

Bear Grylls' Press Release before trip to Antarctica

November 2008

As the world economies battle for air, all of us are facing challenging times. But what lies behind the crisis, and what about beyond it? Beneath the surface of world instability bubbles a much more fundamental issue. How are we going to face up to the earth's energy crisis? And at what cost do we ignore that question?

When we are fighting for basic economic survival it is hard to look beyond our front door, but we must. If we are to have a world worth handing on to our children, we must have the courage to look beyond oil and conventional fossil fuelled power solutions.

We must also fight against the cynicism that questions global warming and we must fight against a lethargy that says it is too late or that it isn't our problem. It is not someone else's problem.

We all have a chance to make a difference to our struggling planet, and it is our generation's time to stand up and be counted. I want to do exactly that. I want my children in the future to know that I didn't stand back and observe, but rather I made steps, however small they were, to bring about change.

I read recently how European Union officials say they're considering an ambitious plan to draw energy from the sun that beats down relentlessly on the [Sahara](#). They say that by building a [solar power](#) plant the size of Wales (a small area, compared to the vastness of the Sahara that is almost as large as mainland USA) and laying down high-voltage transmission cables, the EU could potentially capture enough [clean energy](#) to power the entire continent. Wow! Why aren't they building this now?

It's very hard for any one of us to save the earth alone. I understand that. But this is about a determination to contribute.

Part of each year my young family and I live on a small remote Welsh island. It is a few miles offshore with no mains electricity or running water. We power the island with a small wind turbine and we collect

rain water off the roof. It works. Powering the future is about trying to think outside the box and it's about encouraging the pioneers.

In a week's time I leave for an expedition that I am leading down to Antarctica. We are aiming, first of all, to explore part of the remote Antarctic coastline where the great Southern Ocean meets the vast continental ice shelf. We will be doing this using one of the fastest stand up jetskis in the world and small inflatable RIB, both powered in part by bio-ethanol, an almost entirely carbon neutral fuel alternative. I don't expect this journey to be easy.

We will then aim to scale one of these ice shelves (many of which are over 600ft high). Less easy still, I predict. We will sleep in hanging bivouacs half way up this vertical ice wall before eventually hauling the jetski and inflatable up over the ice face to continue on the mission.

The team then heads inland to Queen Maud Land in the Antarctic interior and the mighty peaks of one of the least explored regions of the huge continent. Here we set our sights on an attempt on one of the great unclimbed peaks on earth, as of yet un-named.

We will be using kite-skis to harness the wind to move across vast ice plateaus and we will trialling and comparing the use of electric powered paragliders against their petrol powered predecessors. These electric engined flying machines have been the holy grail of powered paragliding development, and unlike the current fossil fuel burning back-pack engines, these are whisper quiet and un-polluting. The prospect of flying these small one man flying machines in -35o amongst some of the windiest and most remote mountains on earth is both exhilarating and daunting.

In between each phase we will be returning to an expedition base-camp on the ice, (which thanks to a great logistics team is likely to be the most comfortable base-camp I will have ever been in, which will make a welcome change.) Yet this entire expedition base camp will be powered by renewable energy, using solar panels and a portable wind turbine.

None of this is easy, but in my experience easy is not where the worthwhile stuff happens. Easy doesn't protect our earth. Easy doesn't move people to action.

We want to show that if we can achieve all this in the coldest windiest place on earth we can surely give some of these alternative sources a chance back in sunny England. Our expedition won't save the world, (far from it, we are still flying in commercial airlines to get down there in the first place), but it might encourage people to explore the potential of other alternative energy industries. I want for people to make projects like the Sahara solar mission actually happen, I hope for people to get properly informed about issues such as bio-fuels, rather than throwing them out, without so much as understanding them properly.

To make this Antarctic project possible I chose my sponsors carefully, partnering with a company that were making an environmentally positive contribution. Ethanol Ventures are, I believe, just that, with a clear aim of becoming the leading bio-fuels company in Europe by 2020.

Bio-fuels are often the maligned good guys in the struggle to find new power solutions. To the question: are all bio-fuels good, the answer is definitely no. There are good ones and bad ones. Bad ones result in rainforest exploitation and rising food prices. Good ones significantly cut emissions from transport fuels and can be made from European wheat crops that are surplus to food needs. (In addition, they also happen to produce a high protein animal feed co-product that lessens the need for the imported soy based equivalent). All good things. But then the good and the bad are a world apart. It is these good bio-fuels companies, like Ethanol ventures, that represent the greatest viable hope for cutting transport emissions today.

The ultimate aim is to reach second and third generation bio-fuels, such as ligno-cellulosic ethanol, or in simple terms, power from residues, rubbish and household waste. But to reach these stages we must develop the first generation industries first. If we risk nothing we gain nothing. Our choice is to remain twiddling our fingers, counting the days until the oil runs dry and the earth is bought to her knees, or to stand up and do something.

My dad used to say that what matters in life is to follow your dreams and to look after friends. If he was alive today I know he would also say look after the world. To lead a ground-breaking expedition to Antarctica has been a dream since I was a child, but to make a positive difference to how we see the potential of alternative energy and bio-fuels is a must. Wish us luck.

Extra points:

What are biofuels?

Biofuels are derived from crops or organic wastes, which can be mixed with diesel (biodiesel) and petrol (bioethanol). Biodiesel is made from crops that produce oils – such as palm, oilseed rape and soya – whilst bioethanol is a form of alcohol that is made from sugarcane, wheat and maize.

Do biofuels cut carbon emissions?

Whilst most biofuels produce lower emissions than petrol or oil, the level of carbon savings depends on the type of biofuel and its production processes - wheat based ethanol can save up to 70% emissions versus fossil fuels.

Don't biofuels lead to food price increases?

Biofuels account for only 0.5% of the global wheat crop. Food price rises in recent years have mainly been driven by other factors – including consecutive poor harvests in the world's main wheat producing areas, and interventions in the market (such as changes to the Common Agricultural Policy).

How much can be made sustainably?

This depends largely on where and how the feedstocks are grown. European cereals such as wheat have a tremendous capacity to provide sustainable feedstocks for Bioethanol. With the right focus on

developing yield on existing land we can replace up to 13% of our Petrol needs from European feedstocks alone.

Why are we using wheat which could feed people?

"Good Biofuels" focus on ensuring we are using crops that otherwise would not be used in the foodchain. Bioethanol from wheat can come from the accelerated development of yields in Europe, can be grown on set aside land that has been surplus to our food needs and through working with Eastern European partners, bring back land left idle after the collapse of the Soviet Union into productive use. In addition the co-product from ethanol is a high protein animal feed that can help with our European food security and displace imported high protein animal feeds such as soy, this helps ease the pressure on global land use.

When and where will biofuels be used?

Biofuels will primarily be used as transport fuel – however an additional by-product of bioethanol production is a high protein substance that is able to be used as animal feed.

To what extent is there commercial interest and demand for biofuels?

The UK market requirement for petrol blending is expected to be one million tonnes a year by 2010.

What is the EU and Government legislation on biofuels?

The EU has set a binding target that 20 per cent of EU energy consumption should come from renewable sources by 2020, it is very likely that this will also require a mandated 10% of transport fuels should come from renewable sources like Bioethanol In the UK, the required obligation level will be 2.5% of total fuel sales from April 2008 rising to a minimum of 5% from 2010.

What bioethanol production facilities currently exist in the UK?

A number of major fuel retailers have recognised the potential of biofuels and are looking into the area – for example BP are currently planning to build a facility to meet the likely demand.

Why are we not waiting for second generation technology?

There are challenges in making the processes required for second generation technology work on a commercial basis. The timeframe in which this could happen is therefore uncertain, and could take 10 years or more before they can be made available.

Why don't we just import bioethanol?

This is a viable option, but using bioethanol produced in the EU will not only help Europe's energy security but we can assist food security through the production of co-products and thereby reducing the demand for imported animal feed. The production processes can also be audited to ensure that they are sustainable.

To know more please visit www.journeyantarctica2008.com