

# **WATER COOLANT CONVERSATIONS ON SUSTAINABILITY AND PACKAGING**

**Our work to date within developing sustainable packaging solutions and the accompanying services has given us a unique view across the sustainability sector. From the challenges large industry players face, embedding sustainability into the services we require from the companies, environmentalists and concerned individuals demanding faster change.**

**Below we have condensed many of the insights and learnings we have developed over the last two years into a easily digestible stream of thought.**



# CONSCIENTIOUS CONSUMERS

**Your customers are asking questions; they may not be asking you directly but it's on their minds. Why are you still using plastic straws? Do you have a vegan option? Is your produce organic or ethically sourced?**

**Hospitality, foodservice and retail are particularly exposed to consumer habits due to the competitor rich environment they operate within and people are voting with their feet, be it consciously or subconsciously.**

**Moving away from traditionally single use packaging items offers an opportunity for businesses to become sector leaders in sustainability, benefit from reductions in operational costs, improve guest experience, enhance consumer-brand loyalty, reduce waste removal bills and show improvements in organisational CSR, all while ensuring they do not become an industry 'dinosaur'.**

**We view single use plastics as a brand damaging risk you need not expose yourself to and the alternatives are readily available.**

**On a wider scale many of the big hospitality names are making moves in the right direction, with some proactively adopting change and others moving at a 'fraction-before-regulation-necessitates-it' pace.**

## EXPERIENCES

**Just a purely functional service is no longer enough, customers are demanding an experience. In a society where everything is shared online, designing an experience worth sharing digitally allows your customers to do your marketing for you.**

**Having products and packaging branded to you ensures your name and brand get the exposure they deserve and a use of sustainable materials will ensure you get peoples attention for all the right reasons.**

**And it's not just us saying it, we have been working with a wide range of companies to provide a sustainable brand experience through our products. This ensures the experience you enjoy doesn't leave a moral question mark over its sustainability and that your short lived enjoyment doesn't have long lasting detrimental effects.**

## RELATIVE OBSOLESCENCE

**Many of the products we discard are, from a functional viewpoint, as good as new. Commonly it is our love and fascination with these products that has since waned. Western societies are dominated with marketing that focus on new and youthful messaging, which doubtless contributes to this effect. Few people want to surround themselves with used old objects!**

**Perhaps an increased focus, on the story the product tells, and an increase in the intangible services the products offer, pose a solution to this issue and to the sustainability implications of the status quo? Could this see us move to a scenario where these currently relatively obsolete products make us behave more morally?**



## **BRAND IMPRESSION**

**Bridging the worlds between reality and desired portrayal of brand/corporate image are ever increasingly a key determinant of success. The packaging your products are encased within are commonly the 1<sup>st</sup> point of contact a customer has with your product. We all know 1<sup>st</sup> impressions matter and we have found 'Conspicuous Sustainability' to be a winning concept.**

**Making a real point and focus of sustainability both encourages awareness whilst ensuring the 'it looks like plastic so it probably is plastic' fallacy is not encountered.**

**What's more, it makes good business sense, irrespective of your personal feelings. Nielson reports show that consumers prefer to purchase brands that associate themselves with sustainability and many are happy to pay significantly more for this, to the tune of 73% of millennial's feeling this way! This allows a circle of good to develop where people desire to do the 'right' thing, align their purchasing power with their moral compass, become loyal to the brand/service/product, generate returns for the aforementioned and allow that business to grow and champion further good.**

**More broadly speaking there appears to be a high level of consumer confidence about what's wrong, not what's right. This results in those in positions of responsibility across all levels of an organisation having a clear opportunity (perhaps even an obligation to avoid the bystander apathy effect) to altruistically steer the conversation towards the most sustainable and ethical options and fully engage and champion positive environmental changes.**

## PERSONAL IMPRESSION

I want to pose two scenarios nearly 4 years apart as real world proxies for changing mind sets on sustainability issues.

I worked in Hamburg briefly researching algae based bio reactors within buildings. One evening I was explaining the principle of providing a closed loop sustainable housing environment to an acquaintance out there. After my explanation I was greeted with "But you don't look like the Birkenstock wearing bio people at the refill store". This could be taken as both jumping to stereotypes and a simply uninformed viewpoint. Perhaps however this train of thought is in fact the norm, and many of us just do not vocalise our thoughts so clearly?

Fast forward to 2019 and I was grabbing a coffee to go with some colleagues,  $\frac{3}{4}$  of us dutifully passed over our reusable coffee cups with a rightfully warm fuzzy feeling occurring internally that we were 'doing our bit'. Our fourth colleague however, who had suggested the coffee, was too embarrassed to order a coffee in a single use cup and settled for a canned drink to avoid the embarrassment.

Temporarily ignoring the vast margin for error in my haphazard social science experiment the second scenario is a thankfully increasing trend I have noticed. People don't want to appear to be 'part of the problem' or uneducated to the current climate crisis. I would even go as far to say sustainability is becoming a sign of social status and fashionable thing to be associated with in certain demographics.

# AVOID GREENWASHING

**Use of 'green' marketing is becoming increasingly prevalent. The clear upside to this is that industry is realising the importance of sustainability to the consumer. The unfortunate downside however has been a rise in unsubstantiated or at best dubious real world credentials.**

**We have found the 'absence of evidence ≠ evidence of absence' principle offers a rightly cautionary lense through which to view many of the unsubstantiated environmental messages.**

*As I write this, I myself have fallen victim to this greenwashing, or perhaps bluewashing, courtesy of Adidas. Earlier this year I enthusiastically purchased a pair of Adidas x Parley Ultraboost sneakers. After subconsciously consuming all the brand photos and messaging (gill nets next to identically coloured shoes in a gill net pattern, beach cleaning photos, recycling processing plants etc) I made a very 'System 1' decision and bought them. Months later I was listening to a podcast where Boyan Slat's enlightened me to the fact that the plastic was just 'ocean bound plastic' (in Adidas's own words 'intercepted from beaches and coastal communities before reaching the ocean') whatever this means? Given that ~40% of the worlds population lives within 100km of the coast this is a somewhat broad measure. After 2 hours of further digging I found their deeply buried [official documentation](#) on the matter and their somewhat ironically final point in the document left a sour taste in my mouth.*

## adidas

### 11. What is adidas doing with the remaining ocean plastic not used in Parley products?

PET bottles are separated from products made out of HDPE (plastic rings and caps) and are converted into yarn. The HDPE products, which cannot be converted into yarn, are sent to regular recycling facilities. Additionally, some flagship stores use Parley Ocean Plastic™ to create instore sales support items such as hangers and mannequins.

### 12. Are Parley products made from plastic that comes from the ocean?

No. Parley Ocean Plastic™, used as a replacement for virgin plastic in the making of adidas x Parley products, is a catalyst innovation created from upcycled plastic waste intercepted from beaches and coastal communities before it reaches the oceans.



*As a side note I should have realised this earlier given the 11 bottles retrieved/shoe figure and the ~6 million shoes sold (2017 & 2018) assuming collection of a 500ml Coke bottle as the average 'bottle' at a weight of 24g they would have needed to collect 132 million bottles worth of 'ocean plastic'. Then factor in UV degradation, oxygenation, temperature, accidental contamination, cleaning, cap/label removal, bottle 'density' per unit ocean or beach etc and the cracks in the vista I had painted in my mind begin to appear.*

*I wonder how many people-myself very much included-who bought these products enthusiastically thinking they were cleaning beaches and doing their part in "making the world a better place" when in reality the plastic being used could easily have been any old London kerbside recycling?*



# CUSTOMISATION

**Customisation is a huge area of growth, providing a tailored consumer experience allowing the user to show their personality is a huge brand win.**

**However, providing mass market profitable customisation, that is both sufficiently customised to provide the desired effects, but both financially feasible in a physical product at scale, can be a challenge both technologically and logistically.**

**Companies such as Moo.com have done fantastic jobs at developing a seamless, design and order flow for the ordering of self designed products within the stationary space but sustainable packaging is yet to fully enjoy this.**

**The second bonus we see with customisation (and more generally business or consumer involvement in the process to receiving a product) is the 'IKEA effect'. This is the cognitive bias and subsequent disproportionate attachment a buyer places on a product they have been closely involved with during phases such as design, production or customisation. In our experience this close attachment and 'champion' figure can be found and nurtured with companies when said buyer is closely involved in the product design process and leads to a stronger repeat order cycle and loyalty to the product.**

# PEOPLE ARE FUNDAMENTALLY GOOD AT HEART

There are very few people-excluding those with nefarious political or personal motives-who have a particular desire to use unsustainable materials and actively contribute to the climate crisis. The convenience of low cost single use plastics and the detachment from the damage they cause make for an uphill battle, but this is where you come in...

Consumers need retailers, hospitality and foodservice providers to champion alternatives through demanding change. The convenience of disposables and the familiarity we have developed to this model are significant but far from insurmountable.

We, the average consumer, are fortunately not Homo economicus. A desire for competitive pricing and a quality product is both rational and necessary however the significance of fulfilling ones' moral obligation and upholding ones' personal values must be balanced with the previously mentioned metrics. Much of the current morally bankrupt consumption stems from use of our "system 1 brain" "system 1 brain" (System 1 is the brain's fast automatic, intuitive approach) this is heavily influenced by our fluency with certain brands and often further swayed by companies advertising/messaging/promotion resulting in well meaning consumers falling for the narrative style fallacy peddled by brands to generate emotion and loyalty. Our more analytical, and hopefully moral, wellness and provenance focused "system 2 brain" (System 2 is the mind's slower, analytical mode, where reason dominates) is required to see past the glossy exteriors portrayed to us.

A major area of opportunity lies in using packaging as an accessible front end to as much more detailed digital product 'picture'. I would challenge that many of us would greatly shift our purchasing habits if we were confronted with the full backstory to many of our products at the time of purchase. Here lies a huge opportunity for businesses that are doing right to leverage that to consumers more clearly as POS.

## IS IT WORTH THE RISK?

**Existential risks require unique frames of reference. Understanding how to rank the benefits/cost of stasis not by plausibility, but by the potential harm they can cause, provides a sound framework.**

**The environmental damage and emission based risks associated with a continuation of the use of fossil fuel derived products is dire in a 'good' scenario and terminal a 'bad' scenario.**

**For those businesses that are not environmentally minded, the potential downside of a continuation of current behaviour, however small you believe the probability of the aforementioned terminal event, are never worth the risks down the line.**



## THE RULE OF THE SMALL MINORITY

**It was not long ago that virtually no one questioned the plastic straw, it was the status quo and functionally did a fantastic job at slurping up all our beverages!**

**These little suckers were soon to be put under close scrutiny however. A small handful of ever increasingly vocal activists (think the viral straw-in-turtle's-nose video, David Attenborough's Blue Planet and many others) quite literally brought this issue into our front rooms and onto our myriad devices.**

**This small minority were so diligent in their activism that huge swathes of hospitality and foodservice have made pledges on a plastic straw removal date or begun the phase out already.**

**The governing principle to this transition is:**

**Those who refuse single use plastic items will only use alternative materials, but the typical consumer will quite happily change to a sustainable alternative too.**

**We believe this to be especially significant because as this small minority grows (circa 3-5% is required for this effect assuming negligible alternative product cost increase), and as the range of environmentally unacceptable products increases, the governing principles that have applied to products such as straws will expand in scope greatly.**

## **DEVIL IN THE DETAILS (i)**

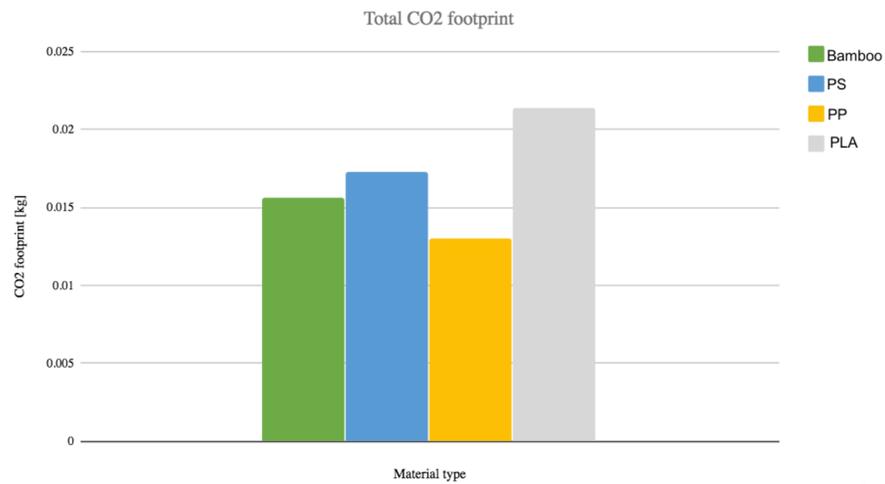
**Plastic pollution and its myriad alternatives should never be taken independent of emission profile. An alternative that essentially reduces plastic pollution but causes greater emissions simply transfers the problem. This comment does come with caveats, for example paper straws produce ~5% more carbon emissions per unit than plastic, however the plastic straws environmental damage potential is atrocious, meaning this substitution makes absolute sense currently.**

**Here at PANDA we take this very seriously and only ever release products where we can either fully justify an initially higher carbon emission outlay, based on later reuse, or in many cases, our products have outright lower emission profiles than conventional single use products.**

**See below an extract from our Life Cycle Assessment conducted by University College London (Feb 2020) on our bamboo spork product.**

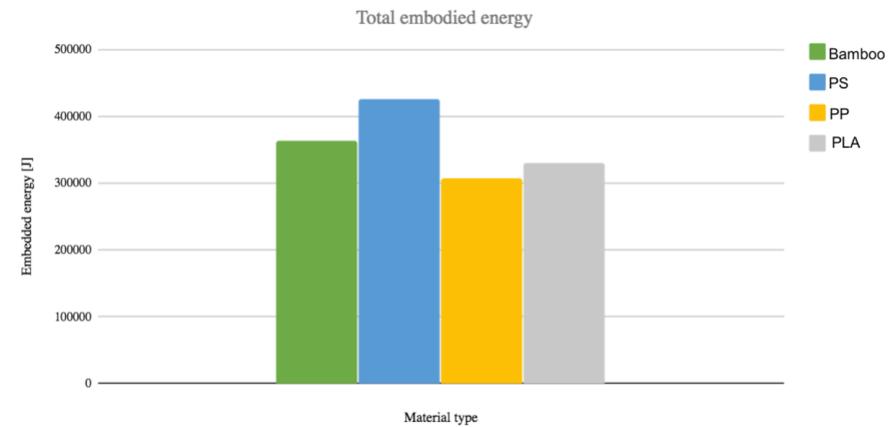


## SPORKS



PANDA  
PACKAGING

## SPORKS



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Bamboo spork	vs PS	vs PP	vs PA
Amount of reuses of bamboo spork needed to make up for EE:	0.8533048522	1.178933188	1.0966735
Amount of reuses of bamboo spork needed to make up for CO2 footprint:	0.9015675954	1.203071788	0.7291664

## UNETHICALLY ETHICAL BUSINESSES (ii)

**Founding an ethical business is a brave and essentially morally well guided decision to make; you want to bring your vision for change into the world and this should be applauded. Thought has to be cast however to how ethical a business is that long term will produce greater emissions than the current status quo.**

**Championing your mission and cause is a credible activity but when your products result in greater lifecycle emissions per unit there lies a paradoxical necessity that you don't reach scale!**

## FRAMING

**Anchoring or framing plays a vital role in our decision making process, and is perhaps underappreciated as a lens, through which we view our impending climate emergency.**

*If I were to ask you: (i) Did Ghandi die at less than or greater than 114 years old?*

*(ii) At what exact numerical age do you estimate Ghandi died?*

*The entirely random mention of 114 years old likely framed or anchored your estimated numerical figure for his age of worldly departure. (example credit Daniel Kahneman)*

**This framing principle can clearly be applied to a climate scenario:**

**Your experiences of changing climate have likely been minimal over your lifetime, due to the inherent difficulty in perceive minute changes over human lifetime referenced time periods. This leads to falsified feeling of immunity to impending climate disaster and irreverence to the delicately balanced Goldilocks zone we call home.**



## **H.V.F**

**Commonly, significant global problems that can be successfully solved by technology in the broadest sense have some overarching similarities.**

**Max Levchin summed these up fantastically with the H.V.F (Hard, Valuable and Fun) acronym. I would suggest perhaps one more ever growing addition to this list in the form of [visibly] Impactful.**

**Following this theme, I believe we will see a significant increase in the numbers of companies formed to tackle environmental issues and plastic alternatives/new packaging methods will be a major area of focus.**

## **CHANGING OF THE GUARD**

**On occasion it requires change of generational mind-set (or perhaps more accurately social and economic context) to champion a change.**

## A CLOSING THOUGHT

**Dr. Ruben Rausing summarised the requirements of a successful packaging product perfectly back in the 90's with the "*Save more than it costs*" mantra. At the time this phrase was focused around efficiency, quality, product differentiation and the resulting businesses growth; perhaps the real 'saving' now however is a planet that is habitable for future generations...**