

'There is no planet B'

(Emmanuel Macron, 25th April 2018)



An essential guide to plastic packaging and a
sustainable future

an employee-owned business



Contents

- 1 Plastic **pollution**
- 2 The history of **plastics**
- 4 The **problem**
- 5 World wide flow of plastic **packaging**
- 6 The **science**
- 8 Near future **science**
- 9 Tax and **legislation**
- 12 How you as a producer are **responsible**
- 13 Packaging waste regulations **explained**

- 15 What can we do **today?**
 - 16 What can we **reduce?**
 - 18 What can we **re-use?**
 - 19 What can we **recycle?**
 - 22 What can we **replace?**
- 24 Things to **debate**
- 25 The Kite **challenge**



Plastic pollution

Our oceans and rural habitats are being clogged up and damaging the food chain, making it difficult for wildlife to survive. For an idea of the severity of the problem, here is the length of time it will take some items to disintegrate:

Plastic cups - 50 years



Plastic straws - 500 years



Plastic bottles - 450 years



Plastic bags - 20 years



Nappies - 450 years



The history of plastics

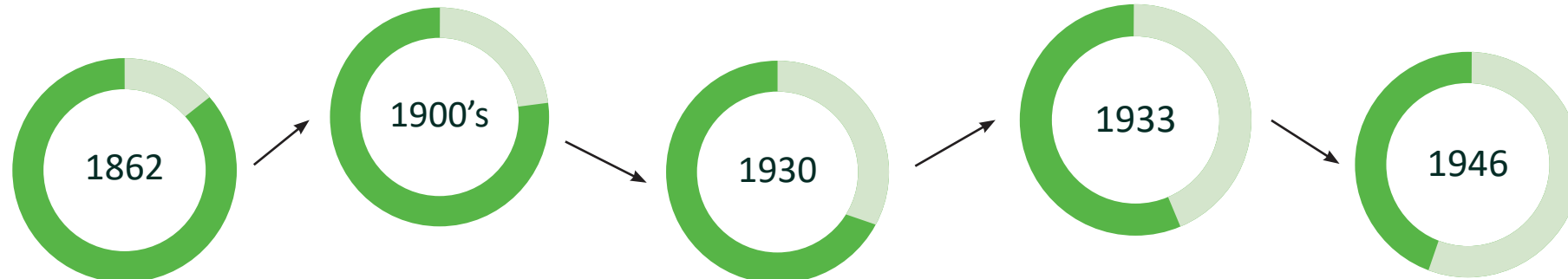
Despite the current plastic crisis and the need for societal change, we cannot forget the role plastic has played along the years as humanity has adapted and evolved. It has been a wonder product and proved to be useful in so many ways.



Swiss textile engineer Dr. Jacques Edwin Brandenberger created Cellophane as a waterproof layer on fabric.



Ralph Wiley, a Dow Chemical lab worker, accidentally discovered polyvinylidene chloride which became known as Saran™ or stretch film.



Alexander Parkes developed the first man-made plastic. Parkesine derived from cellulose. Yes – the first plastic was bio-based!



Richard Drew, a young 3M engineer, invented Scotch® Cellulose Tape, renamed Cellophane Tape.



Dr. Jules Montenier developed the first major commercial plastic spray bottle.



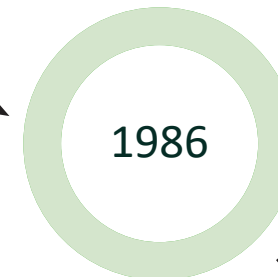
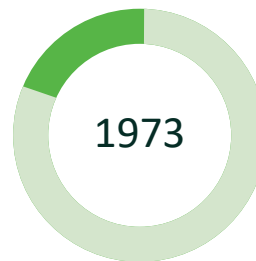
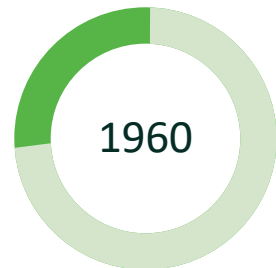
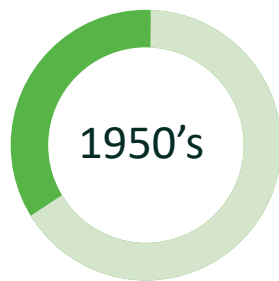


In the 1950's high-density polyethylene was introduced for milk cartons and soon became very popular household milk packaging.

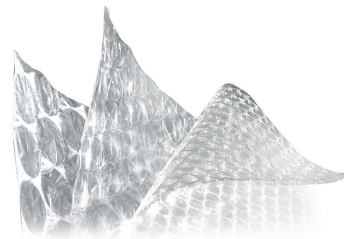


1973 was when polyethylene terephthalate (PET) bottles were patented.

Earthbound claim it was the first company to package lettuce in plastic bags.



Engineers Alfred Fielding and Marc Chavannes created bubble wrap at their company, which was aptly named Sealed Air Corporation.



The moment where TV Dinners capitalized on two things - plastics and the microwave. Aluminium trays were replaced with plastic, microwavable trays in 1986.



The problem

With Teresa May setting out to rid the UK of avoidable plastic and David Attenborough warning us of the detrimental impact the substance is having on our oceans, people are beginning to re-evaluate the whole purpose of single-use plastic and whether there is really a need for it.

As we sift our way through the many tasks and challenges society throws our way, the particularly hot topic of protective packaging derived from plastic and polyethylene is being discussed throughout a wide range of industries. Plastic is being distributed left, right and centre, with non-recycled waste piling up in every eco system.

The UK's café culture produces 30,000 tonnes of coffee cup waste each year. The disposable cups cannot be recycled within normal systems as their cardboard composition is tightly bonded with a polyethylene liner, deeming them unacceptable for recycling by paper mills.

The waterbed dumping ground...

A really significant issue is that mass plastic use is creating waterbed pollution from single-use products such as plastic bottles and bags. These are producing colossal quantities of waste in our rivers and oceans. Even though it is hard to identify the exact amount of plastic flowing into our oceans, scientists estimate that a huge 8million metric tons of plastic are added to our oceans each year, on top of the already estimated 150 million metric tonnes currently circulating our oceans. Our oceans and riverbeds are seeing the repercussions of a plastics epidemic, with sea creatures taking the brunt of consequences from human actions.

Now thanks to the eye-opening scenes of Blue Planet, more and more of the population are considering the impact of their actions with the voice of David Attenborough becoming a guiding conscience amongst the nation.

"The amount (of plastic being distributed in the ocean) is equivalent to a garbage truck full of plastic dumping into the ocean every minute."

—The Independent (April 2018)

"Ghent University in Belgium recently calculated that shellfish lovers are eating up to 11,000 plastic fragments in their seafood each year."

—The Guardian (Feb 2017)

"According to the Ocean Conservancy, in less than 10 years, scientists predict there will be 250 million metric tons in the ocean and by 2050, there will be more plastic in the oceans than there are fish."

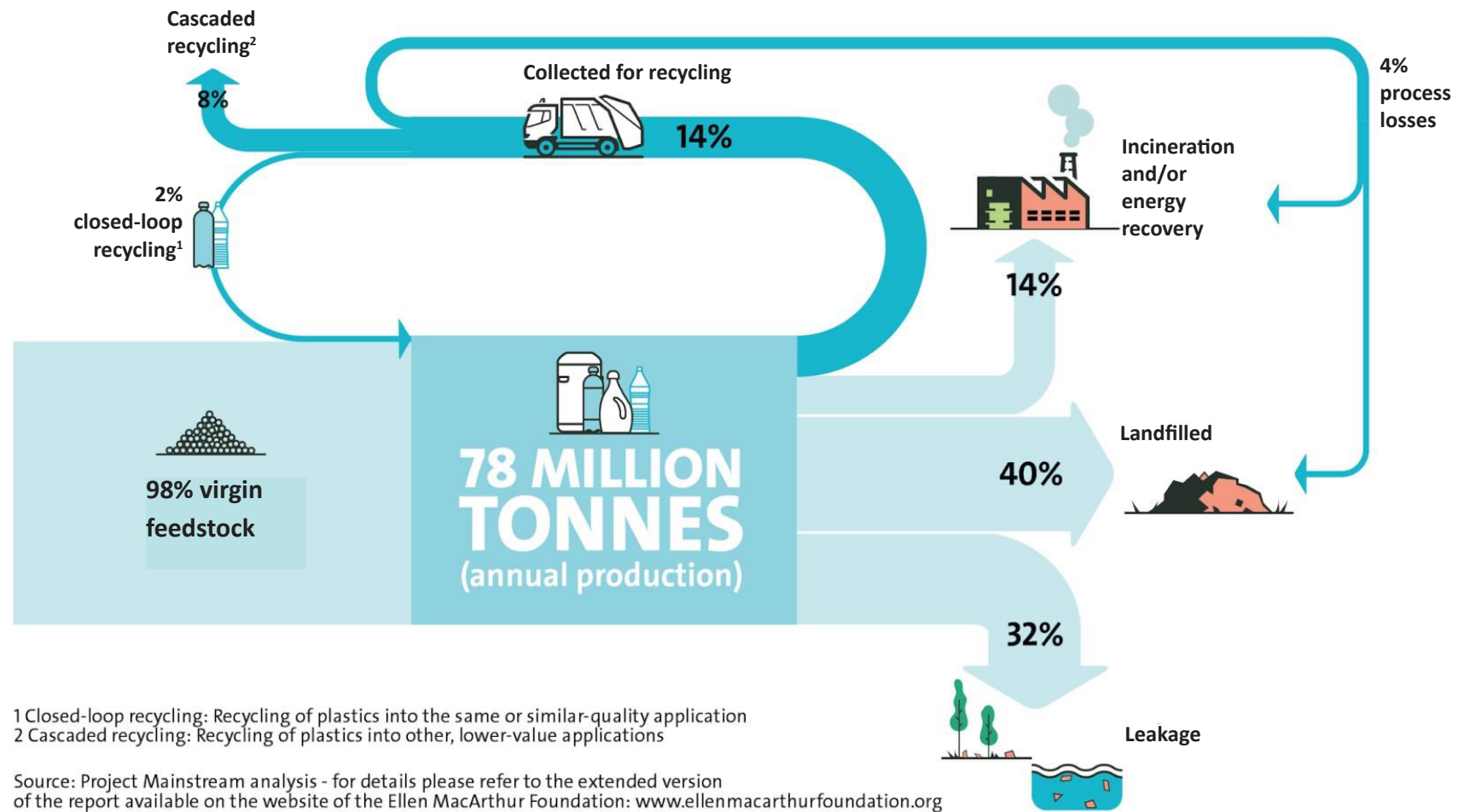
—The Independent (April 2018)

fact

every minute one
garbage truck of plastic
is dumped into our
oceans

World wide flow of plastic packaging

Sometimes as a business, we struggle to see past the disposal of our plastic, and we don't see where it actually ends up. Over recent years, plastic has been causing the environment harm in a number of ways, so what happens to the millions of plastic tonnes?



(Veolia 2018)

The science

So now we've established the problem of the plastic epidemic, it's time to talk about the existing technologies that have the potential to tackle the issue.

One key challenge is that plastics are often mixed together in a pack and often mixed with non-plastic materials, thus making it more difficult to separate and recycle. Currently, the government and councils do not offer a service for recycling mixed plastic waste, meaning a huge percentage ends up in landfill sites, with the risk of these leading to accidental contamination of waterways and the ocean.

At the moment, organisations are presented with lots of jargon but what does it mean?

Jargon buster guide!

- **Mono-plastics** - the term mono plastic means plastics that do not have a mixed composition. They are manufactured from one material making them easier to recycle than those comprised of different materials.
- **Degradable plastics** - these are made from traditional petrochemicals which can be engineered to break down more quickly. They contain additives which can cause them to decay more rapidly in the presence normally of sunlight or oxygen. However these can often lead to micro plastic contamination especially in river beds and the ocean flow where there is very little sunlight or oxygen.
- **Landfill** - any waste that is not recycled or re-used has to end up somewhere and its end destination is usually a landfill site. This is an area of land which acts as a dumping ground for all kinds of different waste products. One key on-going issue surrounding these sites is that they are not sustainable. People are starting to wonder what happens when they're full???
- **Energy recoverable plastics** - with landfill sites quickly filling up, it has become apparent that there needs to be a more suitable alternative destination for non-recyclable, waste plastics. One characteristic that is often forgotten about these plastics is their high energy yield. When plastic waste is burnt a very high heat value is achieved, often exceeding 40MJ/kg, which is higher than coal, paper and wood, meaning scrap plastic is a viable feed stock for energy production.

fact

every minute one
garbage truck of plastic
is dumped into our
oceans

- **Bioplastics** - these are made from natural materials such as corn, sugar cane, bamboo polylactic acid (PLA). PLA's can be engineered to behave like polyethylene and polypropylene. They save around two thirds the energy needed to make traditional plastics and are generally compostable. However a lot of land and water is needed to grow the original crop.
- **Compostable** - compostable materials are often compared to biodegradable materials as they are similar in the sense that they are both intended to decompose. However compostable materials go a step further by generating the earth nutrients once the material has fully finished breaking down
- **Bulking agents** - one useful option to consider when looking at improving plastic products at the design stage, is that of bulking agents. When bulking agents are used they can be particularly useful for producing time efficient, good quality and cost effective compost. Calcium carbonate is one popular mineral used as a bulking agent.
- **RPET** - refers to the recycled polyethylene terephthalate, in which plastic packaging made from PET such as plastic bottles can be sorted, cleaned and transformed into new products. It is a good example of where plastic packaging can be recycled economically and efficiently.
- **Down cycling** - refers to the practice of recycling products into lower grade products. Common in the plastics industry to recycle high-grade waste into things like garden furniture and water pipes.



Near future science

Can science help?

- UK based Recycling Technologies, has built a plastics recycling machine that converts conventionally 'unrecyclable' mixed plastics back into a new oil called Plaxx, which can then be reused to make new high-grade plastic. The mini-refinery has a modular design with parts that can pack into five 20ft shipping containers.
- Companies are beginning to use compostable plastics. Companies like TIPA produce compostable plastic packaging which features a multi-layer film made out of plant-based polymers which disintegrates in the heat and humidity of home composting. Also they capture carbon as they are grown from natural sources including crops such as corn and sugarcane and their manufacturing process is energy efficient, producing 68% fewer greenhouse gases.
- The EU-funded CLAIM project is developing technologies to prevent litter from entering the sea, including a photocatalytic nano-coated device and a non-coating system to jump-start the degradation of tiny nano-particles of common plastics in water
(BBC News, March 2018)
- Scientists recently accidentally created a mutant enzyme that 'eats' plastic bottles. The international team then tweaked the enzyme to see how it had evolved, in so doing found they inadvertently made the molecule even better at breaking down the PET (polyethylene terephthalate) plastic used for soft drink bottles.
(The Guardian 16 Apr 2018)



Tax and legislation

So what is being done?

Packaging waste legislation

Packaging waste legalisation is in place with the aim of encouraging businesses to reduce their packaging waste and increase their recyclable, recoverable packaging content. We will explain a lot more about this later on **page 12**.

Plastic bag tax

As the average plastic bag is slow to degrade in the environment, damages wildlife and is an eyesore when littered in our communities, the plastic bag tax scheme was brought in to reduce the use of single-use plastic carrier bags and the waste associated with them by encouraging the use of re-usable bags. The scheme has proven a great success and reduced the usage of plastic bags by 80% in England. The bag charges are also being implemented across Scotland, Wales and Northern Ireland with the government estimating an £780 million benefit to the UK economy.

(DEFRA, gov.uk, January 2018)

Single-use plastics ban

Single-use, disposable plastic products including cotton buds, cutlery, stirrers and straws are potentially being banned across Europe under a new proposal put forward by the EU. This ban is likely to be one of many that the UK could encounter in the coming years in order to combat the plastic epidemic.

Taxation plan

In a bid to change behaviour and reduce plastic waste, the government is consulting on imposing a “plastic tax” on products such as plastic takeaway boxes, disposable cups, cigarette filters and plastic wrap as well all other single-use, non-recyclable products to encourage recyclable alternatives.

“Sky News on 19th April 2018 reported there are around 8.5 billion plastic straws thrown away each year.”

—Sky News (April 2018)

fact

synthetic plastic fibres
have contaminated the
most remote places on
Earth

A green future: the government's 25 year plan to improve the environment

The government's new 25 year environment plan sets out proposals to improve the environment within a generation. These proposals cover some monumental changes, with one chapter in particular honing in on the plastic epidemic and the reform that lies ahead. The chapter 'Increasing resource efficiency and reducing pollution and waste' declares the government's aim to eliminate all avoidable waste by 2050 and all avoidable plastic waste by end of 2042.

The objectives:

- **Stop producing so much** waste by being more resource efficient
- **Implement well-designed and delivered regulation**, taxes and charges that contribute to cleaner, sustainable growth
- **Look at the whole life-cycle of resources** – from production to usage and what we do with them at the end of their lives
- **Use more efficient production processes** and better designed products that reduce waste and use recycled/re-used materials wherever possible
- Commit to **comprehensive and frequent waste and recycling collections** which protect local amenities and ensure that products are recycled as much as possible



"It is estimated that 8.3 billion tonnes of plastic have been produced since the 1950s. Without urgent action to cut demand, this is likely to be 34 billion tonnes by 2050, the majority of which will end up in landfill or polluting the world's continents and oceans."

-HM Government - A green future (April 2018)

"In the UK alone, during its recent Great British Beach Clean Up, the Marine Conservation Society found 718 pieces of litter for every 100m stretch of beach surveyed"

-HM Government - A green future (April 2018)

Other government initiatives & strategies being developed

How will we as a nation achieve zero plastic waste?

- Producers and manufacturers to take more responsibility for environmental impacts of products and the potential for incentivising more recyclable products.
- Reduce demand for single-use plastic
- More accessible, clear-cut recycling systems –including clear labelling systems and a more enforced Litter Strategy
- Improve rate of recycling at end-of-life and waste management stage

Upcoming Bioeconomy strategy

Bioeconomy is defined by the European Commission as “the production of renewable biological resources and the conversion of these resources and waste streams into value-added products, such as food, feed, bio-based products and bioenergy.”

Europe launched and adopted the Bioeconomy strategy in 2012 and the UK government is planning on following suit, by producing a UK Bioeconomy strategy that will bring together biological industries, academia and innovators and link up farmers and land managers with high tech industries.

Clean growth strategy

In this journey of environmental reform, the government has also introduced the clean growth strategy in which it will focus on growing the national income while cutting greenhouse gas emissions. In order to make this happen the government has pledged to roll out lower-carbon processes, systems and technologies nationwide, doing so in the most cost-effective way possible for businesses and homes alike.

“Re-using and recycling plastics is critical”

-HM Government - A green future (April 2018)

How you as a producer are **responsible**

Did you know that if you are a business you have a responsibility as a producer? Packaging Producer Responsibility has been around since 1997 and is based upon the 'polluter pays' principle. This principle looks at the actions of an organisation and the ultimate impact these could have on the environment.

For example, the packaging a company adds to its products to protect the goods for delivery, will ultimately be removed by someone else. This packaging, if not then re-used, ultimately ends up in the UK waste system where it can either be recycled, converted into useful energy (energy from waste) or put into landfill.

Clearly land-filling is a poor use misuse of resources and the best approach is to recycle wherever possible. To fund this, under the Producer Responsibility Regulations a company which introduces packaging into the UK, that could ultimately end up in the UK waste stream, must pay a green tax or levy to help fund the cost of its recycling.

The Producer Responsibility Obligations (Packaging Waste) Regulations 2007

These regulations require UK companies to complete what is effectively an annual 'packaging tax return' which is submitted to the Environment Agency. It is important to note that sending your own waste for recycling does not reduce or offset the obligations you may have.

Failure to comply with the Regulations is a very serious offence and can lead to enormous financial penalties.

However, not all companies are affected. An annual return only has to be submitted by those who in a year meet the following **three tests**:

- are a business operating in the **UK**, and
- have a **turnover > £2 mil**, and
- introduce **> 50 tonnes** of packaging into the **UK** market

The 50 tonnes (50,000kg) seems a lot but many companies reach this level as the following need to be included:

- Packaging purchased to add to goods
- Packaging around bought-in finished goods from the UK which are supplied to an end-user
- Packaging around imported (outside the UK) raw materials, components and finished goods
- Manufactured packaging
- Imported packaging for resale

fact

by 2050 there will be more plastic in the oceans than there are fish (by weight)



Packaging waste regulations explained

What is classed as packaging?

Under the Packaging Regulations, packaging is defined as anything used for the containment, protection, handling, delivery and presentation of goods. This ranges from an aerosol can and a cardboard box through to a wooden pallet. In short, everything that surrounds goods other than a lorry or shipping container is classed as packaging.

How does a company comply?

A business that meets the above tests must submit a 'packaging tax return' to the Environment Agency by the 7th April each year. In this *return* a company needs to:

- determine the packaging flows through its business
- determine the various material types in their packaging
- identify what '*obligated activities*' have been performed on the packaging
- compute the *packaging tax obligation* for the weight of each packaging material type used in each *obligated activity*
- compute the total *packaging tax obligation*
- provide evidence that it has met its total *packaging tax obligation* by purchasing **Packaging Recovery Notes (PRNs)**

These *returns* to the environment are technically complex and therefore companies usually achieve compliance through specialist packaging compliance scheme like Kite Environmental Solutions.

How a compliance scheme can help companies comply with these regulations

Compliance Schemes were written into the Regulations in 1997 and play a key role in delivering the success of the system. All compliance schemes have to be accredited by the EA and are subject to annual audit by the EA.

They submit their members' *tax returns* to the Environment Agency (EA) as well as evidence that they have purchased the relevant PRNs by materials type to offset each member's obligation. The costs of these PRN's is charged to each member.

Kite Environmental Solutions is one of the largest compliance schemes in the UK and has been rated as "EXCELLENT" by the EA.

packaging material

- paper
- glass
- aluminium
- steel
- plastic
- wood

obligated activities

- manufacturer 6%
- convertor 9%
- packer/filler 37%
- seller 48%

Kite's scheme rated
'EXCELLENT'

PRNs

Licensed (by the Environmental Agency) packaging waste re-processors can issue one PRN per tonne of material type that they have re-processed.

These PRNs are then bought, on behalf of their members by Compliance Schemes.

The prices of PRNs are subject to supply and demand and can fluctuate wildly from time to time.

How can companies reduce their **COST** of complying with the Regulations?

In essence, companies need to try and **reduce their PRN obligations**.

They can do this by:

- **REDUCE** That is, reducing the amount of packaging they use e.g. switching to lighter gauge (lower weight) stretch film
- **REPLACE** That is, by replacing packaging of one material which has a high PRN cost with one that has lower PRN costs e.g replacing plastic with paper/cardboard. Historically paper PRNs have cost significantly less than plastic PRNs.
- **RE-USE** That is, by moving to re-usable packaging e.g. cardboard pallet boxes with dividers.

Future plans for producer responsibility and compliance schemes

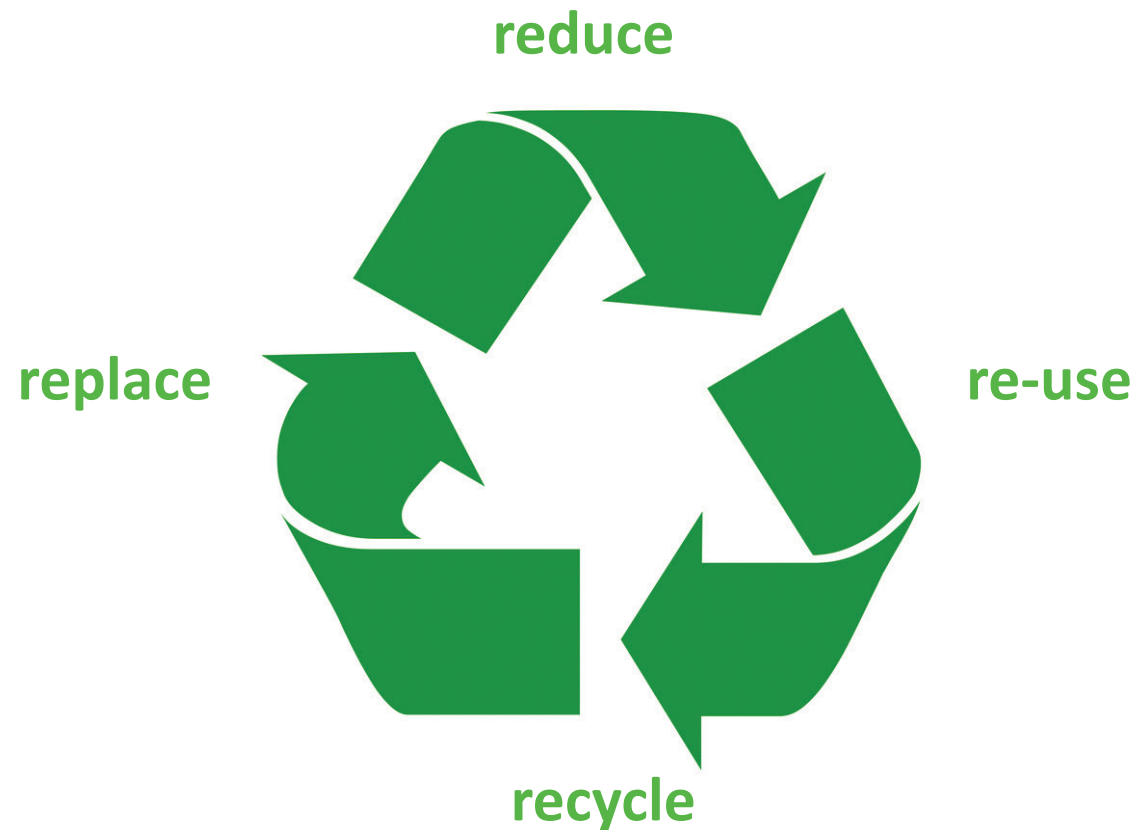
The Secretary of State for the Environment is looking to develop the current legislation to allow the UK to adopt the *circular economy*. This will result in extended producer responsibilities which will require producers to pick up at least 80% of the costs of collecting material, sortation and re-processing. It is thought that currently only between 10% and 20% of these costs are currently being met by producers. A consultation regarding possible changes, coupled with calls for evidence, will be produced by DEFRA towards the end of 2018.

fact

PRN's are the green tax that is used to fund recycling in the UK.

What can we do today?

With all the different voices and information going round surrounding the plastic epidemic, it's hard to know what way to go and what measures to take when it comes to changing your practice as a business or consumer. WRAP, the UK Plastics Pact has come up with the model of following a *reduce, re-use, recycle* philosophy to gain control of plastic overproduction. Here at Kite we have added a *replace* section to this.



The next couple of pages offer advice on some positive changes that we believe can easily be made to impact the 4 r's. They are all simple but will have a big impact on the environment. By no means is this everything we can do, as we would need 100's more pages, however we have touched on what we believe to be easy but impactful options.

What can we reduce?

Use thinner plastic, and use the right sized bag for the product, making better volumetric use of packaging

Pallet wrap audit - Kite's in-house load retention specialists can carry out a scientific audit of a business's usage of stretch film and come up with improvements which usually result in a reduction of up to 30% in stretch film usage. For example, it is common for pallet wrap machines to be operating inefficiently causing a significant increase in stretch film used and hence an increase in stretch film entering the waste stream.

Kite's engineers will focus on the following process:

Load stability testing



80% of UK pallet wrap machines operate at less than 80% efficiency



Kite demonstrate how to save money and reduce environmental waste



Our engineers will conduct regular re-visits to ensure maintenance of best practice, quality & safety

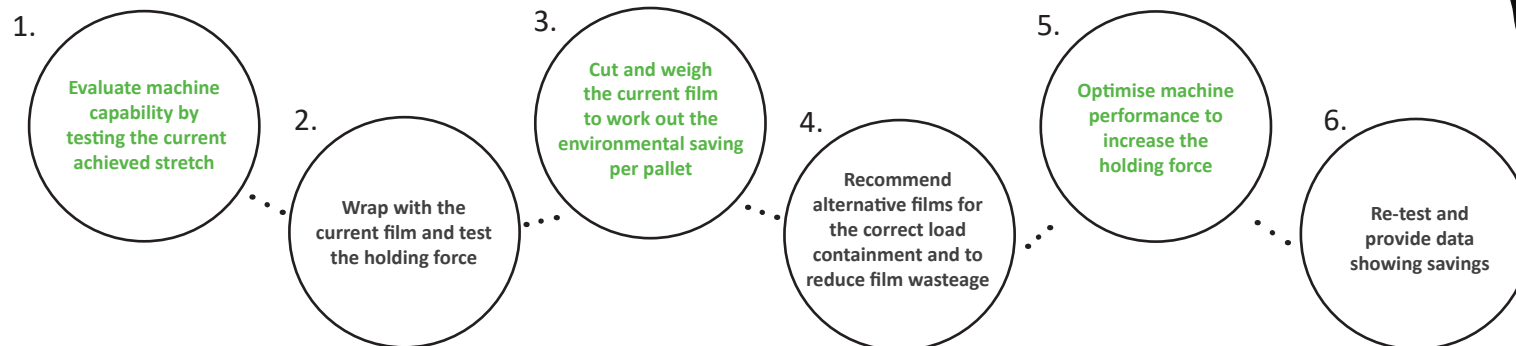


Kite can show you how to improve the productivity of your machine to reduce film usage



Data analysis is provided to prove your load is safe and demonstrate your material savings

Audit process



Audits conducted using latest generation Highlight test system



What can we reduce?

5x5 system

The 5x5 incorporates a series of pre-stretch gears within the dispenser which ensure that the stretch film dispenses at the optimum elastic point. This minimises the risk of over-stretching which can lead to the film breaking, or under-stretching meaning more film is being used than necessary and no cost benefit is achieved. The 5x5 system normally uses less stretch film achieving around a 20% saving.



Stretch wrap machine

There is a wide range of stretch wrap machines for low to high volume operations. Used in conjunction with high performance films with a superior stretch yield and puncture resistance, excellent load stability can be achieved whilst reducing the amount of plastic used. A 50%-75% reduction in stretch film used is not uncommon.



Stretch safe

40% faster than wrapping by hand. The tension control allows users to get more out of their stretch wrap. The film used with this system is a lower gauge high-performance film but performs as well as a thicker film, meaning film usage is reduced. This system is ideal for medium sized operations.

What can we re-use?

Stop using plastic and look to re-usable packaging made of metal, plastic or wood. Thousands of tonnes of transit packaging are used every year in the UK and re-usable packaging can offer significant business and environmental benefits.



Klikstor archive boxes

Sturdy and extremely high-quality, Kite's Klistor boxes can be easily collapsed after use and re-used time and time again due to their durability.

Timber boxes

Manufactured from birch plywood, Kite's heavy-duty timber cases are suitable for transporting heavy duty items and can be re-used several times.



Pallet stillages

Ideal for storing a range of items in the workplace, Kite's range of pallet stillages are extremely strong and can be used repeatedly to store and move goods around.

What can we **recycle**?

Often, when you hear the word recycle you typically think of it as an end process – a conscientious afterthought, whereas in actual fact we need to go right back to the start when thinking about recycling.

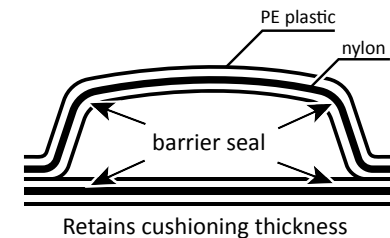
If we want to really master the whole recycling process, we need to address not only the question of what to do with a product at the end of its life but the whole fundamentals of its design. Let's go back to the drawing board and see what we can do to make UK recycling systematic and effective.



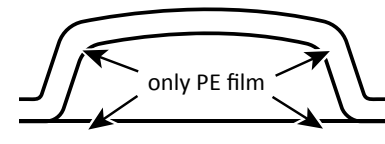
Recyclable by design

WRAP's UK Plastics Pact has set a target of eliminating problematic plastic packaging through effective design, innovation and alternative delivery models. If there is more consideration for sustainability and recycling requirements at the design stage, plastics can be recycled afterwards with ease rather than just adding to UK waste levels.

Barrier bubble



Mono bubble



Mono bubble

Bubble wrap is a perfect example of where a choice at the purchasing and specifying stage can result in an easily recyclable product. There are fundamentally two different sorts of bubble wrap in the UK. Barrier Bubble, which has a barrier layer sandwiched between layers of plastic, the barrier is usually nylon. This bubble will stay inflated for several weeks, but is much harder to recycle as the barrier layer is a contaminant.

On the other hand mono/bubble is simply made out of one sort of plastic PE and therefore easy to recycle. However its bubbles will not remain firm quite as long as a barrier bubble, but in the fresh fruit and internet fulfilment industries, where three days is a long time, why do we need a product that is difficult to recycle and lasts far longer than required?

What can we recycle?

Designed to be recycled

Plastic packaging is often made up of multiple plastic types making them particularly difficult to recycle. Their combined composition often comes about due to the demand for either product strength or convenience of design in terms of practicality and cost. For example, take the typical plastic salad tray you have for your lunch or the plastic container a child's new toy truck comes in. These often have an PET base and a plastic film lid that is made from a different type of plastic such as polyester which means they are particularly difficult products to recycle as the two different films can not easily be separated and consequently add to waste levels. These trays can with only a modicum of effort be designed in a single type of plastic, this can also have a very significant recycled content.



Trays are made on an in-line thermoformer that takes a roll of “Base Film” which it heats up and then presses out the shape or formed tray. This tray is then loaded with the product (salad or toy) after which “Lidding Film” is then heat welded to the base to seal the whole pack. By changing the base layer and the lidding layer to a single type of plastic a mono-material pack is created, thus massively increasing the potential for recycling.

Clear labelling & segregation

A system to clearly label waste will make it a lot easier for businesses to separate their waste. Clearly marked containers for different kinds of waste and well-understood recycling procedures can ensure that potentially recyclable materials are recycled and ensures less waste goes to landfill.



What can we **recycle**?

Collection process

Only 56% of plastic bottles are recovered in the UK, largely because of a lack of suitable collection processes which are a vital ingredient in global reprocessing and sustainability. If a consistent collection process was in place, we would have less discarded waste ending up as pollution.



Plastic shredders

Shredders can play a vital role in waste management, reducing the physical volume of material. The finely shredded waste plastic makes economics of collection and re-processing much more viable.

Bailing machines

A bailing machine can be a valuable tool in simplifying recycling. These machines compact and bundle cardboard, plastic film and shrink wrap allowing businesses to efficiently sort at source and store the waste streams they generate.



What can we **replace**?

replace this

Polythene mailing bags



Paper mailing bags & paper bags

The perfect alternative to polythene mailing bags, this environmentally friendly 100% recyclable mailing solution is re-usable, cost-effective and very heavy-duty.

with this



Tape



Gummed paper tape

Made from natural paper and starch Kite's paper gummed tape forms a strong fibre-bond that will not peel away and is fully biodegradable.



What can we **replace**?

replace this

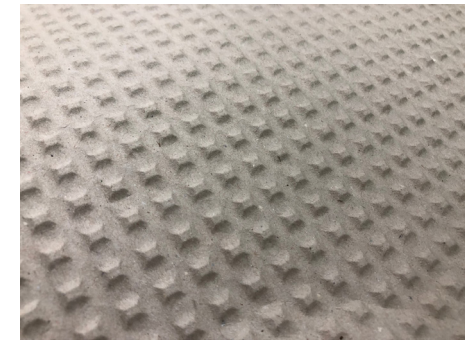
Bubble wrap



Paper bubble wrap

Extremely high absorbent cushion paper ideal for lining, padding and covering delicate items.

with this



Mini air



Paper systems

Kite's range of paper protection provides both low and high volume users with the perfect, eco-friendly void fill solution.



Things to debate

Should we be investing more in education on plastics?

There are a lot of people out there who do not recycle, but often it's not because they don't want to, it's because they simply don't know what they should be recycling. With all the different labels out there, individuals get confused about whether items are recyclable or not. Labelling systems should be revamped so that it is simpler and easier for people to make informed decisions.

Should we be investing more in infrastructure?

As a nation, there is a growing voice of concern about the lack of investment and organisation that has gone into the whole infrastructure process. The UK is currently looking to re-evaluate the waste collecting, sorting and recycling procedures with the government's Department for Environment, Food & Rural affairs (DEFRA) assessing the waste and recycling throughout the UK to achieve a cleaner environment. Investing in infrastructure would develop a sustainable plastics supply chain and lay the foundations for correct recycling practice going forward.

Should plastic be banned?

With the rising plastic waste epidemic, society is looking to stop mass production of plastic but there is the lingering question of whether plastic should be banned. The problem with banning plastic is the fact that it has also brought a lot of positive improvements (e.g. food preservation) for society so the more realistic approach is to use plastics correctly. WRAP's, UK Plastics Pack, sees a vision of a world where plastic is valued but doesn't pollute the environment with a target of eliminating unnecessary single-use packaging through redesign, innovation and alternative models. Society can focus on remodelling plastic as opposed to banning it as a whole. Clearly plastic packaging should be made recyclable, re-usable or compostable, offering a sustainable solution.



The Kite challenge

Now that we have our four r's to follow *reduce, re-use, recycle and replace*, doing our part for the environment just got that little bit easier. We hope we've given you some useful advice and inspiration to spur you on to do everything you can.

Here at Kite we're looking to make a real change so we've challenged ourselves and our customers to reduce plastic usage by **120 Tonnes** by the end of 2019, so why not call us now to see how we can work together to achieve this target!



**Work towards building a
better future for the next
generation!**



an employee-owned business

