular economy and a more sustainable use of plastics.

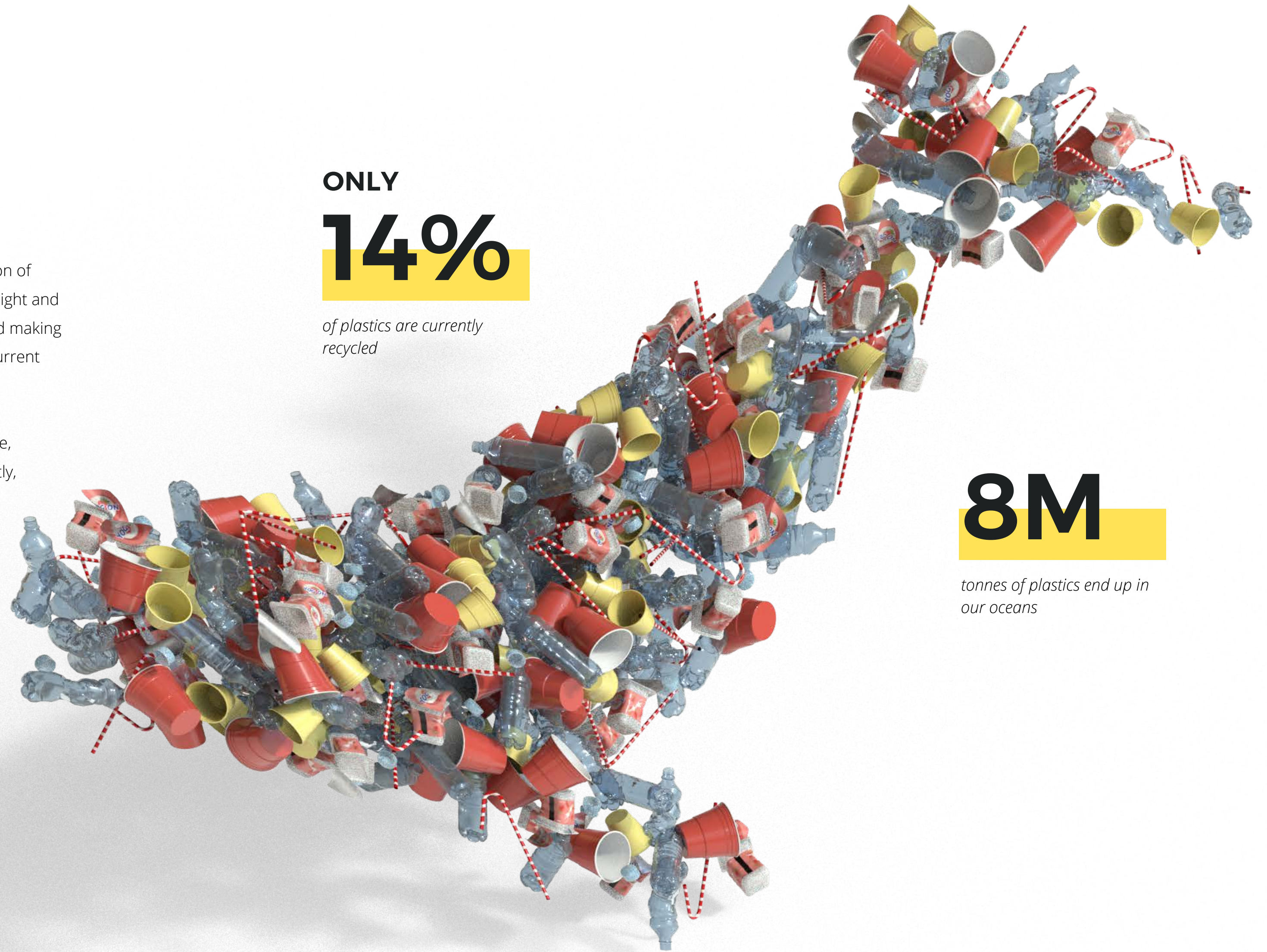
ONLY

**14%**

*of plastics are currently recycled*

**8M**

*tonnes of plastics end up in our oceans*



1. The New Plastics Economy: Rethinking the future of plastics & catalysing action, Ellen MacArthur Foundation, 2017
2. Project Mainstream analysis – for details please refer to Appendix A in World Economic Forum, Ellen MacArthur Foundation and McKinsey & Company, The New Plastics Economy — Rethinking the future of plastics, (2016, <http://www.ellenmacarthurfoundation.org/publications>).
3. The New Plastics Economy: Rethinking the future of plastics & catalysing action, Ellen MacArthur Foundation, 2017

## BOOSTING COLLECTION, SORTING, AND RECYCLING

The global rate of collection for plastic waste is stagnant at 14%<sup>4</sup> with geographical variation. In Europe, we see the highest plastic recycling rate at 33%, while North America<sup>5</sup> and the Asia Pacific region lag at around 9%<sup>6</sup>. **The China ban** on plastic imports has sent a wake-up call to developed markets to find domestic solutions to tackle their own plastic waste.

We have seen more efforts from the policy level across the world to encourage recycling and circular economy practices to achieve the recycling targets. **The strongest targets come from the European Union, where more than 50% of all plastic packaging must be recycled by 2025, and 55% by 2030**<sup>7</sup>. It has also put in place some measures to incentivise improved collection, sorting, and recycling, such as the Extended Producer Responsibility scheme, or taxes on non-recycled plastic packaging or virgin production without a minimum recycled content.

Although these taxes single-out plastic, they are simultaneously positive in fostering quick development of wider recycling infrastructure and technologies that create higher quality recycled content to be introduced into packaging.

Ultimately, tackling the plastic waste crisis can only be addressed by transforming the waste management system. This is even more critical in emerging economies, where the bulk of plastic leakage into the ocean takes place. Waste management systems need to be bolstered globally and shaped to incentivise collection, sorting, and recycling.

### EU TARGETS

# 50%

*of plastic packaging must be recycled by 2025*



4. The New Plastics Economy: Rethinking the future of plastics & catalysing action, Ellen Macarthur Foundation, 2017
5. Accelerating circular supply chains for plastics, Closed Loop Partners, 2018
6. What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050, 2018
7. European Commission (2018) European Strategy for Plastics in a Circular Economy.

## PUSHING FOR MORE RE-USE AND HIGHER RECYCLABILITY FROM THE PLASTIC VALUE-CHAIN

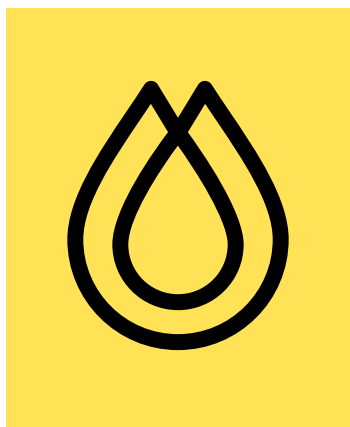
As a material designed for single and short-term usage, plastic has been designed to prioritise convenience as opposed to re-use. The cradle-to-grave lifecycle of plastic is damaging to humans and the natural environment. The shift to more circular models naturally implies moving plastic material away from current widely used linear models such as waste-to-energy, incineration and disposal, and landfilling, which are lower in the waste hierarchy.



To allow for a circular plastic economy, strong collaboration between the value-chain players and relevant stakeholders is critical. From the plastic supply side, producers and product designers need to consider the end-use of plastic products and incorporate this factor into the design and production process. The priority is to reduce the quantity of plastic packaging and prevent over-packaging. The second priority is to innovate and redesign in two ways:

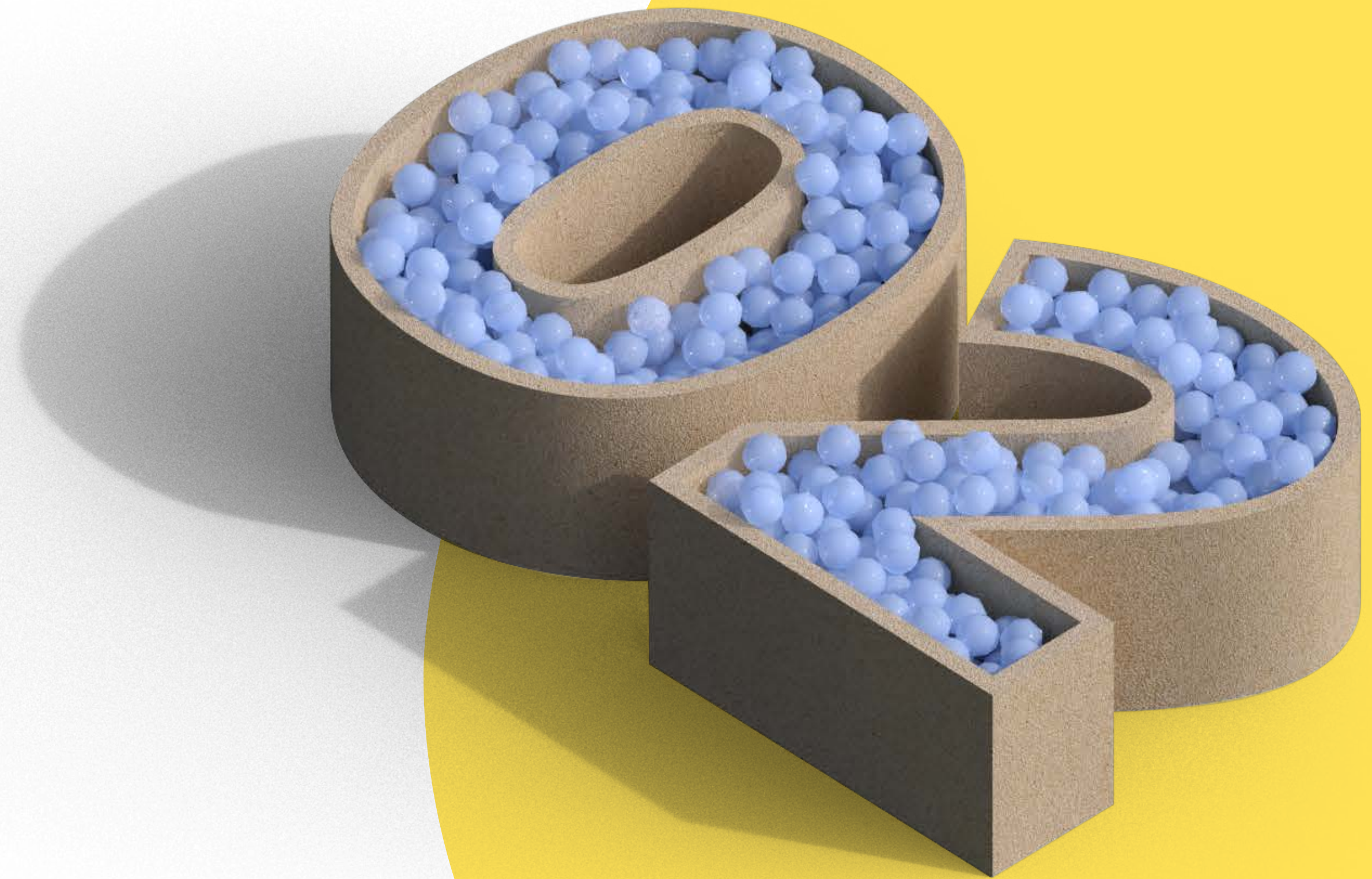
1. Remodel from a single-usage model to a re-use model.
2. Redesign to allow for higher recyclability and wider after-use applications of the plastic material.

While acknowledging and supporting the need to reduce and reuse, it is in this second category of recycling that chemical recycling and Plastic Energy play a key role.



# About us

Overcoming challenges





## COMPANY ACHIEVEMENT AND DEVELOPMENT

Plastic Energy is an innovative company at the forefront of the circular economy for plastics and the chemical recycling industry. Over the past 10 years, we have developed our own patented technology able to convert mixed plastic waste into a feedstock to produce virgin-quality recycled plastic.

We are unique in this industry with our operational experience in our two commercial plants in Almeria and Seville in Spain, running for more than 5 years.

### Yes, we are RECYCLING!

Plastic Energy has made the bold decision to focus its activity on closed-loop chemical recycling instead of on the production of fuels. By taking this strategic and circular approach, we have pursued essential research and development to improve the quality of our recycled oils, which enables the creation of virgin-quality recycled plastics.

Our team has worked diligently in collaboration with petrochemical partners to ensure that we meet the specifications of petrochemical crackers and create the optimal output (TACOIL) to create new plastic. Plastic Energy has succeeded in stabilising its TACOIL output at a commercial and industrial level through years of experience processing end-of-life plastic and fine-tuning the technology.

The virgin-quality recycled content or circular polymers created can be used by converters and brands in the same applications as virgin plastic.

*Since April 2020, 100% of the recycled oils we produce are used to make new plastics.*



## Development and upscale in Europe

This operational experience, validating our technology and strategic direction, has resulted in the establishment of long-term partnerships and agreements with key players in the industry.

Europe has been the most fitting environment for Plastic Energy to embark in our development and upscale of chemical recycling infrastructure due to multiple reasons. Our existing and upcoming plants are benefitting from a strong EPR scheme with waste collection and sorting efforts, and a clear leadership in the circular economy.

Our current European partners are as follows:

- **SABIC (JV):** 20,000t/a plant in the Netherlands (SABIC Plastic Energy Advanced Recycling B.V.) expected for end of 2022.
- **TOTALENERGIES (JV):** 15,000t/a plant in France expected for 2023.
- **EXXONMOBIL:** 25,000t/a plant in France expected for 2023, with a potential to expand to 33,000t/a.
- **INEOS:** MoU for a plant in western Europe.
- **NESTLÉ:** Feasibility study underway for a plant in the UK (exact location to be determined).

Not only are our two plants in Spain commercial, but they are also enabling the development of larger-scale plants, by testing both the plastic waste from different origins, and testing the suitability of the TACOIL for different petrochemical partners or sites on an industrial scale.



## Development in the rest of the world

### ASIA-PACIFIC

Asia is at the centre of the global plastic leakage problem, making it an important focus of Plastic Energy's development strategy. China's 2018 waste import bans have fuelled a growth in plastic waste exports to countries without sufficient infrastructure or resources to manage this waste, and which rely too heavily on the informal sector. In addition to these environmental and social challenges, the region is expected to see a growth in plastic packaging demand and production over the coming decades, with production and consumption of plastic set to outstrip Europe.

As a first-mover in the region, Plastic Energy has faced many **challenges**, such as the absence of adequate regulatory and financial incentives to **sort and to recycle**. We have gained the experience and expertise to create localised solutions for Asian countries, which have a different regulatory environment and recycling market to Europe or the US.

Since 2019, Plastic Energy has invested significant resources in understanding markets across Asia, and specifically in developing projects in Malaysia and Indonesia:

- **Malaysia:** Partnership with Petronas to build the first chemical recycling project in Malaysia with target start-up date of 2024.
- **Indonesia:** Plastic Energy signed an MOU with the West Java Provincial Government to develop a chemical recycling solution for Indonesia and has been working with key industry players to achieve this.

Plastic commitments in Asia-Pacific:

- **2018:** Plastic Energy and WWF-Indonesia committed to a partnership which aims to divert 100,000 tonnes of end-of-life plastic waste per year from the country's landfills and surrounding oceans by 2025.



**US**

The US is an important region for Plastic Energy's growth as it establishes its presence in another developed market. The country generates large amounts of waste, and export restrictions in recent years have the US focusing on how to better manage its waste domestically.

There have been ongoing efforts and attention to increase investment in sorting infrastructure and learning how to recycle more materials including low-grade plastic flexibles and films.

To this point, we are exploring opportunities in the US with several partners, as petrochemical companies and brand-owners develop and shape their sustainability journey. We plan to develop two to three plants in the US over the next 5 years.

***The US is quickly ramping up efforts to increase collection, sorting and recycling at the state level.***



# PLASTIC ENERGY HAS BEEN RECOGNISED FOR ITS LEADING POSITION IN THE INDUSTRY

Awards, events, and conferences have amplified the visibility of Plastic Energy's profile and of the chemical recycling industry.

- In 2020, Plastic Energy won three IChemE Global Awards for the Innovative Product, Sustainability, and Outstanding Achievement in Chemical and Process Engineering categories.
- Plastic Energy was recognised as a BNEF Pioneer for its leadership in innovative transformative technologies by BloombergNEF in 2020.
- Carlos Monreal was recognised as "a Player to Watch" by the ICIS as part of their Top 40 Power Players in the Chemical Industry (2020).
- Plastic Energy was a top three finalist in the Innovation Forum's Plastics Innovation Awards 2020.

Development and recognition have led Plastic Energy to be invited to participate in many national and international conferences:

14  
in 2019

28  
in 2020

with some notable events including:

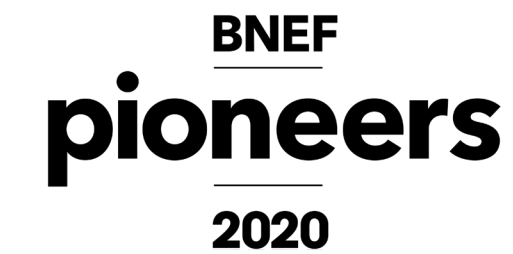
- ◇ CITEO Plastics Solutions Forum
- ◇ Plastic Free World Summit
- ◇ Sustainable Packaging Coalition – SPC Advance 2020
- ◇ Sustainability in Packaging Europe
- ◇ Asia Tech 2020
- ◇ Plastics Recycling Conference & Trade Show 2020



*In 2020, Plastic Energy won three IChemE Global Awards for the Innovative Product, Sustainability, and Outstanding Achievement in Chemical and Process Engineering categories.*



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*Plastic Energy was recognised as a BNEF Pioneer for its leadership in innovative transformative technologies by BloombergNEF in 2020.*



*Plastic Energy was a top three finalist in the Innovation Forum's Plastics Innovation Awards 2020*



Plastic Energy has also been included in some major publications, including:

- A feature about chemical recycling in the Financial Times.
- A chemical recycling video special for CNBC
- Mention in the Associated Press, New York Times, Wall Street Journal and Bloomberg about our collaboration with Sealed Air
- Mention in Bloomberg Green about our joint venture for a new chemical recycling plant in France with TotalEnergies



**Bloomberg**



**AP** Associated Press

**The New York Times**

**THE WALL STREET JOURNAL.**

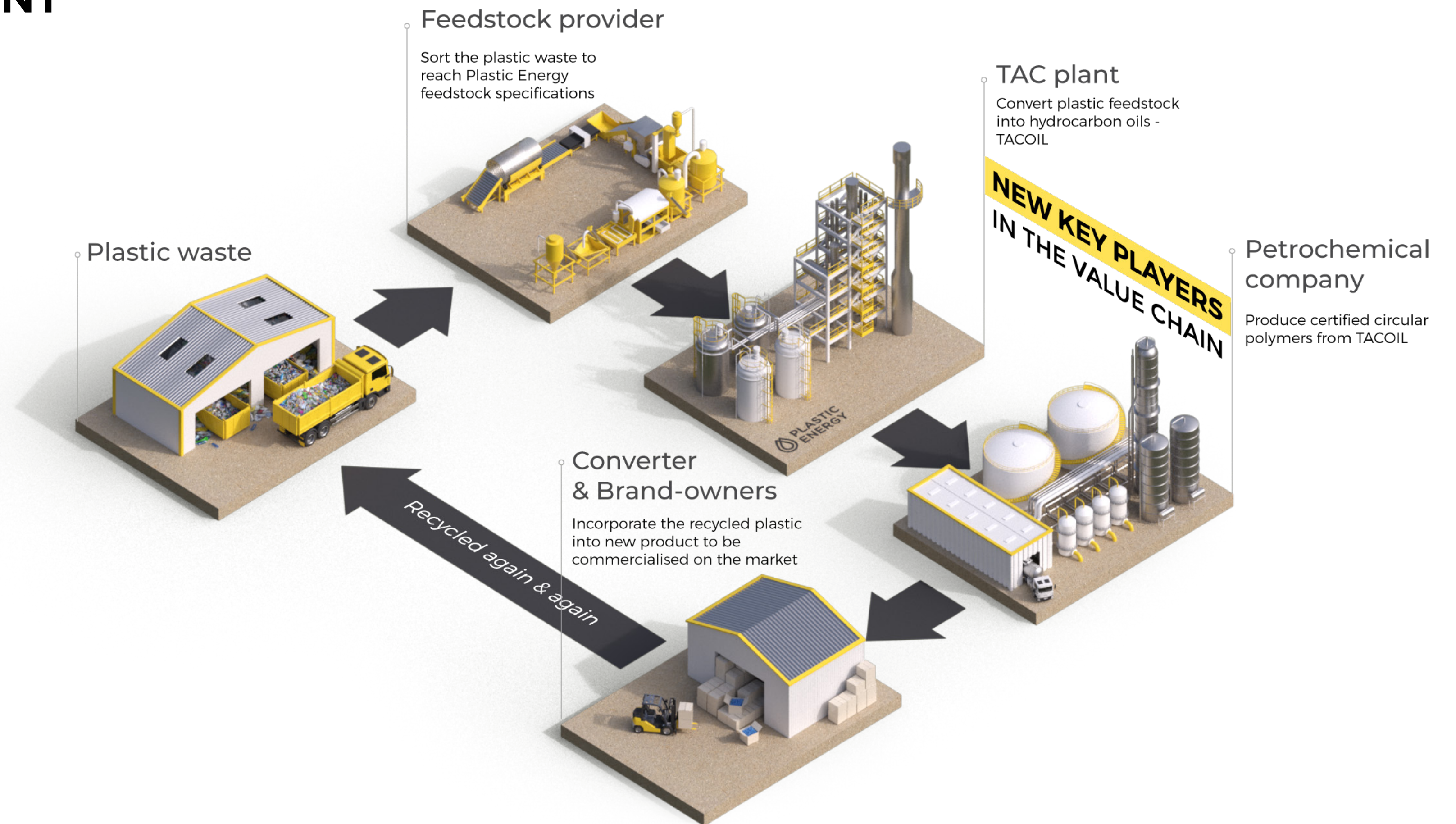


# VALUE-CHAIN COLLABORATION CRUCIAL FOR INDUSTRY DEVELOPMENT

## New link in the value-chain

Chemical recycling provides an opportunity for a collaboration across the entire value-chain, encouraging conversations and partnerships between sectors that may not have previously been connected, such as the waste management sector, the chemical industry, and consumer-facing brands.

Until recently with mechanical recycling, recycled pellets were sent directly from the mechanical recycler to the converter for use in appropriate applications. Through our process, new essential actors are brought into the picture: plastic producers. Plastic producers can incorporate the recycled plastic into new products, which can be recycled again.

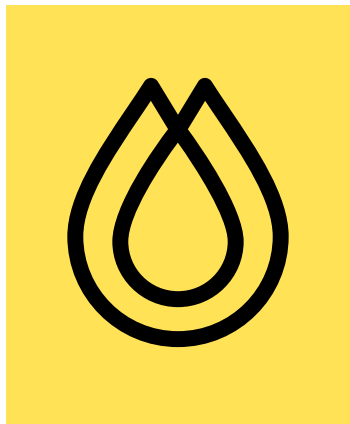


## Proving the concept for value-chain collaborations

At Davos in January 2019 in collaboration with our partner SABIC, we announced the first successful validation of this concept. Recycled content from end-of-life plastic waste was incorporated into food-grade packaging from Unilever, Vinventions, and WalkiGroup for the first time. The traceability of these polymers has been certified by the independent certification scheme, ISCC PLUS.

This collaboration enabled the launch and commercialisation of food-grade packaging with recycled content (rPP) on the European market in October 2019. Unilever released 600,000 tubs of Magnum with recycled content in Spain, Belgium, and the Netherlands, and upscaled this commercialisation to 7 million tubs on the European market in 2020. In 2021, this is expected to be rolled out globally.

This proof of concept has made this process and its promise a reality, and has also created a blueprint for other companies to follow.





# PRODUCTS MADE FROM OUR TACOIL

We decided to take the proof of concept further by taking a company's defined waste plastic and turning it back into a food-grade product for them to use.



i. Commercialisation of Magnum ice cream tubs and Knorr pots made with recycled content on the European market



ii. Philadelphia cream cheese packaging in Europe will be made with recycled materials starting in 2022



iii. In 2021 Vinventions launched its Blue Line of wine closures made from recycled plastic



iv. In 2020 REN Clean Skincare used recycled resins in its packaging for Evercalm Global Protection Day Cream



v. The Tupperware® Eco+ Straw Set was the brand's first product to use sustainably sourced food-safe material made out of recycled plastic



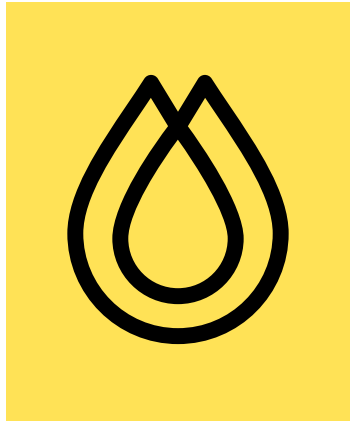
vi. Full closed loop example using post-consumer plastic from Tesco which was turned into cheese packaging



### Case Study: Closed-loop Collaboration

A recent announcement that represents a working example of this concept, is the launch of a closed-loop pilot project between Plastic Energy, Sealed Air, SABIC, Tesco and Bradburys Cheese, to create the first recycled food-grade plastic film made from materials returned by customers. Consumers deposited used flexible food packaging in Tesco stores, which was then transported to Plastic Energy to be chemically recycled into TACOIL. This TACOIL was processed by SABIC, who turned the oil into recycled polymers, which Sealed Air then used to create plastic packaging for Bradburys Cheese, which was sold on Tesco's shelves.

These examples show how a value-chain collaboration can contribute to plastic waste reduction, as well as work towards the creation of a circular economy for plastics.





**Sealed Air**

2415

## Driving the circularity of plastic packaging

Many global companies have made a commitment that 100% of their plastic packaging will be recyclable and will contain recycled content.

In 2020, Plastic Energy signed a collaboration agreement with Sealed Air to further develop and support designing processes and products for circularity. The goal of the collaboration is to help brands incorporate recycled content back into their packaging, while expanding the range of materials that are collected and recycled. This agreement and associated milestones affirm the importance of value-chain collaboration.

Assessing the recyclability of plastic structures through our technology is helpful to support our partners in understanding which plastics we can recycle, how to define and expand the range of accepted plastic waste types, and how to design modifications needed for plastics that are today, too complex to be recycled. This, in turn, shows how chemical recycling can enable the circularity of plastic packaging.



## STAKEHOLDERS' ENGAGEMENT TO DETERMINE THE DIRECTION OF TRAVEL

### Advocacy on chemical recycling is making the field more visible to policymakers

#### EU

With the breakthrough of chemical recycling technologies and their growing relevance through the plastic to plastic conversion, the lack of policy clarity in European legislations has become one of the industry's main concerns.

With its position as a leader in the field of chemical recycling, Plastic Energy takes its role seriously and has a core responsibility to participate actively in advocacy activities and stakeholder discussions, to inform on the progress of the industry and share experience of real-life data operations.

To represent the chemical recycling industry, Plastic Energy, along with a few other chemical recyclers, co-founded Chemical Recycling Europe (ChemRecEurope) in January 2019, with the CEO of Plastic Energy, Carlos Monreal, as

its President. Through Chemical Recycling Europe, we have supported the growing understanding of these technologies across the value-chain, along with policymakers and NGOs,



and have brought this solution to the front of the agenda on plastic recycling. This demystification process has involved defining "chemical recycling", advocating for a fair recognition of chemical recycling within recycling rates and recycled content methodologies through published position papers, and the organisation of various informative events and webinars. Through ChemRecEurope, Plastic Energy has been active in bringing the value-chain together to support both an increase in recycling and - better quality - recycling.

We are an active participant with the European Coalition on Chemical Recycling, founded in March 2019, gathering European associations with an interest in chemical recycling with the aim to contribute to the EU Circular Plastic Alliance (CPA) and define an industry-wide position on chemical recycling and its integration into the current system. ChemRecEurope is also participating in multiple groups of the CPA with the aim to ensure that 10 million tonnes of recycled plastics find their way into new products by 2025.



After early work on recognition of the importance of chemical recycling, Plastic Energy joined the European Polyolefin Circular Economy Platform (PCEP) in May 2021. In addition to focusing on the type of plastic we recycle, polyolefins, this platform brings together the full value-chain for these polymers to enhance value-chain collaboration with a clear aim of circularity.



#### US

In 2021, with the development of our activity in the US, Plastic Energy joined the Advanced Recycling Alliance for Plastics (ARAP), representing chemical recyclers in the US, and the Sustainable Packaging Coalition, to support US advocacy across the value-chain.



## NGO engagement

We have engaged in discussions with NGOs to mutually understand each other's position on plastic recycling. This has led us to sign the New Plastics Economy Global Commitment with the Ellen MacArthur Foundation. As part of the signing, Plastic Energy has committed to convert at least 300,000 tonnes of low-value plastic waste into feedstock for new plastic manufacturing (Plastic2Plastic) by 2025.

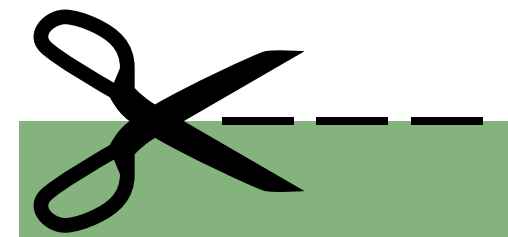


Plastic Energy signed the New Plastics Economy Global Commitment

Plastic Energy is a Platinum Partner of Waste Free Oceans, a foundation working to end ocean pollution by partnering with recyclers, converters and brands to collect and transform ocean plastic.



In the same vein, Plastic Energy joined the UK Plastics Pact led by WRAP, and agreed to work towards their four main objectives:



Eliminate problematic or unnecessary single-use packaging through redesign, innovation or alternative (reuse) delivery models.

**100%**

100% of plastic packaging reusable, recyclable or compostable.

**70%**

70% of plastics packaging effectively recycled or composted.

**30%**

30% average recycled content across all plastic packaging.

## GOALS

### MARKET EXPANSION

By 2030, we aim to process up to 5 million tonnes of plastic waste per year across Europe, Asia and the US

### SUSTAINABILITY

Establish a climate action and ESG roadmap by end of 2022

### CIRCULAR ECONOMY

We will continue to support the circular economy for plastics through our recycling infrastructure development, our involvement in policy and advocacy, and through value-chain collaboration



# Our sustainability strategy

Taking action



At Plastic Energy, our aim is to be part of the solution for a healthier and more sustainable planet. We started our journey as a small start-up developing a technology in the sustainability sector, and now we are maturing to the next stage, becoming an established and sustainable business. We have taken the important step of adopting new sustainability values that will be rooted into every aspect of our company: environmental, social, and economic sustainability. The incorporation of these values will enable growth in a sustainable direction, which supports the UN Sustainable Development Goals and the Ten Principles of the UN Global Compact.

### About the United Nations Global Compact

As a special initiative of the UN Secretary-General, the United Nations Global Compact is a call to companies everywhere to align their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption, and to take action in support of UN goals. Plastic Energy Global has officially become a signatory for the UN Global Compact in July 2021. We are pledging our support to uphold the Ten Principles and to report annually on progress made in support of the initiative through the mandated "Communication on Progress". Our progress for 2021 will be included in next year's sustainability report.

**WE SUPPORT**



## SUPPORTING THE UN SUSTAINABLE DEVELOPMENT GOALS (SDGs)

Plastic Energy delivers fundamental benefits to wider society both directly and indirectly. Environmental and social impacts on society are greatly interlinked – while Plastic Energy primarily provides a solution to a global environmental challenge, it also simultaneously benefits wider society.

### SDG 13 – Climate Action

Chemical recycling clearly supports climate action goals by reducing GHG emissions in our environment, when compared to its current alternatives, and reducing the currently high risk of environmental leakage and unsustainable approaches associated with landfills and dumpsites.

### SDG 12 – Responsible Production and Consumption

Plastic Energy has worked on educating people on the power of circularity and the need to make the most out of our planet's resources – moving away from 'waste' and toward 'resources' by recycling plastics.

### SDG 9 – Industry, Innovation, and Infrastructure

Plastic Energy has demonstrated how the power of technology can be used to do good. By building recycling infrastructure, we will contribute to solving the plastic waste problem through local solutions.

### SDG 8 – Decent Work and Economic Growth

The development of each plant directly creates local jobs within the chemical recycling plants, as well as indirectly creates jobs in the surrounding area (logistics, construction, transport...). This will bring social and economic benefits to society.

### SDG 14 & 15 – Life Below Water and on Land

Through the implementation of chemical recycling and the reduction of plastics entering the natural environment on land and sea, we protect wildlife from ingesting or dying from plastics/microplastics, and protect communities living off marine life.

### SDG 3 – Good Health and Well-Being

It is generally understood that reducing plastic mismanagement and land/water pollution leads to improved well-being and health, giving greater access to clean water and natural environments. As Plastic Energy develops plants in the Global South (Asia), notable social benefits include the formalisation of the waste management sector and the social, economic and health benefits associated with it.

## SUSTAINABLE DEVELOPMENT GOALS





## SAFETY

### Safety First

Our technology contains a chemical and thermal process, which needs to be managed properly to avoid safety risks. Plastic Energy's sense of global responsibility includes a strong dedication to health, safety and the environment (HSE) and an abiding belief in the company's fundamental approach to safety, including:

- HSE being a corporate core value and a condition of employment
- The belief that no job is worth a loss of life or injury
- ZERO Safety & Environmental Incidents as an attainable objective

We believe that a strong safety culture improves product quality and operational and financial performance. As a result, Plastic Energy's workforce always strives to protect the health and wellbeing of our employees, preserve the environment, and build productivity and morale. It creates a work environment that aims to be among the safest. Plastic Energy Ltd. became a member of the British Safety Council in January 2020 to strengthen its commitment to health and safety.

### Establishing the right structure

As a growing company, it is key for us to establish HSE processes and procedures as a central part of the company's culture to prevent the risk of injury, ill health and environmental impact for the construction and operation of our plants. Plastic Energy directly employs experts in design and safety that have experience within the petrochemical and construction industry. Our management team's commitment, training, awareness and discipline also continues to push HSE forward by identifying and reducing risks to the lowest practical levels, maintaining awareness of HSE issues, adhering to proven HSE principles and seeking continuous improvement in every activity.

This focus and our expert credentials have allowed us to be trusted by major global clients following full due diligence.

In 2020, we reinforced our group-wide overseeing of HSE by taking on board a Group Health and Safety Manager with a long experience in the industry, reporting directly to our Executive Vice President and covering all aspects of the business. This has improved our efforts to harmonise Plastic Energy's HSE policy to the highest standard. This work has incorporated our pre-existing records on HSE at the plant level since they have been in operation. Each plant has a nominated safety lead that reports to the Group HSE Manager. Local HSE committees include a range of employee representatives and can empower employees to raise safety concerns.



## Keeping plant workers safe

Following the Spanish national law *Ley 31/1995 de Prevención de Riesgos Laborales (modified by Ley 54/2003)*, we have taken clear actions to duly respect the law and create a safe working environment. We address risk assessment, training, and PPE usage as part of normal safety procedures and issue updated HSSE policies on a continuous basis to ensure that our plants are safe.

Plastic Energy hired an independent auditing company to assess its adherence to health and safety measures and ensure that everything is designed to minimise risk for each employee based on the position, task, and process of activities in both of our plants in Spain. This study has been supplemented by an analysis of preventive actions.

Finally, the plant HSE lead undergoes a monthly security inspection to ensure that all sections of the plants and auxiliary facilities conform to Spanish safety regulations.

**RISK ASSESSMENT,  
AUDITS, AND  
PREVENTION**



 **PLASTIC ENERGY** | World leader in chemical recycling



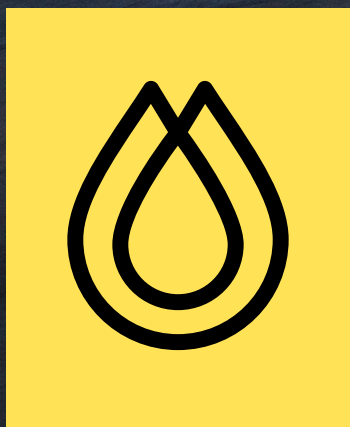
**LAYING THE  
GROUNDWORK TO  
ACHIEVE THE HIGHEST  
POSSIBLE SAFETY  
STANDARD**

**RIGOROUS ONGOING TRAINING**

Employees in the plants are required to complete a mandatory initial training as well as regular trainings alongside the regular assessment of risks. While the initial training covers the prevention policies and the emergency plan, the ongoing training is specialised for each employee and their specific tasks, risks and safety prevention measures. The continuous training focuses more specifically on prevention updates or safety aspects for new machines or technological aspects, and on regular reminders on first aid and emergency procedures.

**KEEPING OUR VISITORS SAFE**

We have established strict rules and mandatory procedures to keep our visitors safe during plant visits while minimising disruption and safety of the normal plant functioning. Each visitor receives a full safety briefing prior to entering the plant and is given appropriate safety gear if required.



## COVID-19 RESPONSE

2020 was a challenging year to operate our plants with the outbreak of the pandemic. To ensure that we upheld our health and safety commitments, we created a COVID Response Committee to review and develop control measures to minimise the risk of the spread of COVID within the workplace. Regular meetings are continuously held to review the current COVID situations within each country, plant, and office. Employees were updated through regular communications with regards to the development of COVID-19 and required restrictions.

Our plants in Seville and Almeria continued to operate throughout the pandemic as we were part of the key worker value-chain.

As such, education of the workforce to the risks of COVID-19 and mutual trust and respect were critical to ensure compliance with the required rules and measures that were implemented.

While the plants continued their operations, we implemented a work from home order for our corporate staff to minimise the risk of contracting COVID-19 through travel and by close contact within offices.



## Performance and Reporting

Plastic Energy has undergone a steep learning curve since our first two industrial plants started operating in 2015 and 2017. We had some accidents and safety incidents in the early days of operation and have tightened our safety policies and measures as a result. Plastic Energy's HSE management is based on a continual improvement model. This model includes an annual HSE review and update, communication throughout Plastic Energy's workforce and a system of performance measurement.

For our operational plants, all safety-related issues are reported monthly to the management team, and any safety incidents are reported as soon as practical after they occur. Besides recording incidents according to local requirements, in 2020 Plastic Energy also started recording incidents to the **OSHA Incident Reporting, Investigation and Classification International Standard**. The new Group Incident Reporting procedures were developed to not only standardise the group's reporting but also to better gauge the gravity of incidents. An introduction of Actual and Potential Severity for all incidents ensures the required response and level of investigation and allows preparation for such an incident.

Plastic Energy's 2020 OSHA Reporting Standards for recordable incident rate stands at 4.93, which is an improvement on the 2019 rate of 9.87. The OSHA rate for 2020 was 5.2 for the comparable industry of waste treatment and disposal. However, petroleum refineries have a significantly lower OSHA rate at 0.9. It is Plastic Energy's intention to develop its systems and culture to provide an equivalent world class performance.

While working with many contractors in the development of our plants, we have developed a detailed assessment of contractors to ensure all companies working with us meet the group's required levels of HSE systems, performance, and culture.

Plastic energy has established an extensive HSE training programme that emphasises the importance of health and safety and engages our workforce in day to day understanding and practice of HSE. Training topics included first aid, emergencies, height at work, and confined spaces, amongst others. During 2020, Plastic Energy achieved 131% of the target for its planned HSE training programme.

***We are a young and growing company and still have a lot to learn, but we are putting everything in place to make sure that we approach safety and risk management in the right way.***

On a regular basis we are reviewing our H&S procedures, consulting our employees, and importantly auditing our technology, engineering, and operational procedures to ensure that they are to the highest possible safety standard.

During 2020, many procedures have also been reviewed and developed to ensure safe practices. Improvements were put in place with the engagement of the workforce and training to ensure that the new procedures are correctly implemented to improve safety performance.

## GOALS

### SAFETY

Utilise auditing results to develop HSE Improvement Plans for the projects to improve performance

Utilise corporate audit results to ensure that consistent standards are applied throughout the company

HSE Management System will be further developed in line with ISO 45001 and ISO 14001 requirements



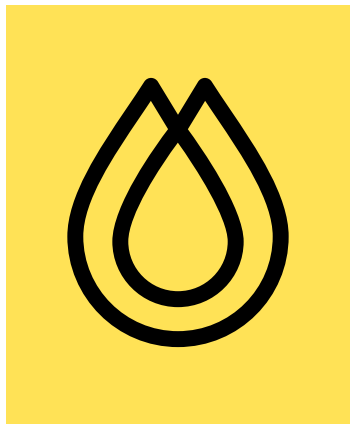
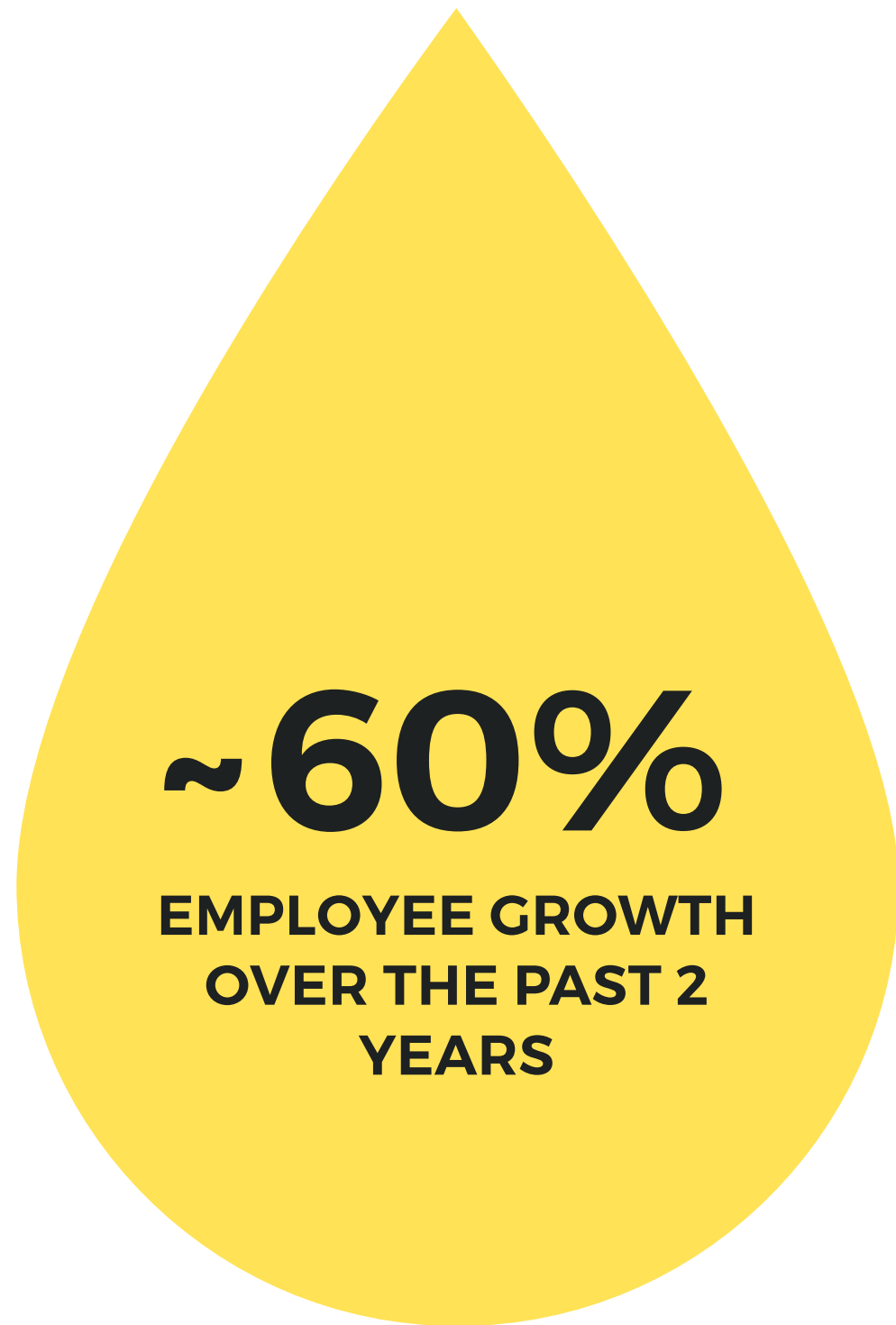
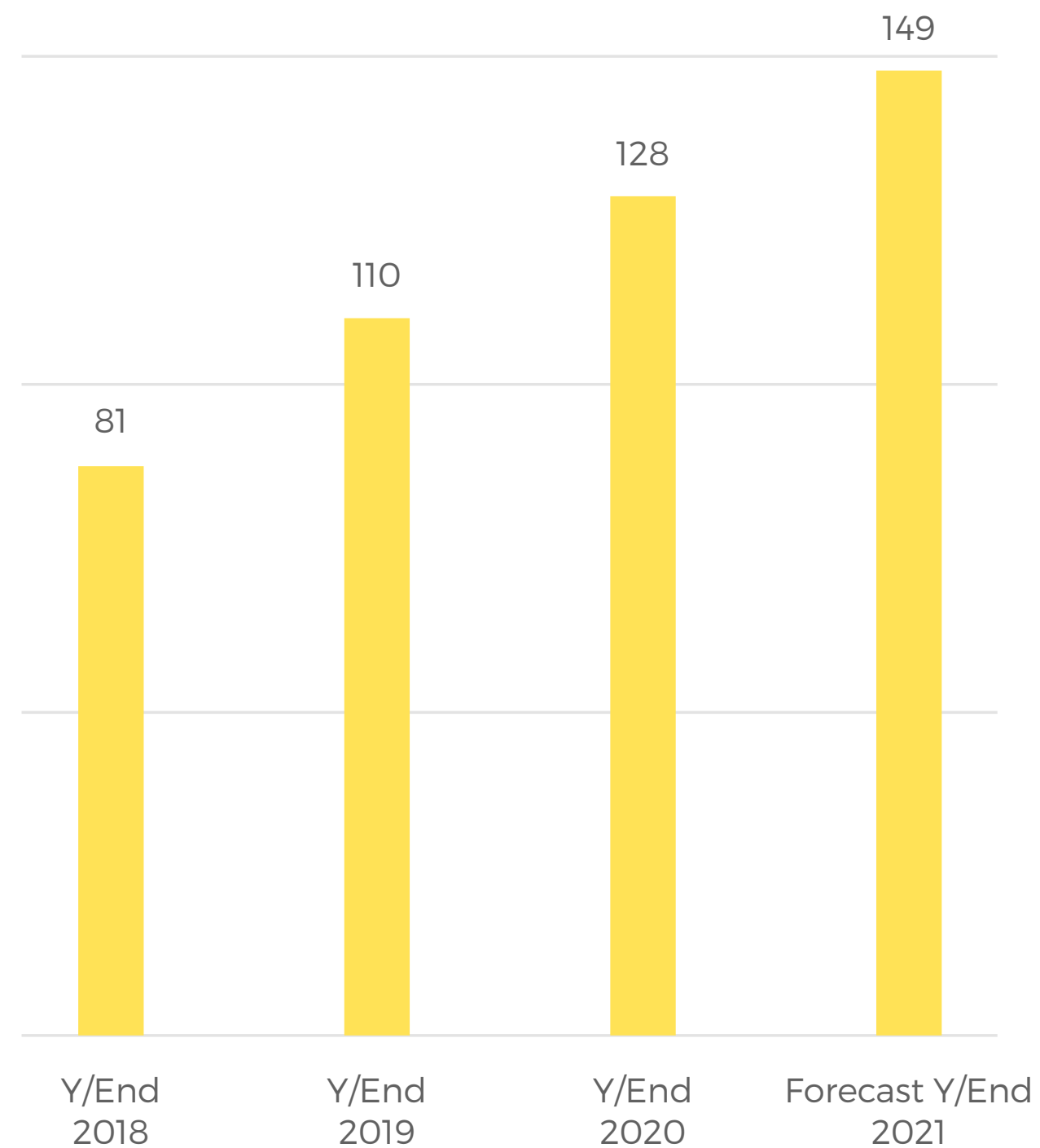
## PEOPLE, GOVERNANCE AND COMPLIANCE

### Our people are our biggest asset and the key enabler in Plastic Energy's success

We aim to create a safe and welcoming atmosphere for our employees as we value all the diverse skill sets, knowledge, and experience that our Plastic Energy family has. As a young and growing company, we are working on developing initiatives to support our talented workforce. Plastic Energy is in full compliance with UK law on Human Rights, Modern Slavery and Child Labour.

**Our workforce's gender split is currently at 26% female and 74% male.** As we strive to improve our gender balance across the company, we will specifically aim to improve it at the management and Board level. While we are operating in a traditionally male-dominated sector, we recognise the greater need to increase gender and racial and ethnic diversity. A more inclusive and diverse team will bring invaluable perspectives to our decision-making processes.

### PE Group - Teams Growth - 2018, 2019, 2020 and 2021 Forecast



## Inclusivity and harmonising our internal culture

While our corporate staff and engineers are based in the London headquarters, our company has deep roots in Spain. In the last five years, our team in Spain has been focused on leading the operation and development of our industrial chemical recycling plants, managing our suppliers and customers, and supporting further technological development. From the success of our Spanish operations, we now have the capacity to focus on the next exciting stage of our company: **expansion and scale up**.

Over the past two years, Plastic Energy has gained approximately one new employee for every two members of staff, and we have developed new teams in Singapore, Malaysia, and the US. We expect to see a further increase of 16% in our workforce in 2021.

Welcoming new talent also means we are constantly shaping our internal culture across different offices and different functions. **While local and regional teams are essential to efficiently develop the business, we truly believe that an integrated and diverse team will deliver the biggest success for the company.** As we continue striving for the most inclusive, safe, and open working environment, we have designed and established the basis to develop this internal culture with an employee handbook with policies and framework.

While our current employee handbook has been tailored to our headquarters in the United Kingdom, we are fully committed to providing equality, fairness, and respect for all those who work for, and with, Plastic Energy, as well as those applying to work or engage with us. We are aiming to roll out appropriate sets of policies across the global operations to comply with national employment laws and legislative aspects in 2022.

Harmonisation of our internal culture and policies across our global operations will be the first step in establishing a global Human Resources system for Plastic Energy. While we recognise the need for consistency between offices, we are also aware of the importance of flexibility given the variety of the nature of jobs within the company. For example, our flexible working policy may work well for corporate staff but has a marginal impact on our plant staff who work by shift.

As such, some flexibility and customisation in our local policies will be respected and maintained.

**Our equal opportunities and diversity policy is applied in all areas of employment including recruitment and selection; training and development; benefits, rewards, and promotion; and dealing with grievances and disciplinary issues. A set of strong internal principles about pay levels are also established. This reaffirms our commitment to Equal Pay as we operate under the Equality Act 2010.**

**Our short-term priority in 2021 is also to conduct equality and diversity training for everyone in the company. The training will cover:**

- Equality
- Diversity and inclusion
- Wellbeing and mental health awareness

**The key policies in our current employee handbook such as whistleblowing, diversity and dignity at work will be top priority in the roll-out scheme to regional offices.**



## Strengthening our transparency

We are working to put the structure in place for the transparent development of the company and **aspire to follow the best practice and standard available today in this journey from an entrepreneur-led start-up to a fast-growing multi-stakeholder company.**

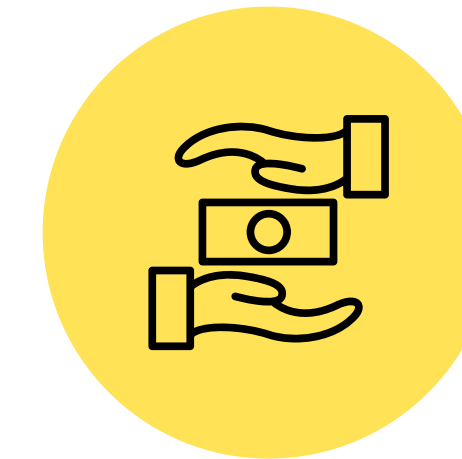
We have established a transparent company structure with clear processes and reporting lines to the CEO. A regular business planning, strategy and reporting cycle has been implemented across the company in the last year to further support our decision-making process. The CEO also reports to the Board and shareholders quarterly.

In 2020, we implemented our new Anti-Bribery and Corruption ("ABC") policy, which details the responsibilities and obligations of the company and those who work for and with Plastic

Energy, in relation to our strict zero-tolerance position on fraud, bribery, and corruption. A compliance officer is responsible for monitoring the operation and effectiveness of the company's anti-bribery and corruption policies and reporting. The company has formulated an ABC training programme for its Board of Directors, Senior Management team and employees. The company has in place a confidential whistleblowing hotline and encourages all employees and consultants to report any potential breaches of the company's ABC policy via the hotline or directly to their line manager.



FREEDOM OF ASSOCIATION

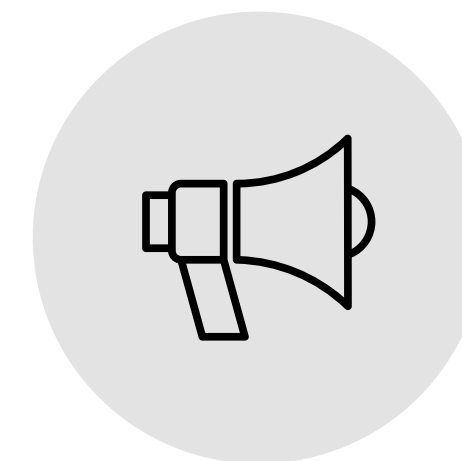


ANTI-CORRUPTION AND BRIBERY POLICY



EQUALITY OPPORTUNITIES AND DIVERSITY POLICY

## COMPLIANCE AND GOVERNANCE POLICIES



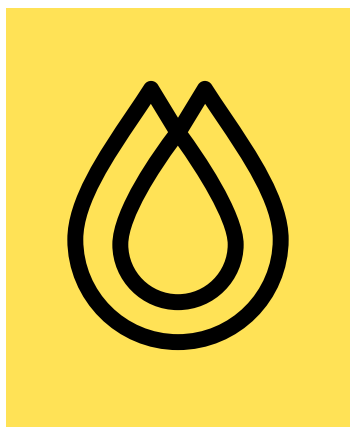
WHISTLEBLOWING POLICY



DATA PROTECTION POLICY



ENVIRONMENTAL POLICY





## Strengthening teamwork as we integrate further

While we collaborate and stay in touch across various Plastic Energy offices through regular online meetings, specific teams are meeting regularly to share updates and ensure aligned and supported work and relationships between team members. In addition to monthly calls and a quarterly newsletter from our Senior Management team to update the employees on the company's development, our CEO also dedicates regular visits to different regions to ensure all teams are fully connected. Working at Plastic Energy means working flexibly and together towards the same vision.

Beyond inclusive teamwork practices, we are nurturing activities outside of work to strengthen relationships between employees and foster a sense of belonging to the Plastic Energy team. For instance, our staff in the London office enjoy an office-wide lunch every month and occasional fun activities like company socials or corporate runs.



PLASTIC ENERGY® Recycling plastics that no one else can



2020, the year marked by the COVID-19 pandemic, tested our collective resilience and level of teamwork. We rose to the challenge of ensuring the safety of our employees and provided the best equipment to adapt to working from home per government's guidelines. We continued to ask team leaders to organise regular catch-ups to ensure constant support of employees. We continued our commitments to an open working culture, maintaining consistent and transparent communication both in the workplace or online.

As we moved to working from home literally overnight, we also had to redesign the way we communicate and connect. While we cannot replace the in-person interaction that we had previously, we tried to find ways to boost the innovative and collaborative spirit between teams. We set up a Water Cooler initiative and online quizzes, which integrated team members from different offices across Europe, Asia, and the USA, while we learned more about each other and continued to build meaningful relationships.



# GOALS

## PEOPLE

- Increase diversity over the whole company, especially at our management and Board levels
- Roll out an employee handbook for all regions
- Pursue the development of training
- Strengthen the company culture
- Continue to strengthen the communications between different offices
- Develop internal opportunities within the company

## GOVERNANCE

- Create more independence and division of responsibility between the leadership of the Board and the executive leadership team to strengthen and embed a structure of controls in the company's culture
- Provide ongoing training on ABC risks and issues
- Adopt compliance and KYC questionnaires for all third parties engaging with the business, and where appropriate, secure independent third-party search reports
- In 2021 the company will adopt both a human rights policy and a supplier code of conduct
- Expand the board to include executives, non-executives, and stakeholder representatives through a formal appointment process.



## PLANET

At Plastic Energy, we are dedicated to solving the plastic waste crisis and to leaving the planet better than we found it. We have conducted a thorough examination of the environmental impact of our business and a peer-review assessment of our technology to find areas for development. While we still have a lot of work ahead, we are committed to placing sustainability at the heart of our technology and business development strategies.

### Environmental impact of our daily work

#### FROM FREQUENT FLYERS TO TRAVELING SUSTAINABLY

The development of the business, the enhancement of our visibility through in-person conferences, and the need to build strong relationships, trust, and transparency with clients has drawn Plastic Energy employees to travel extensively. This has also been further emphasised by the development of the business in South-East Asia where plastic waste leakage is a key problem.

This geography and its limited waste infrastructure have required a particular attention and in-person proactiveness of the company to be considered and supported. With a local team now on board, we expect long-haul flights to this region to decrease.

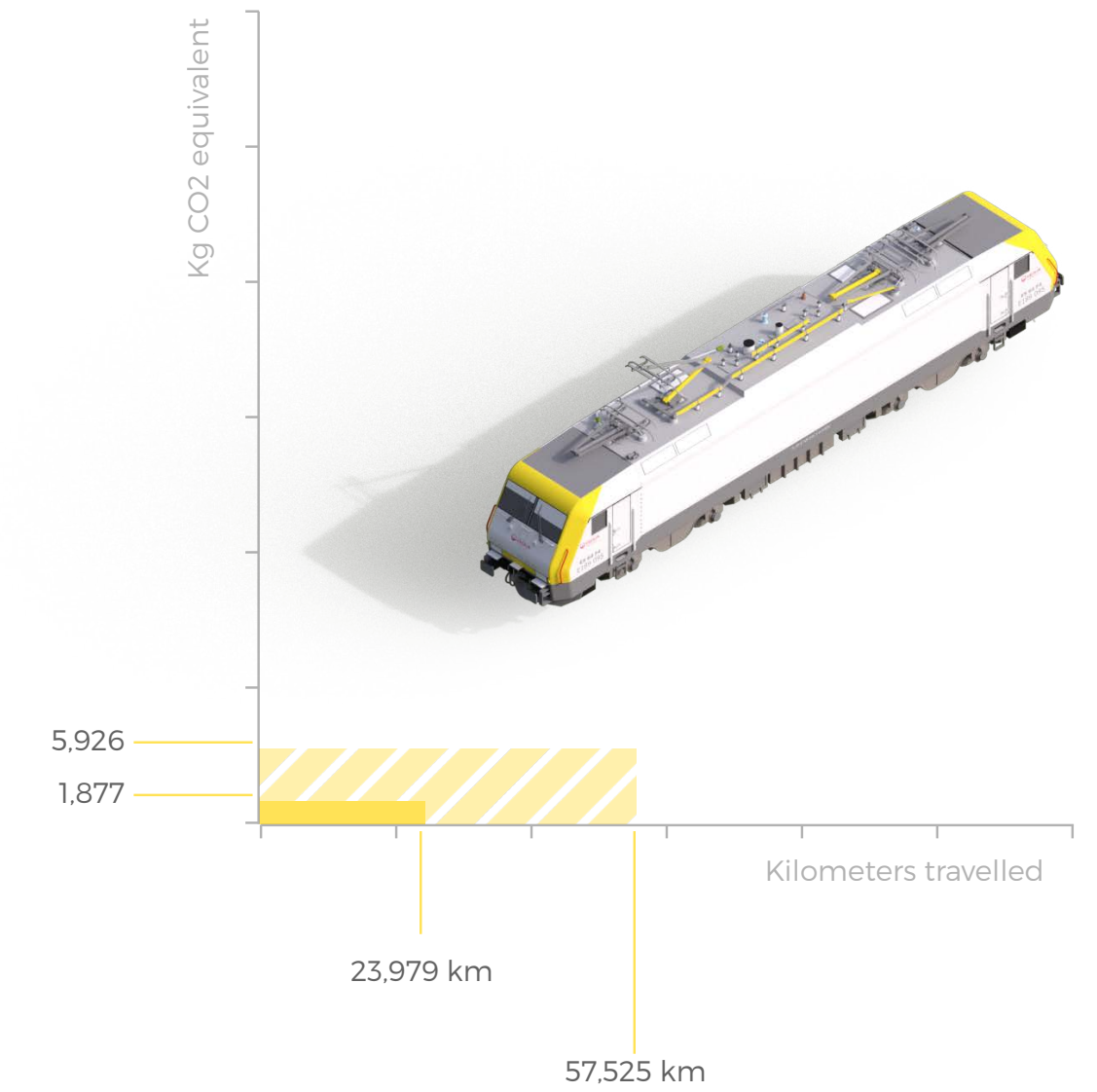
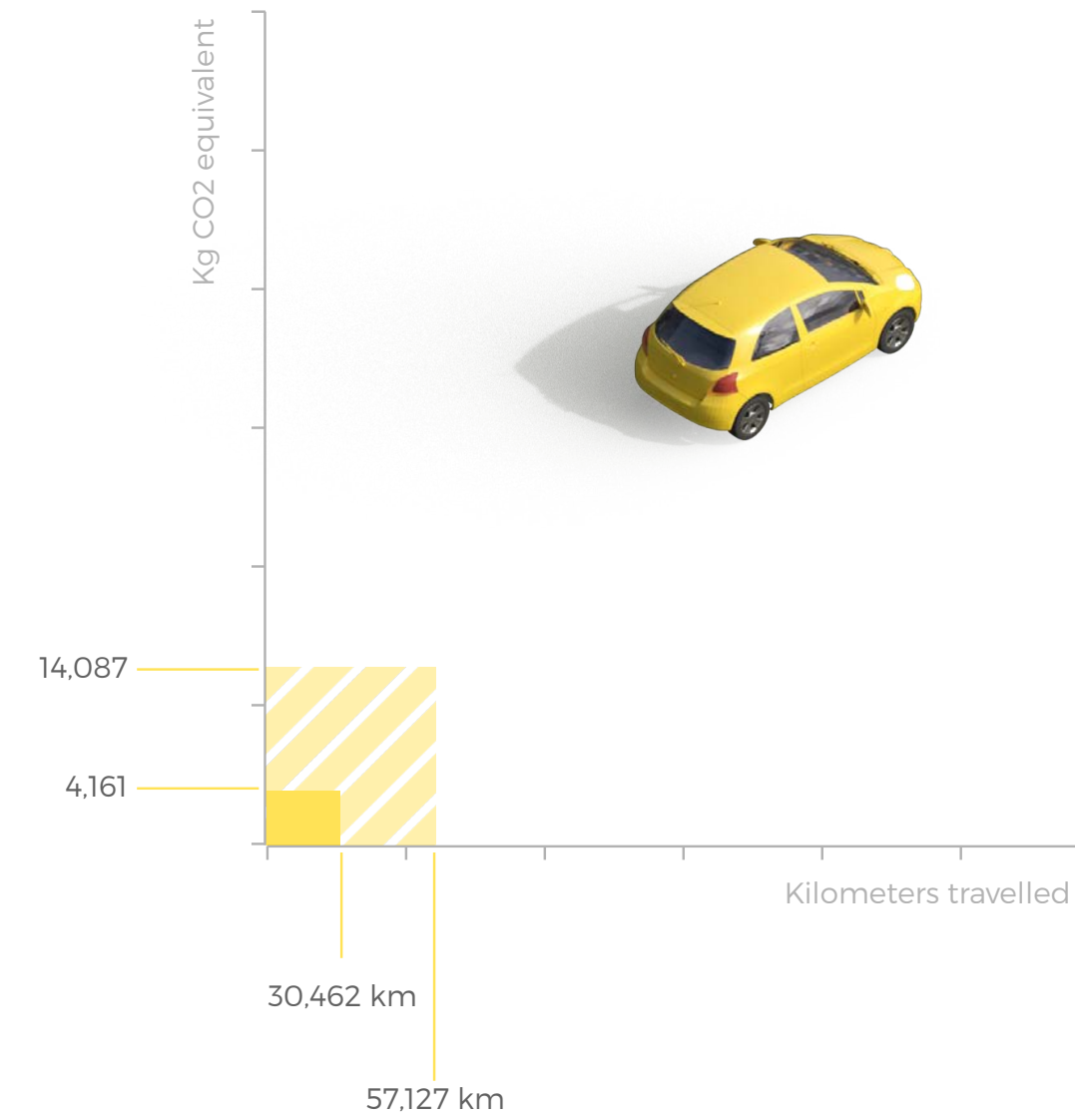
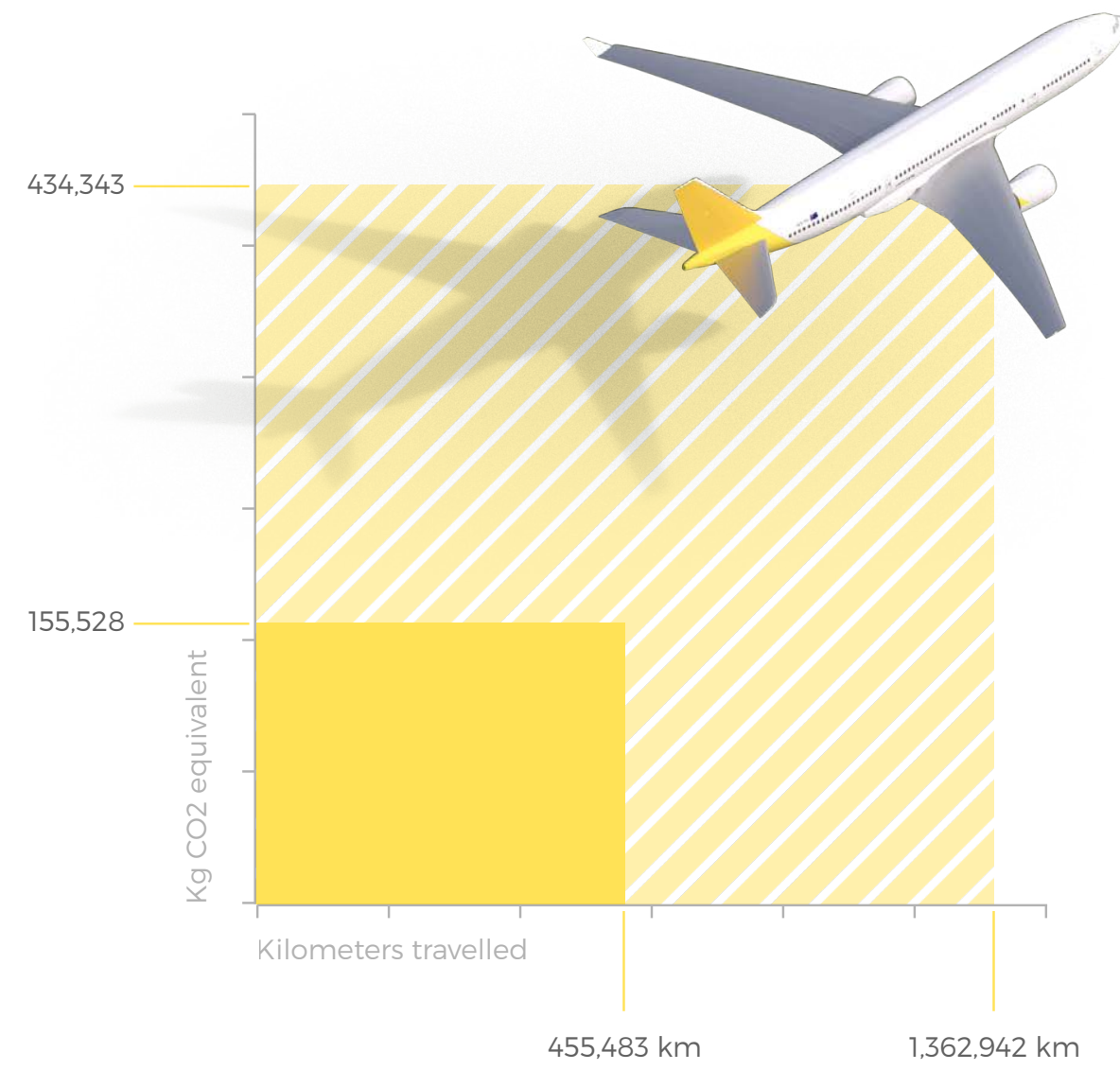
Although traveling has helped us develop, we realised that this has been an unsustainable journey. With our determination to reduce our emissions as well as with the learnings of working through online meetings during the pandemic, we are aiming to reduce our travels and travel more sustainably when it is required.

**WITH OUR DETERMINATION TO REDUCE OUR EMISSIONS AS WELL AS WITH THE LEARNINGS OF WORKING THROUGH ONLINE MEETINGS DURING THE PANDEMIC, WE ARE AIMING TO REDUCE OUR TRAVELS AND TRAVEL MORE SUSTAINABLY WHEN IT IS REQUIRED.**

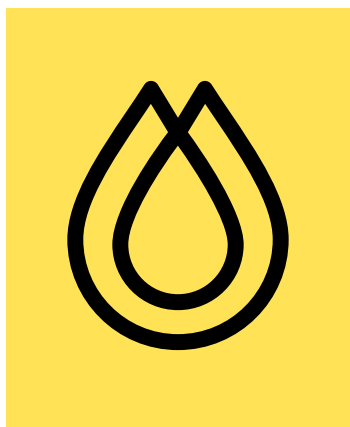
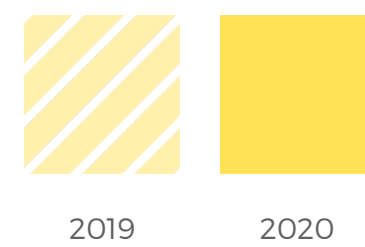


## Less and more sustainable travels

This review of our travel behaviour has motivated us to develop travel guidelines that all employees will have to follow to incentivise lower carbon travelling options, as well as some goals to reduce travel overall.



Business travels in kilometres for 2019/2020



### Travel guidelines from 2021 onwards:

- Employee safety is paramount in travel decisions.
- In Europe, use a train when the trip is less than 500 kms - unless unavailable.
- First or business class trains should be used with planning when replacing a flight.
- Prioritise using web-based platforms for meetings less than 1.5h, unless travel is deemed essential based on the importance of the discussions or the technicality. If this is the case, it is the employee's responsibility to make the most of their trip and organise multiple meetings in this same location.



## GOALS

### TRAVEL

Harmonise the system to book travel across the company to enhance transparency and facilitate comparable reporting year-on-year

Ensure employees adhere to our 2021 travel policy

Sustainably offset air travel emissions

A photograph of a yellow airport sign for arrivals. It features a black silhouette of an airplane in a square frame above the text 'Arrivals' and 'Aankomst'. A large black arrow points upwards and to the right.

Arrivals  
Aankomst

## ENVIRONMENTAL IMPACT OF OUR TECHNOLOGY AND PLANTS

Sustainability remains a top priority for Plastic Energy, and we are constantly looking for ways to improve our process and operations to ensure that they are energy efficient and have a low impact on climate change and the environment. We aim to maintain the European standards for all our projects to ensure the highest standard for our activities in terms of permitting and environmental impact, even if the standard may be less restrictive in some geographies.

### Controlling environmental impact of our plants

We abide by the **Industrial Emissions Directive (IED)** to control our emissions and have implemented all the processes and **Best Available Techniques** to ensure all emissions fall below the limits set by the IED. This involves investments in equipment such as thermal oxidisers that would destroy any concerning substances and clean the gases. The Continuous Emissions Monitoring Systems (CEMS) monitors our emissions automatically and constantly ensures we are adhering to the level of acceptable emissions under the IED and abiding by our permits.

The hydrocarbon oils (pyrolysis oils) produced to be sold to off-takers must comply with both EU Regulations, (EC) 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and EC 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP). This creates a process to control the potential risks associated to the product and improves the protection of human health and the environment from the risks that can be posed by chemicals. With the same performance as fossil oils, the pyrolysis oils as intermediates under REACH also need to be produced and managed in an isolated environment under strict controlled conditions (SCC).

*Plastic Energy is the lead registrant of the pyrolysis oils from plastic waste under REACH European legislation. We can therefore sell our product on the European market following existing regulations.*



## Upgrades

The **end-of-waste status**, that is starting to be acquired by chemical recyclers in various geographies, also provides a security that the output is a product that has the same properties as fossil oil, can act as a replacement in petrochemical crackers, and doesn't have additional health or environmental impacts compared to fossil substances.

*Plastic Energy has achieved end-of-waste status in the Netherlands for its TACOIL to be used as a raw material for producing virgin plastics and is in the process of gaining this status in multiple other European countries.*

In addition to the processes put in place to control emissions and other impacts of the recycling processes, regular and independent tests, reports, and monitoring to authorities, are mandatory.

## Certifications

Certification schemes are key to ensuring the traceability of the process from the waste plastic to the final recycled content and validate the circularity of the process. They also support each link of the value-chain with trusted claims. We have worked closely with the certification schemes through yearly audits of our process to validate that our facilities are certified.



ISCC PLUS (Almeria and Seville). ISCC experts traced the path of end-of-life plastic through Plastic Energy's Seville plant, into SABIC's production cracker, and subsequently for use as virgin-grade plastic in Unilever packaging, demonstrating the circular economy of plastic in action, following the mass-balance approach. This is the first process of its type to receive ISCC PLUS accreditation, which Plastic Energy received for both of its plants in December 2019.



Roundtable Sustainable Biomaterials (Seville): The RSB Standard scheme certifies whether production of bio-based feedstock, biomass-derived material and any advanced fuel or product, like Plastic Energy products, has been environmentally, socially, and economically responsible. The Plastic Energy Seville plant went through the implementation and external audit for the RSB standard and qualified in December 2020. We are the first end-of-life plastics chemical recycler to achieve RSB certification.

# GOALS

## UPGRADES

Implement systems to further reduce emissions in Seville

Improve wastewater treatment at the plant in Seville

## CERTIFICATIONS

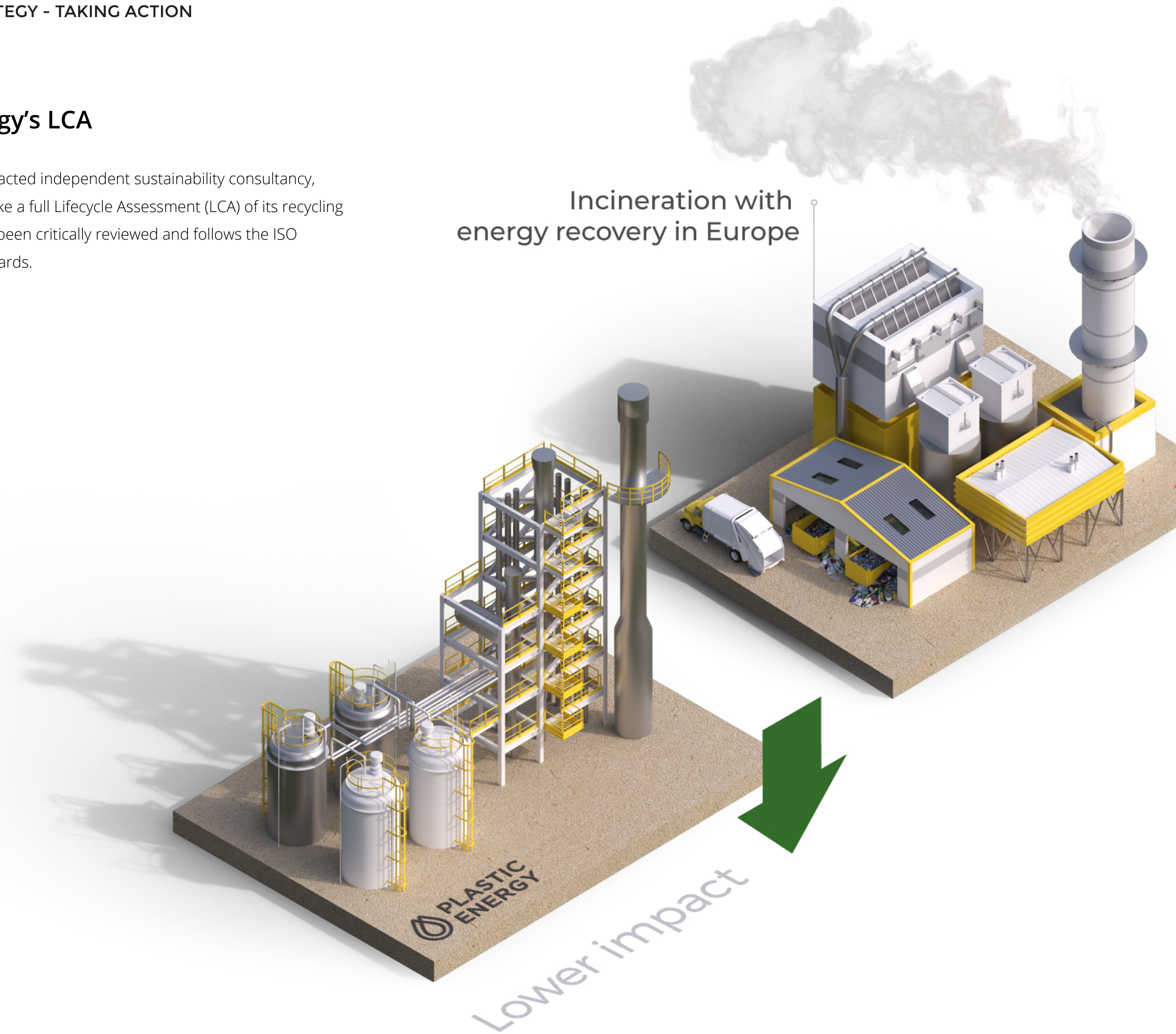
Receive full REACH registration for TACOIL and Light-Oil

Receive RSB certification for our plant in Almería



## Plastic Energy's LCA

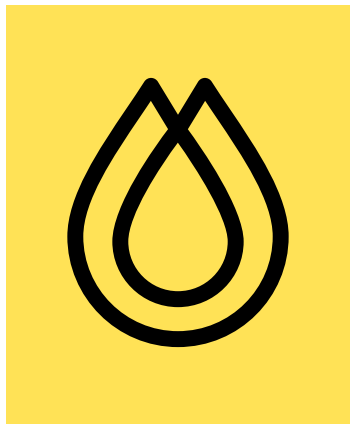
Plastic Energy contracted independent sustainability consultancy, Quantis, to undertake a full Lifecycle Assessment (LCA) of its recycling process, which has been critically reviewed and follows the ISO 14040/14044 standards.



Incineration with energy recovery in Europe

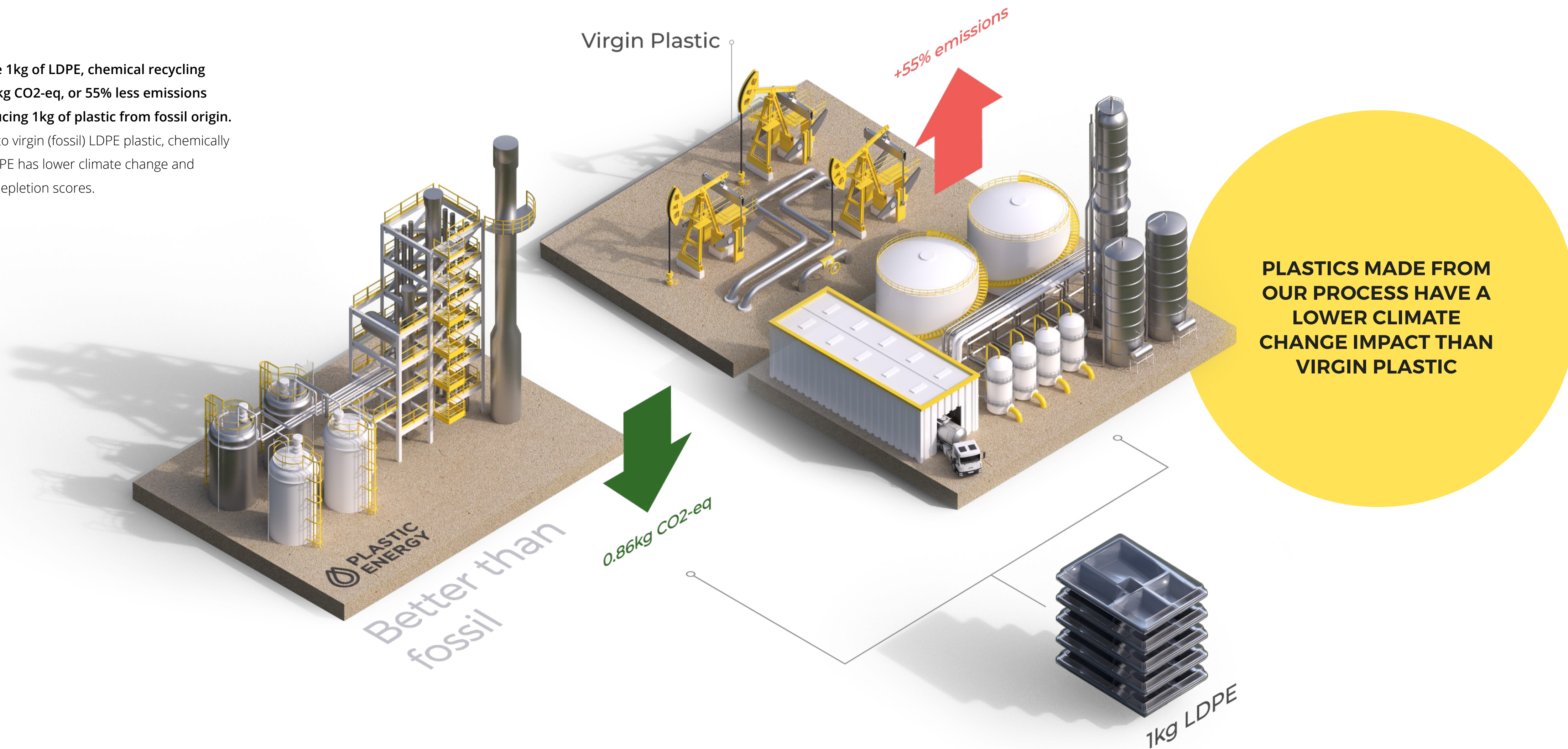
**PLASTIC ENERGY'S PROCESS HAS A CONSIDERABLY LOWER CLIMATE CHANGE IMPACT THAN INCINERATION WITH ENERGY RECOVERY**

To treat 1kg of mixed plastic waste, chemical recycling emits **0.55kg CO<sub>2</sub>-eq, or 65% less than incineration with energy recovery.** Incineration is the scenario with the highest climate change impact, as GHG emissions from plastic incineration are not fully compensated by the electricity and heat recovered in the process. Landfilling has the lowest impact on climate change, however, is the most detrimental to circularity and fossil resource use and has the most potential to pollute the environment through plastic leakage. Chemical recycling is therefore the most desirable option when compared against incineration and landfilling, which are the current alternatives for mixed plastic waste.





To produce 1kg of LDPE, chemical recycling emits 0.86kg CO<sub>2</sub>-eq, or 55% less emissions than producing 1kg of plastic from fossil origin. Compared to virgin (fossil) LDPE plastic, chemically recycled LDPE has lower climate change and resources depletion scores.






### Impact of chemical recycling compared to other alternatives

An environmental impact is not only about CO2, but also other important indicators such as resource use, water use, and ecosystem quality.

The table on the right is a summary comparison of where Plastic Energy stands today in comparison to other alternatives.

	CLIMATE CHANGE	RESOURCES	WATER	ECOSYSTEMS QUALITY	QUALITY (FOOD GRADE)
CHEMICAL RECYCLING	Yellow	Green	Yellow	Green	Green
MECHANICAL RECYCLING	Green	Green	Green	Yellow	Red
VIRGIN	Red	Red	Green	Yellow	Green

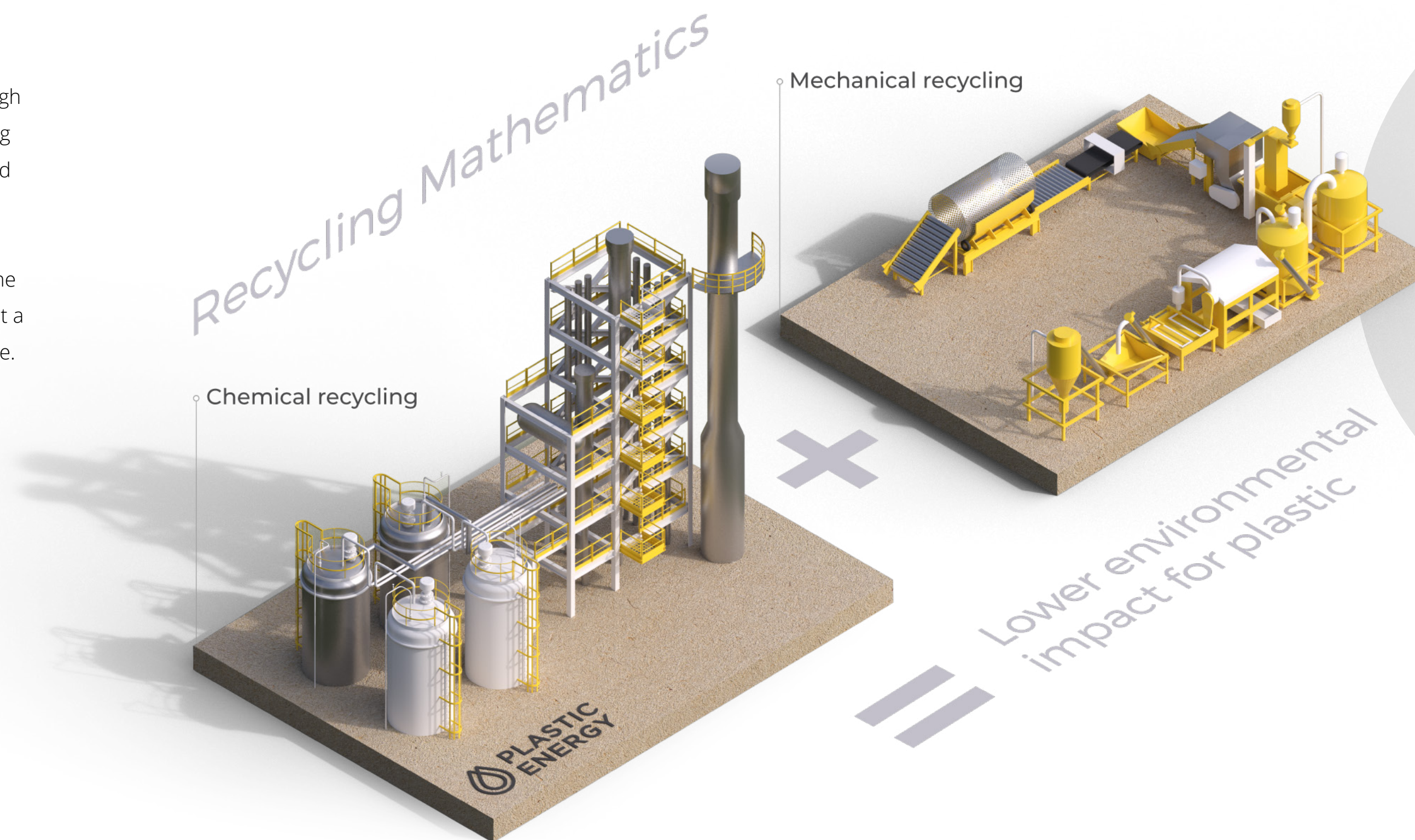
  

	GOOD PEFORMANCE
	
	BAD PEFORMANCE



Chemical recycling is complementary to mechanical recycling, and when used in conjunction, can be an effective and circular way to reduce the impact of plastic leakage into the environment, or being sent to landfills or incinerators.

While mechanical recycling has a lower environmental impact than chemical recycling, its outputs are not of high enough quality to incorporate into food-grade packaging (with the exception of PET under certain conditions), and it faces many technical and economic challenges to be able to recycle contaminated or multi-layered plastics and films. Chemical recycling can process and recycle the plastics that mechanical recycling cannot treat, making it a complementary solution to the global plastic waste issue.



**COMBINING CHEMICAL RECYCLING EFFORTS WITH MECHANICAL RECYCLING EFFORTS WILL GREATLY REDUCE THE ENVIRONMENTAL IMPACT OF PLASTIC.**



## Supporting academia

Supporting academia in the development of LCA methodologies for plastic recycling through chemical recycling in a circular economy is essential to enhance industry and academic collaboration and provides stronger credibility for environmental impact analysis.

Our support, through transparent data sharing, resulted in an academic article led by the University of Manchester, published in *Science of the Total Environment*.

### High-level conclusions:

*"The results suggest that chemical recycling via pyrolysis has a 50% lower climate change impact and life cycle energy use than the energy recovery option. The climate change impact and energy use of pyrolysis and mechanical recycling of MPW are similar if the quality of the recyclate is taken into account. Furthermore, MPW recycled by pyrolysis has a significantly lower climate change impact (-0.45 vs 1.89 t CO<sub>2</sub>eq./t plastic) than the equivalent made from virgin fossil resources. However, pyrolysis has significantly higher other impacts than mechanical recycling, energy recovery and production of virgin plastics."*

Read the full article [here](#).



## PATHWAY TO REDUCING OUR IMPACT THROUGH TECHNOLOGY DEVELOPMENT

### Continuous innovation through the years

As a leader in the chemical recycling industry, Plastic Energy has a relentless focus on innovation. Our technology team has vast experience in technology development, engineering, chemistry, and research and development. Our industrial plants in Spain are not only delivering for our customers today, but they are also crucial for the group's innovation efforts. Plastic Energy has a technology development roadmap for the next designs to achieve larger scale, better products, lower cost, and lower environmental impact.

### Laboratory-led robust research

The high quality of our product is credited to a long-standing partnership of our technology team with Loughborough University, where we prioritise research and development. Our R&D programme currently focuses on maximising yield and delivering a higher-quality product. Better technology performance by default improves product quality and process efficiency.

The process of innovation starts at our laboratories, where we test various new plastic waste feedstocks and introduce new process conditions. Following promising laboratory results from various testing from our R&D centre at Loughborough University, an initial trial will be carried out at Plastic Energy's production facility in Spain. By testing new R&D projects in our commercial-scale plants in Seville and Almería, Plastic Energy has developed a good understanding of how the different

plastic waste feedstock produces products in commercial plants. As a result, Plastic Energy can successfully implement technological improvements to commercial plants without introducing significant risks to the process.

### Relentless focus on technology development

Plastic Energy has been contracted to build a range of plants processing between 15,000 t/a – 33,000 t/a of plastic waste in Europe over the next few years. This represents a scale increase of upcoming plants by 4-5x the current capacity of our Almeria and Seville plants, to meet the growing demand for plastic recycling of mixed and complex plastics. As we scale up, our technology team has also placed a strong focus on increasing reliability and resilience of the process while lowering environmental impact.

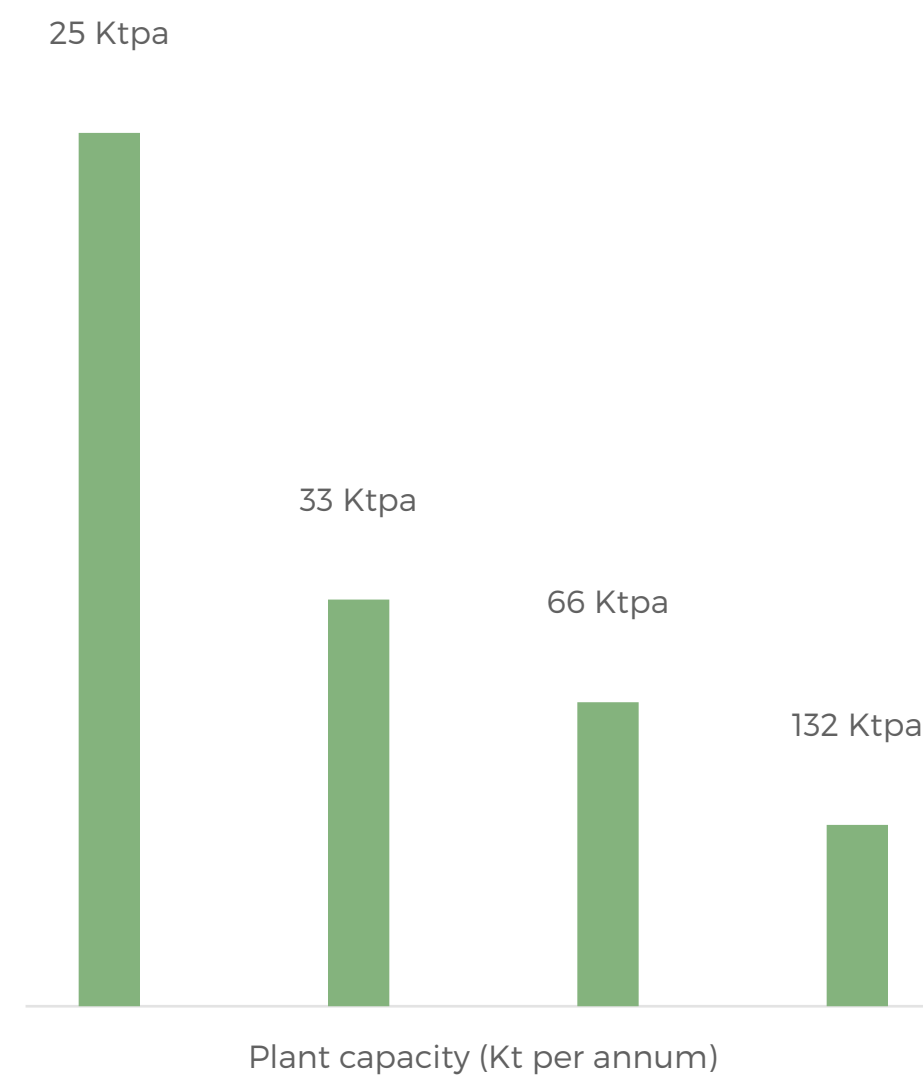
We have made significant advances in the syngas and waste heat management systems to ensure improved safety, better energy efficiency and lower environmental impact. The scaled-up plants will benefit from advanced automation, energy recovery and increased processing capacity. We continue to work with our technical partner Siemens to guarantee that our system designs are to best practice and industry standards, as we minimise manual intervention and optimise unit operations through A.I.



### Environmental impact expected to decrease

Through these changes and technology improvements, we expect to heavily reduce the environmental impact of Plastic Energy's operations. Our 33ktpa plants will see a 51% reduction in energy consumption compared to a 25ktpa plant, as technology develops. Our biggest design at 132ktpa will see a 69% reduction in energy consumption, compared to a 25ktpa plant.

### Reduction of energy impact with capacity increase



Specific energy consumption per kg TACOIL

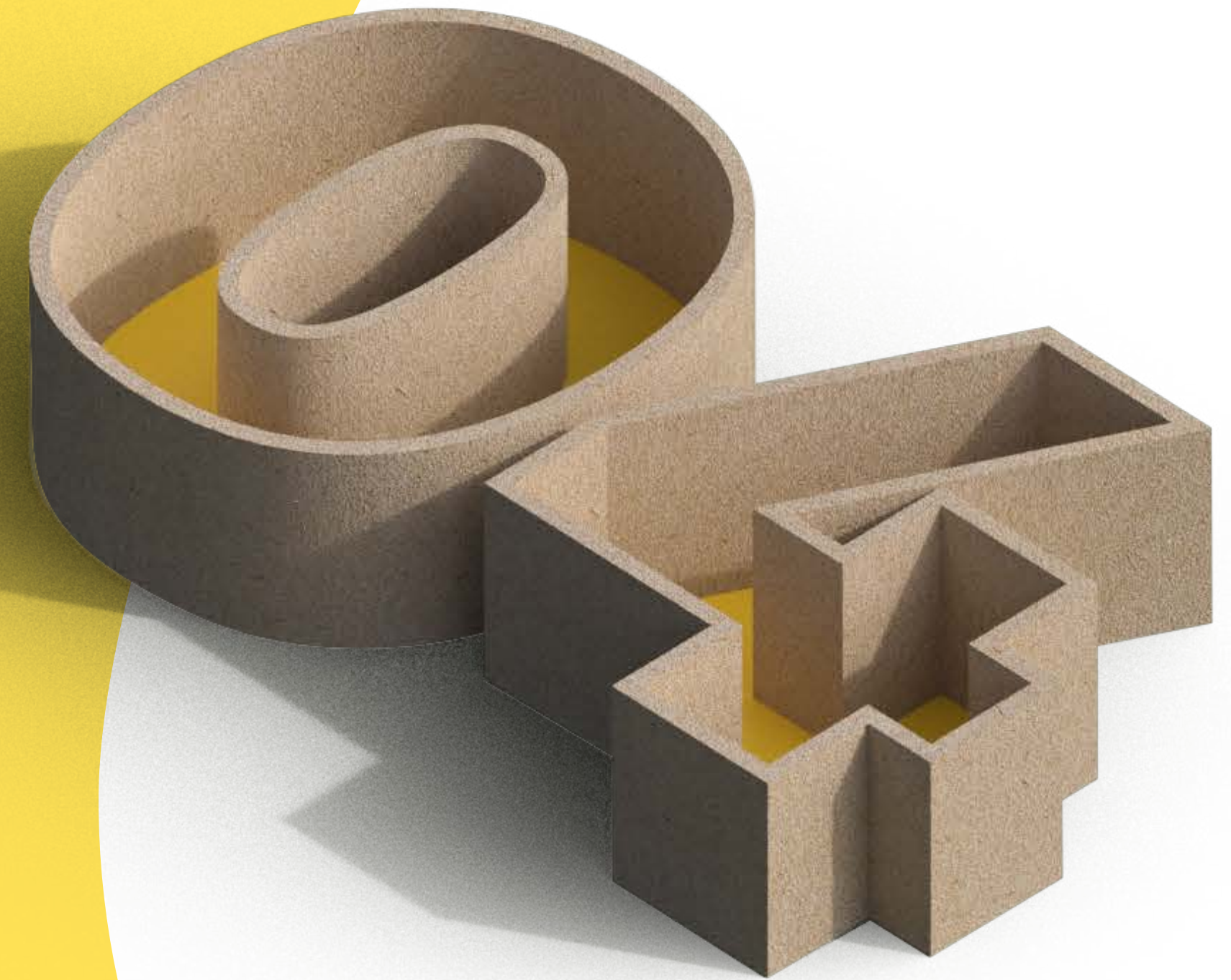
# GOALS

## TECHNOLOGY DEVELOPMENT

- Continue reducing environmental impact of plants as Plastic Energy develops
- Source renewable energy for all our existing and upcoming plants
- Establish a roadmap by end of 2022 on how to achieve net zero
- Expand our LCA for new plant designs by 2023
- Achieve net zero by 2050



# UN Global Compact



## UN Global Compact

Plastic Energy fully supports and is committed to the UN Global Compact's Ten Principles. We are working to improve in the areas of human rights, labour, the environment, and anti-corruption.

The table to the right shows that we have incorporated 10 principles of the UN Global Compact into our business strategy, culture, and day-to-day practices.

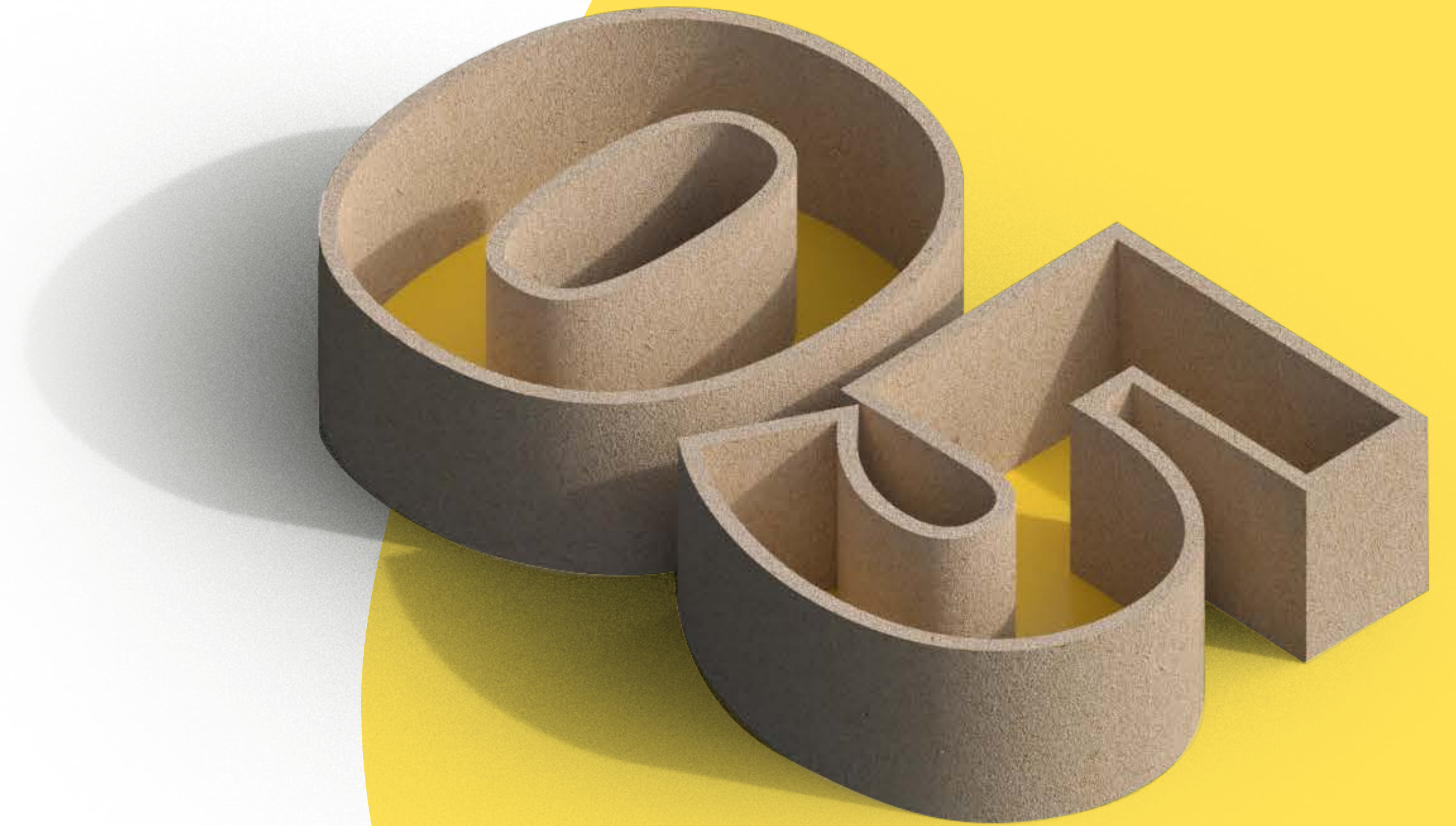
	PRINCIPLES		PAGES
HUMAN RIGHTS	1	Businesses should support and respect the protection of internationally proclaimed human rights; and	30
	2	make sure that they are not complicit in human rights abuses.	30
LABOUR	3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	32
	4	the elimination of all forms of forced and compulsory labour;	30
	5	uphold the effective abolition of child labour; and	30
	6	uphold the elimination of discrimination in respect of employment and occupation.	31
ENVIRONMENT	7	Businesses should support a precautionary approach to environmental challenges;	38
	8	undertake initiatives to promote greater environmental responsibility; and	35
	9	encourage the development and diffusion of environmentally friendly technologies	45
ANTI-CORRUPTION	10	Businesses should work against corruption in all its forms, including extortion and bribery.	32

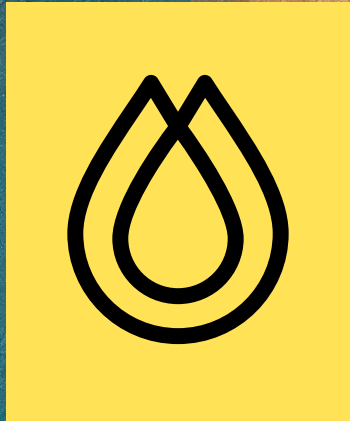
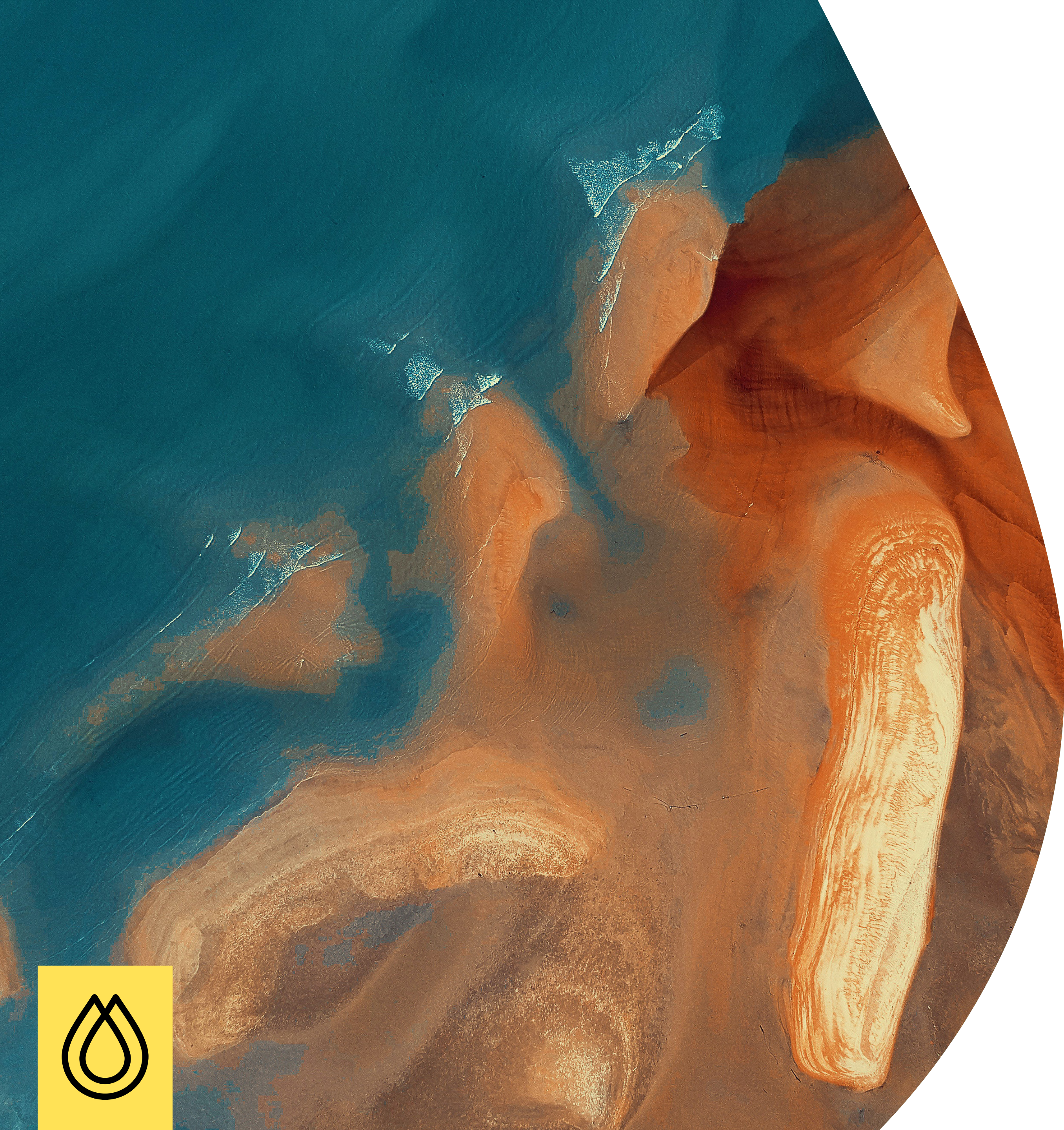




# In Closing

a note from our sustainability team





Thanks for reading our first ever sustainability report. At Plastic Energy, we come to work every day with a passion to build a healthier and more sustainable planet. As we tackle the growing global plastic crisis, we are ensuring that we do so in the most sustainable way possible. In the process of producing our sustainability report, it has been a great opportunity to collaborate and brainstorm ideas with each team within the company on our vision for a better, more inclusive, and more environmentally friendly Plastic Energy.

We are fully aware of the challenges and work ahead as we grow into an established and sustainable business. Each year, we will report on the progress we make on this journey to sustainability. With this sustainability report as the foundation for the decade to come, we are confident that Plastic Energy will continue to create meaningful change.

For further sustainability enquiries, please contact [sustainability@plasticenergy.com](mailto:sustainability@plasticenergy.com)

