



# ... it's our **future**



### Our world is changing ...

The world about us is changing fast... In environmental terms this is not for the better. Our natural resources are being consumed in ever increasing volumes as we and the rest of the world, strive to maintain or achieve the westernised ideals of a modern lifestyle.

Overwhelming increases in carbon emissions, together with the erosion of vast swathes of natural habitation are recognised as some of the key contributors to the causes of climate change.

The alarming reality is that regardless of this knowledge, the combination of our desire to maintain our lifestyles, together with the aspirations of the new emerging global economies, suggest that we are unlikely to reverse these trends without some pretty dramatic changes to our current way of life.

This is scary stuff... But is it too late? What actions can possibly be taken that are capable of making the right kind of difference?

#### Greenhouse gases - Climate change ...

Waste is a major issue, yet our way of life in this modernised, throwaway world, means that despite this knowledge we continue to create waste material in vast quantities, all of which needs disposal. We clearly recognise the need to divert waste from landfill, as almost everyone of us has heard the message that decaying waste releases methane which, as a greenhouse gas, is many times worse than carbon dioxide.

So we all know and understand that landfill is the wrong option. Recycling is good... This we know! But only when the end result genuinely justifies the means. When the product of a recycling effort has a genuine benefit and when the effort expended in the process of recycling, hasn't created more carbon emissions than would have been generated if the waste had simply gone to landfill in the first place!

So the answer is... Intelligent recycling is good. Recycling merely to comply with legislative edicts or merely for the sake of achieving recycling targets may have little or no real benefit and create a "product" with little market appeal, or no value whatsoever.

A quandary then... We need to divert waste from landfill, but what should we do with it? Recycling is good, but only with the right materials and then, only sometimes. This leaves a vast amount of material that needs to be disposed of in an alternative way.

Incineration is viewed by the authorities as the easy solution, but we all know that if we burn the waste, we are back to creating vast amounts of carbon dioxide combined with a range of other undesirable emissions. The public have consistently rejected the option of incineration, even when cunningly presented as a means of recapturing limited amounts of energy from waste.

So... Are there any genuinely viable, alternative options?



#### Carbon emissions ...

One of the single biggest man made causes of carbon emissions is our constant thirst for energy.

Our lifestyles are such that almost everything we now do has a requirement at some point to consume energy. It has become such an intrinsic part of our lifestyle that we instinctively use it without a thought... The obvious things like heat, light and fuel for our cars tend to register somewhere in the subconscious, but all manner of things that are now an irreplaceable part of our lives, Computers, Television, Cooking, Music, Cleaning, Washing, Entertainment (both personal or public on a grand scale), are almost invisible consumers. Our consumption of energy dwarfs any other impact that any of us will make upon the resources of our planet and thus our personal contribution to climate change.

Most of our energy, whether heat, electricity or fuel for our vehicles (both private and public transport) comes in one form or another from fossil fuels. i.e. Coal, Oil or Gas.

Ignoring for just a moment, the effect on climate change created from burning these fossil fuels, the sobering fact is that we are now running out of these precious resources. Our rate of consumption has now risen to the point where predictions suggest that fossil fuel supplies will be incapable of meeting demand in less than 25 years.

Considering that Planet Earth requires around 100 million years to produce coal and somewhere between 100 and 300 million years for oil and gas, the omens are not good.

#### Sounds like we're in deep trouble !

So, we have a few problems then ! We are producing waste like never before in the history of this planet, which if left to decompose produces greenhouse gases... Which we now know contributes to the impact of Climate Change.

We are producing additional greenhouse gases as a result of almost every action we take as a part of our modern way of life... Which again contributes to Climate Change.

And, we're running out of the fossil fuels that provide the power for almost everything we do. Unless someone has some serious answers ... Then we really are in deep trouble.

What we really need is something that can eradicate waste (with no emissions) and produce serious levels of energy, to such extent that we no longer need rely upon fossil fuels to provide our energy.

And... We need this now!

EPi ....

The solution to eradication of waste... Without emissions.

The solution to production of controllable, predictable, reliable, renewable energy.

A technology that's available right now!



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