

uk2020

Editorial and Speeches (2014-2015)

uk2020

EDITORIAL AND SPEECHES
2014–2015

By Rt Hon Owen Paterson MP

Editor: Chris Bullivant

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Letter from the Chairman

Rt Hon Owen Paterson MP

UK 2020 is developing an optimistic, outward looking, future-focussed, and robustly conservative policy platform to be adopted by the leader of the Conservative Party contesting the General Election in 2020.

In this first year, since our launch in October 2014, we have sought to inject fresh thinking into UK energy policy, the debate around the UK's relationship with Europe, and to defend vigorously the free market and innovation in science – especially where it has the most potential for impact: for those who are poorest on the planet.

We have attempted to combine imaginative thinking with thoroughly referenced, grounded research, and measured all our output by the question, does this contribute to the Conservative Party and intellectually challenge policy makers?

It is an easy temptation, in the hard press of running government, to accept a derived consensus in policy making. Our role at UK 2020 is to serve by poking at consensus, to question assumptions, and to consider new ways to reach an optimistic destination.

In this volume we have collected the eight editorial pieces and six speeches produced in our financial year 2014–2015.

With thanks for your support

A handwritten signature in black ink, appearing to read 'Owen Paterson', with a long horizontal flourish extending to the right.

Rt Hon Owen Paterson MP

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Why UKIP is wrong about immigration

PUBLISHED IN CONSERVATIVEHOME

5 January 2015

Two startling facts leaped out of the newspaper headlines last month. First, immigration has overtaken the economy as the most important issue facing the country, according to the respected pollsters YouGov. Second, despite predictions to the contrary, especially from the BBC, immigration from Romania and Bulgaria is now running at 50,000 a year.

The YouGov finding is extraordinary. All my adult life, the state of the economy and the closely related matter of unemployment have been the number one concern of the British people. Not so now. Every month since May, immigration has either tied with the economy as the country's main worry or been in the lead. During September, it outscored the economy by 58 per cent to 48 per cent as the top priority of voters.

But after Labour's abject 13-year failure to control our borders, during which four million people were allowed to enter the UK – an unprecedented influx – I can't say I am too surprised. Understandably, given the pressures that this tidal wave of newcomers has imposed on our public services, job opportunities and wage levels, the public is hopping mad about the collective failure of the political class to get a grip on our borders.

An election is only just over four months away. It is a safe bet to assume that immigration will loom large in the political battle to come – and that victory will go to the party that offers the most convincing solution to the question of how to bring order to the chaos of the present arrangements.

Labour and the Liberal Democrats have nothing to offer. Ed Miliband recently tried to toughen his party's stance. But his efforts provoked derision when they coincided with a leaked internal briefing paper for his MPs and activists telling them to "move the conversation on" if voters had the temerity to mention immigration.

As for the Lib Dems, I treasure the arrogant complacency of Vince Cable, the Business Secretary, airily dismissing the threat of a Romanian and Bulgarian influx as "just a scare story". The latest numbers prove how wrong he was.

UKIP, with its victories in the European elections and two by-elections last year, has skilfully tapped into public fury over borderless Britain. But I fear that its answer – leave the European Union and introduce an Australian points system to control numbers – is another dead end. Immigration is not a binary issue of control or no control, membership of the EU, or no membership. It's a complex global problem.

Immigration is not a binary issue of control or no control, membership of the EU, or no membership. It's a complex global problem.

Essentially, as long as there are significant incentives to move, people will cross borders. As long as we are a rich nation, people will continue to come. While Romanian wages are one-eighth of UK wages, it's worth the cheap airfare.

When controls are imposed, people find a way round them. Even in the US, where millions cross the porous Mexican border, nearly half the illegal immigrants are people who entered legitimately as tourists, as students or for business purposes and have overstayed. In the UK, there are over 30 million visitors each year and attempts to pull up the drawbridge, as UKIP would have us do, would simply lead to a massive surge in illegal immigration.

Yet for our economy to grow, we must welcome people with a whole variety of skills, be they fruit pickers or graduate doctors. This is the conundrum: accepting 260,000 net immigrants in a year is stretching our public services to their limit and is unsustainable, but our open economy needs immigration.

UKIP's solution is simply to "leave the EU". I can see many advantages in Britain quitting the EU. But that alone would not crack the immigration problem. Even if we were to leave, it is inconceivable that the UK could negotiate a trade deal with the EU that did not involve some agreement on freedom of movement.

Currently, 13 per cent of the UK population are first generation immigrants. Norway and Switzerland, both outside the EU but with such agreements, have immigrant populations of nearly 15 and 23 per cent. UKIP's preferred option, the Australian skills-based points system, has resulted in an immigrant population of 27 per cent. Immigration is driven by "push" and "pull" factors unique to each country. Shaping these is more effective than formal border controls.

David Cameron was right in November to address one of the key "pull" factors by promising to "make welfare reform an absolute requirement in renegotiation". However, much of the problematic immigration into this country stems not from the EU but from the European Convention of Human Rights. Repeal of the Human Rights Act and adoption of a new Bill

of Rights would set the UK free from the ECHR, helping us to address the “push” factors.

We would no longer be forced to allow family members to join migrants; we could remove illegal immigrants as we wished. It is ludicrous that we are unable to deport illegal immigrants from Calais, because our judges say that France is not a “safe” country for asylum seekers!

Some measures, particularly those to do with benefits, are permissible under existing EU law. But many more will require treaty change. The Lisbon Treaty has made this change more complicated; it will be extremely difficult to reach an agreement before 2017. As if this wasn’t enough, the member states (especially Germany) and the Brussels Commission have made it clear that free movement is “not negotiable”.

We can’t force them to give us treaty change without invoking Article 50 of the Lisbon Treaty. It is the only legally binding mechanism that we can use to enter formal negotiations on a new relationship. It allows two years for negotiations, so there would still be time for a referendum in 2017.

Enterprising migrants have started nearly half a million businesses, employing over eight million people.

It is critical to remember that the economic single market and the political EU are not one and the same thing. We can participate in the market as members of the European Economic Area without being saddled with the EU as a political project. Those, such as the business chiefs of the CBI, who confuse the memberships of the single market and the EU are making a basic error and misleading the British people.

This is where UKIP is wrong. Desperate to control immigration from the EU, the party has rejected continued membership of the single market within the EEA – which would place our economy at risk. In fact, as a member of the EEA but not the EU, we would not be bound by the European Court of Justice and its rulings on our benefits system. But, crucially, we could introduce “Safeguard Measures”, giving us an “emergency brake” on excessive migration – an option not available to us in the EU. We would get the benefits to business and the economy of free movement, with real power over our borders.

Managing immigration is a question of balance. We cannot afford to bring down the shutters and cut ourselves off from the rest of the world – many of our industries need skilled immigrants to keep our economy growing. Remember, too, that enterprising migrants have started nearly half a million businesses, employing over eight million people. A managed immigration policy should recognise this.

UKIP's policy of simply "leaving the EU" is nothing but a populist slogan. Implementing an intelligent policy of managed immigration will require guts, determination and attention to detail. The colourful characters running UKIP may have added to the gaiety of the nation during the festive season. But only a resolute Conservative government with a good working majority can begin to address these issues.

The Cause of Abbott's troubles – tough decisions, not hard line views

PUBLISHED IN CONSERVATIVEHOME

21 February 2015

I have just returned from a week in Australia talking to a wide range of people, and found that recent criticism of Tony Abbott by some right-wing British commentators to be wide of the mark.

Abbott came to power 16 months ago at a critical juncture. After more than 20 years of uninterrupted growth, the lucky country's run of good luck was ending.

As in the UK, the Labor government had managed to go on a credit-fuelled spending spree. In Australia this was during the nation's biggest ever mining boom, when exports were enjoying the highest prices relative to imports in the nation's history.

When Labor came to power in late 2007, the federal government had no net debt and \$50 billion in funds. After six years, Labor had run up a debt of \$240 billion, the fastest fiscal deterioration of the 29 advanced economies studied by the IMF. Government debt – state and federal – trebled, rising from just shy of 10 per cent of GDP in 2008 to almost 30 per cent in 2014. In addition, Labor locked in new unfunded spending, with future deficits totaling \$123 billion over the forward estimates.

As a result, Australia is borrowing more than a \$1 billion a month or \$100 million dollars a day. Worse, the boom is now going bust. Prices for Australia's single largest export – iron ore – have fallen by more than 50 per cent and the price of wheat has fallen 20 per cent, resulting in falling tax receipts.

Abbott campaigned on a platform of ending Labor's waste, and despite the fact that he never enjoyed high personal approval ratings was elected to government with one of the largest majorities in recent history.

Far from a fickle public flinching at his tough border protection policies, his stance on illegal immigration still enjoys high levels of support. Similarly, his policies on climate change have not changed and have not caused him grief in the polls.

Rather, his fall from grace with the electorate has come about because of the tough stance he has taken to put the government's finances in order.

To get back to surplus, the government needs to cut some \$65 billion a year for the next decade. Yet expenditure on health, education, welfare and old age pensions are all increasing much more rapidly than the inflation.

It is very easy to be popular when you are handing out other people's money, as Kevin Rudd, Abbott's Labour predecessor as Prime Minister, did. It is much harder to try, as Abbott has, to cut, or just cut back the growth, in government spending.

On top of this, Abbott's ruling Liberal National Party Coalition has been held hostage in the Upper House to a motley collection of right and left wing populists. So it is no surprise that Abbott is unpopular. His party has been languishing in the polls ever since he brought down his first painful budget.

It is very easy to be popular when you are handing out other people's money, as Kevin Rudd, Abbott's Labour predecessor as Prime Minister, did. It is much harder to try, as Abbott has, to cut, or just cut back the growth, in government spending.

Yes, he has made mistakes. For example, Abbott unilaterally committed his party, several years ago, to one of the most generous paid parental leave schemes in the world. While this was never popular with his base, it became a major liability once his Treasurer had promised to cut back existing benefits and end the age of entitlement. Abbott was too slow both to craft a more modest policy and to axe the scheme entirely.

The introduction of a modest fee to see the doctor was also deeply unpopular on the Left, while earmarking the revenue raised to put into a major medical research fund infuriated right-wingers who wanted it to pay down debt.

Hence the paradox of Abbott's budget: while parts were tough and not always well thought out, or well defended, other parts cut across that message, allowing it to be caricatured as both mean-spirited and extravagant.

Yet, in only 16 months, the Abbott government has also had some notable achievements. It has signed free trade agreements with three of its major markets – China, Japan and South Korea.

There have also been signs that the economy is picking up, with jobs growing at triple the rate they did in 2013 and GDP growing at 2.7 per cent up from 1.9 per cent a year earlier.

Abbott has survived the spill motion that threatened his leadership, and his team is now working hard to deliver a budget that will put the country on a credible path to surplus without causing households too much pain. It is an almost impossible task.

But even if Abbott can craft a Goldilocks budget that is tough, but not too tough, he will need to get it through the Senate. Given the Labor party is in denial both about its fiscal profligacy and the need to cut expenditure – and securing support from the cross benches is like herding cats – they have a tough job ahead of them.

Far from being a dangerous right-wing populist, Abbott is polling poorly largely because he has refused the populist path of simply kicking the debt and deficit can down the road. Confronting the same daunting task of getting public finances in order that governments face throughout the industrialized world, he has been a little too courageous, in the Yes Minister sense of the word.

It is easy for right wing commentators to sneer from London. But what Tony Abbott and the Liberals are attempting to do – recovering from a massive deficit built by a Labor government in boom years – is hugely in the interests of Conservatives back here. It is a daunting task, but I was struck by the determination in Abbott's team to get this done, to learn from mistakes, and the significant backing they enjoy should not be underestimated here. They deserve the strongest support from Conservatives in the UK.

A few well-aimed shots can stop poachers making rhinos extinct

PUBLISHED IN THE SUNDAYTIMES

1 March 2015

The slaughter is surging, with a South African rhino killed every seven hours for its horn. Time is running out but Owen Paterson explains how Britain can help save the species, not least by withdrawing aid for countries where horn is traded.

Even at 200ft the smell is abominable. The helicopter lands and the first thing you see are vultures looming in the trees above, scared off by the helicopter but staying close. On the ground, the strange thing is a bubbling sound from liquid within the carcass, and the buzzing of huge numbers of flies. As you get closer, the ranger explains that in order to save money, only one shot is used, which rarely kills the rhino.

A second poacher with a sharpened axe hamstring the rhino before chopping it with as deep a gash as possible in the back to damage its spinal chord. Then, if the animal is still thrashing around, they gouge out its eyes and hack off its ears, to allow other poachers to approach and saw off the horn.

I saw three rhino carcasses on Friday and six more were killed over the weekend. I was shown videos by park rangers that documented many of these rhinos lingering on alive despite horrific injuries. These videos make one ashamed to be a human being.

A poacher on the ground will receive up to \$5,000 for killing a rhino, which is more than a year's income in one night.

I was in South Africa's Kruger national park last week, home to nearly half the world's 25,000 remaining rhinoceroses. I met General Johan Jooste who has the responsibility of patrolling an area the size of Wales. A former major-general in the South African army, he has three helicopters, two fixed-wing aircraft and three microlights. He is well funded, with a proper control centre and a thoroughly professional staff of 700 rangers, and yet he is losing the battle.

The reason is simple. Rhino horn is now worth more than \$65,000 (£42,000) a kilo. A poacher on the ground will receive up to \$5,000 for killing a rhino, which is more than a year's income in one night. It is small wonder that rhino killing is accelerating. South Africa lost only 10 rhinos in 2006, but the figure exploded to 1,215 last year – about one every seven hours.

Last year, following my visit to sites of elephant killings for the illegal ivory trade in Kenya, Britain's Department for Environment, Food and Rural Affairs (Defra) organised the London conference on wildlife trade, chaired by the then foreign secretary William Hague. The conference included Princes Charles, William and Harry as speakers, and delegates from more than 50 countries.

It recommended a three-pronged attack to end wildlife crime: better law enforcement, better demand management and long-term economic development. All three are needed to end wildlife crime in Kruger. The rangers' most urgent priority is better and more immediate intelligence, which could be provided by the interception of mobile phone traffic.

Present, admirable, civil liberties measures make it laborious for rangers to apply for intercepts. This would give instant intelligence, helping rangers pinpoint and locate poachers in such vast terrain before damage is done.

Second, they need better rules of engagement: rangers are not allowed to discharge firearms unless in immediate danger, strictly in self-defence. In Kenya, rangers are able to discharge firearms if they are in a dangerous situation. A clever poacher, caught in the act, will throw down his gun and run.

Tracking poachers on foot is time-consuming, but they are investing more in dogs, which are effective in finding poachers. They are also looking at better firearms, better thermal imagery, and using drones.

But what I find most remarkable is that the rangers know who the kingpins are. They know their names, and where they live across the border in Mozambique. But there is nothing they can do to prosecute them. Wildlife crime is not perceived to be a major crime in Mozambique and it is apparent that there is room for much greater co-operation between the South African and Mozambican governments to tackle the poachers. The Mozambican authorities do not want to upset a booming micro-economy in a traditionally impoverished area.

One idea is to create a buffer zone within Mozambique, with better cross-border law enforcement. Rangers' jurisdiction ends at the fence between the two countries. As soon as the smugglers are through the hole in the fence, rangers have to end their hot pursuit. In essence, South Africa is paying lots of money to protect the rhinos and Mozambican citizens are profiting from them. One ranger went so far as to call it "economic terrorism".

As it is, there is weak enforcement in Mozambique. Corruption is endemic. And penalties are light.

The economic pressures the rangers are up against are immense. Poachers are celebrated as local heroes for transforming the local shantytown economy on the Mozambican border. For those who are poor, living in an area with no economic activity, poaching is worth the risk. There is no understanding of the long-term value of these animals. They are seen to be an indulgence for rich individuals.

Previously involved in vehicle hijacking, Mozambican poachers find smuggling rhino horn is far more lucrative. In the shantytowns on the border, such as Massingir in the southwest of Mozambique, there are now grand two-storey houses paid for by a small number of wealthy middlemen, and there are huge parties when a haul is brought back.

Sadly, smuggling rhino makes economic sense where there are no alternatives to making such money. An alternative economy is needed in Mozambique and safari tourism is ripe for development. But critically the demand has to be killed off at its source.

The primary market for rhino horn is Vietnam, China and other growing markets in southeast Asia.

Last year the Vietnamese government received £7 million from Britain in aid. We must say bluntly to the Vietnamese authorities that consuming rhino horn as medicine is simply not acceptable to British taxpayers.

A senior Chinese official looked me in the eye when I was last in Beijing and told me that rhino horn is an established cure for a high fever. Others use it for hangover cures. Yet rhino horn has exactly the same medicinal qualities as toe nails. It is desperately urgent to see attitudes in these countries changed and such cultural shifts are possible.

The Chinese have done well in changing demand on shark fin soup. For centuries it was considered a crucial component of any prestigious banquet, until Communist party members in Beijing and sports celebrities decreed it was no longer an acceptable practice. The Chinese take the care of their own elephants and tiger populations immensely seriously – enforced with the threat of the death penalty. There has to be a concerted campaign by public figures in Asia to make people aware of the true medicinal nature of rhino horn and the catastrophic consequences of the trade.

This is such a dramatic and accelerating crisis that western countries must use every lever to apply pressure on the “demand” states and the “supply” states.

Britain has influence in both Vietnam and Mozambique, not least through the international aid it gives. Last year the Vietnamese government

received £7 million from Britain in aid. We must say bluntly to the Vietnamese authorities that consuming rhino horn as medicine is simply not acceptable to British taxpayers.

Mozambique received £68 million in 2014–15 in cash and resources. This should now be made conditional on co-operating with the South African government in protecting the dwindling number of rhinos.

Not only are wild rhinos at risk of extinction, but Interpol estimates that international wildlife crime is worth up to \$20 billion. An elephant is killed every 15 minutes for ivory worth \$750 a kilo as Asian buyers see it as a safe investment, knowing that elephant numbers are finite.

Already elephant numbers in Tanzania's Selous game reserve have crashed from 100,000 in the mid-1970s to 40,000 in 2011 and 13,000 now. It is also in our own security interests to destroy this criminal trade. Profits from the illegal ivory trade have found their way to al-Shabaab, the terrorist group behind the Westgate shopping centre attack in Nairobi in 2013 in which 67 people died.

Britain has a proud record, with conservation charities led by Tusk, raising much-needed funds and public awareness of the plight of these animals. But this crisis is worsening dramatically and time is short. The British government must not flinch from using every lever, including the withdrawal of aid, from countries that do not co-operate to stamp out this practice.

Future generations will never forgive us if we allow these remarkable animals, which have been on the planet for more than 30 million years, to be driven to extinction within one generation.

Good job, PM, but you need to crack on and think about 2020

PUBLISHED IN THE SUNDAYTIMES

10 May 2015

I am the first to congratulate David Cameron on his stunning election victory. He has confounded the liberal metropolitan elite, the pollsters and the so-called progressives (code for “socialists”) by pulling off the biggest electoral shock of modern times.

“Were you still up for Portillo?” was the left’s jibe in 1997 amid the Blair landslide. Well, I was still up early on Friday morning as Ed Balls imploded, the complacent Scottish Labour citadel was stormed and the Liberal Democrats were wiped off the map. I was still up a few hours later as three leaders resigned – Ed Miliband, Nick Clegg and Nigel Farage. The forces of conservatism had struck back – and struck hard. And that is the point. They say you can learn a lot from defeat. You can also learn from victory.

The lesson I take from the 2015 triumph against the odds is that conservatism works. This is not a fashionable view. Not even within the Conservative party. If I have a criticism of Cameron, it is that he trusts his instincts – and those of his party – far too little. He spent the first part of the 2010 parliament attempting to appease his leftist critics. Hugging huskies and hoodies may have gained him some kudos among the Notting Hill set, but it left middle England bewildered.

The lesson I take from the 2015 triumph against the odds is that conservatism works.

Thankfully, the prime minister learnt his lesson. His election campaign, masterminded by the hard-nosed Aussie Lynton Crosby, may have been grindingly repetitive, with its relentless focus on the long-term economic plan. But it was also grindingly Conservative. Cut spending, cut borrowing, cut debt, cut taxes, balance the books, back business, create jobs, reform welfare, get benefit claimants into work, make schools and hospitals more responsive to consumer demand. What was wrong with that?

Come Thursday, the answer from the British public, never bad judges, was: not much. Hence the victory. But there was also tactical awareness.

The putative alliance between the left (Labour) and the far left (the SNP) – aptly described by Cameron as a pact between those who wanted to bankrupt Britain and those who wanted to break up Britain – was rightly assailed by my party.

Cut spending, cut borrowing, cut debt, cut taxes, balance the books, back business, create jobs, reform welfare, get benefit claimants into work, make schools and hospitals more responsive to consumer demand.

And my conclusion is that it worked a treat. Many a voter came up to me on the campaign trail through key marginal seats to say they were outraged by the idea that a nationalistic Scottish party supported by 4 per cent of the electorate was scheming to impose its destructive ideas on the rest of the UK.

The Tories can be afforded the luxury of basking in the warm glow of victory this weekend. But what matters is what comes next. And there are no lack of challenges to confront.

The first task of this new government is to continue the work on the economy. Calls for an end to austerity are nonsense. We are still borrowing and spending at £200,000 a minute, passing on a colossal debt to our children and grandchildren.

Much of the electorate will support us as we make difficult decisions. And they will need to. No government has ever managed to raise more than 36 per cent of GDP in taxes. And yet public spending consumes 42 per cent of our national output. We must bring this figure down.

Europe

Although not all UKIP voters are driven by the Europe issue, our clear promise to deliver a radical renegotiation to be endorsed by a referendum in 2017 gives us the opportunity to win many of them back.

There is confusion in the public mind between the European Union as an entity and the benefits delivered by the single market. They are not one and the same thing and there is clearly very wide support for the UK participating fully in the European market and much less enthusiasm for participation in the political and judicial arrangements of the current EU.

The prime minister has promised a radical renegotiation and he must be given time and space to deliver. I believe that we have a spectacular future outside the EU.

Scotland

You could see that the Blair devolution settlement was lopsided. The Scottish referendum last autumn has thrown that open and the English have picked this up. We need to look at English votes for English matters.

And we cannot ignore the fact that one of the main grievances with the English taxpayer is subsidising Scottish spending. We need to restore the link between what people vote for, what they are taxed and the public services they receive. We need, therefore, to ensure that Scottish politicians are responsible for raising money that they intend to spend.

Boundaries

The Conservative party has long been hampered by outdated constituency boundaries. It is vital that we sort this out once and for all by levelling out the number of voters in each constituency. This would require boundary changes. However, I would not reduce the number of MPs until the number of ministers in government itself was reduced.

Reducing Ministries

Similarly, there is a chance to improve the delivery of government immediately. Coalition required an excessive number of ministers.

With a proper Conservative majority there is a clear opportunity to re-establish cabinet government and possibly to reduce the number of cabinet ministers, and junior ministers, by amalgamating departments.

A classic example would be the Department of Energy and Climate Change, whose competencies could be taken over by the environment department. The DECC has spawned a seriously flawed policy, putting our long-term electricity supply in jeopardy.

The election was a great result predicted by no one. It's a personal triumph for the prime minister and a positive result for millions of hard-working people across the country, as the economy will continue to prosper. The government must take decisions now to ensure that we have a resounding Conservative victory in 2020.

How Neil Young, Greenpeace work to starve the world's poor

PUBLISHED IN THE NEW YORK POST

14 June 2015

This month, rock legend Neil Young will release his 36th studio album. It's a bit different from his usual fare.

Called "The Monsanto Years," the album features the collaboration of Young and Willie Nelson's sons, Micah and Lukas, and targets Monsanto, the company known for producing food made from genetically modified organisms, or GMOs.

According to Rolling Stone, listeners will hear Young sing this gem: "I love to start my day off without helping Monsanto/ Monsanto, let our farmers grow what they want to grow/ From the fields of Nebraska from the banks of the Ohio/ Farmers won't be free to grow what they want to grow/ If corporate control takes over the American farm/ with fascist politicians and chemical giants walking arm in arm."

GMOs can save millions of lives. It's the environmentalists who are doing real harm.

The aging songwriter is following the lead of activists who claim that GMOs are harmful to health, farmers and the environment.

This is tragically wrong. In reality, GMOs can save millions of lives. It's the environmentalists who are doing real harm.

The best example of this is Golden Rice, a miracle grain enhanced with Vitamin A-producing beta-carotene.

Developed 15 years ago, it was considered a breakthrough in bio-fortified technology. Today, 6,000 children will die from Vitamin A deficiency. Each year, 500,000 people, mostly children, lose their sight; half of them will die within a year of becoming blind. Altogether, over 2 million people every year are victims of Vitamin A deficiency.

Many of those lives could be saved if Golden Rice were in their diets.

But the ongoing opposition of anti-GMO activist groups and their lavish scare campaign with its combined global war chest estimated to exceed \$500 million a year have kept Golden Rice off the global market.

Deploying highly sophisticated PR and un-scientific scaremongering, Greenpeace has led that opposition. But it hasn't acted alone.

Last year, to Greenpeace's loud cheers, MASIPAG, a closely allied organization, violently attacked and destroyed a Golden Rice field trial in the Philippines. The group claimed to be a "farmer-led network," but local officials reported that its thugs had been bused in from a nearby city.

MASIPAG's list of supporters and partners reads like a directory of European church – and government-sponsored social-justice and development groups.

And MASIPAG is just one of a proliferating network of anti-GMO groups and assorted activists operating in the developing world, often with EU support. When did so many "humanitarian" organizations become so disdainful of the lives of the desperately poor?

Patrick Moore, one of the founders of Greenpeace in the 1970s, broke with his creation and now works to expose Greenpeace's actions in the developing world. He's joined with Golden Rice inventor Ingo Potrykus in calling for putting Greenpeace on trial for crimes against humanity.

There are humanitarian and environmental groups that have come to recognize the important role biotech can play in alleviating human suffering and spurring development.

Oxfam and the Nature Conservancy were initially opposed to GMOs. In the light of overwhelming scientific confirmation of efficacy and safety, both have softened or ended their opposition.

Isn't it time for them to show leadership on this urgent humanitarian issue, starting with Golden Rice?

Where also are the UN organizations WHO, FAO, UNICEF – all with nutritional improvement and development mandates? They've recognized the scourge of Vitamin A deficiency as a major and cheap-to-control problem for the last 25 years. But, cowed by activist polemic, these institutions have done little to advance the cause.

Instead of bashing companies that are trying to save lives, Young ought to use his star power to convince the NGO community to do the right thing and support giving the developing world the GMO tools it needs to feed its growing, and tragically malnourished, populations.

The advantages of GM

PUBLISHED IN THE HOUSE MAGAZINE

26 June 2015

Advances in agricultural technology have improved farming and economies globally, but UK farmers and consumers are missing out because of the EU's resistance to advances in biotechnology. I am a keen advocate for GM food as it can feed a growing world population while simultaneously improving the environment.

There is much hype about organic, but few realize that if the world was to produce all its food based on 1960s methods we would need additional land-mass the equivalent size of three Amazon rainforests to generate the amount of food we consume globally now. Clearly without advances in agritech we will not be able to feed 9.5 billion people in 2050 while sparing the rainforests from destruction.

If the world was to produce all its food based on 1960s methods we would need additional landmass the equivalent size of three Amazon rainforests to generate the amount of food we consume globally now.

GM crops are a step up from centuries-old but very slow practice of selective breeding. GM involves the very precise and safe transfer of genetic material between crop plants or to them from other species. For example, developers of 'golden rice' took genes for the production of beta carotene, the precursor of Vitamin A, from corn and inserted them into rice. This creates a golden coloured rice that could save the lives of thousands of children in Asia who die daily from Vitamin A deficiency.

The science is clear that GM is safe. The University of California Davis compared health in the over 100 BILLION livestock before GMOs were introduced and after, and found no negative health impacts. It is difficult to imagine a larger statistical sample than this – what more evidence do we need?

GM is good for farmers too. Germany's Göttingen University found that since GM was introduced almost two decades ago, global crop yields have

increased by 22 per cent, farmer profits are up by 68 per cent, and chemical pesticide use is down by 37 per cent. Ironically twice as much chemical insecticide is now sprayed onto European farms than North American ones because farmers here are prohibited from using pest-resistant GM crops.

GM also improves soil quality – herbicide-tolerant crops can be sown in a no-till system where farmers no longer plough to suppress weeds. The result is more biomass in the soil and better soil structure. Soil erosion per bushel of corn has decreased by two thirds since the introduction of GM traits.

In a free market, farmers and consumers should have a choice about which crops and foods to grow and eat. Farmers in the UK however are denied this choice, however, because of anti-GM scaremongering in other European countries. It is absurd that our farmers are denied the choice of growing better, more sustainable crops because of superstitious NGOs based in Brussels. It is even more outrageous that many of these NGOs – including Friends of the Earth, and organic industry lobby groups – in turn receive millions of Euros in taxpayer-funded EU grants to do this lobbying work.

That the UK has been prevented from adopting GM is one further example of how unscientific policy directed at the EU level is tying our hands domestically. Although I fought hard while in government to break the logjam in Brussels and allow nations to make their own decisions, the situation is still highly restrictive and uncertain.

We can do better. Our policy must allow the UK to once again be a lead innovator in developing and adopting agricultural technology. Doing so will be good for jobs, the economy, the farmer, the environment and the consumer. There is no time to lose.

Will Brussels end its crop-destroying ban, or continue to cow-tow to environmental activists?

PUBLISHED IN THE WALL STREET JOURNAL (EUROPE)

13 July 2015

British farmers who wanted to see one of our country's major cash crops – oilseed rape – make it to harvest this year just received shattering news. The ban on neonicotinoid insecticides ('neonics' for short), initially imposed on farmers by the European Union for two-years in 2013, remains in place. It is a policy that has been agitated for by environmental lobbyists in the EU and here in the UK. For example, even this month, nearly half a million people signed a petition delivered to Downing Street asking for neonics to remain banned in a misguided attempt to "save the bees."¹ But the petition, as does policy, appeals more to misinformed sentiment than to science.

News of the honeybees demise is greatly exaggerated. The EU's own official statistics, show the number of honeybee hives rising by 900,000, in the two decades that neonics have been on the market.

A constituent of mine in Shropshire is working hard on biodiversity conservation, specifically to slow the loss, and then to increase, the numbers of the Red Mason bee: an indigenous species of wild, pollinating solitary bee. He tells me the species has "suffered enormous losses in numbers over the last seventy odd years" and is motivated to ensure these bees are available for future generations. He is a grassroots conservationist working against a policy tide pitted against his efforts saying, "If 'neonics' are banned then we will have to revert back to the much more savage pyrethroid sprays which have been proven to do so much more harm to bees – and all other insects. This would be such a retrograde step. It would be all too easy to assume that the fall in numbers of bees is just down to the current use

of neonicotinoids in producing the food for us to consume – but it really is not that simple.

“It is more an amalgam of reasons, including the loss of many of the wild flower meadows in this country that had to be ploughed up for us to survive the last world war. Plus pest and disease strike on the honey bee more recently.”

Simplistic policy solutions such as a neonic ban, as advocated by the petitioners at Downing Street, don’t consider the evidence and cause more damage to bees and the environment they claim to be fighting for.

The first and most compelling fact is that news of the honeybees demise is greatly exaggerated. The EU’s own official statistics, show the number of honeybee hives rising by 900,000, in the two decades that neonics have been on the market.² And other wild bee species – those that pollinate crops and thus come into the most extensive contact with neonics – are actually thriving.³

In the light of these facts, the EU’s policy development process is unraveling. The French scientist, whose laboratory study was cited by the commission when it imposed the ban, Mickaël Henry, has admitted that he may have overdosed the bees in his experiments, as many of us said at the time. Henry now says he has “no real clues” how much insecticide bees actually encounter in the field.⁴

So that recently the commission insisted that the ban “was at no time based on a direct link on bee mortality.”⁵ This is despite evidence available online to the contrary, and begs the question why it was banned?

Now, as a result of the ban, an increase of insect pests will lead to losses of Britain’s oilseed rape crop, just as they are experiencing in fields across Europe.

Germany is predicting losses of 20 per cent this year,⁶ and at least five member states have claimed exemptions that would allow farmers to use neonicotinoids (or “neonics” as they’re known for short) on an emergency basis.⁷

The process is an indictment of the “precautionary principle” – Brussels’s trump card for implementing regulations before evidence is available to show whether the regulations are even necessary or beneficial. In this case, the two-year ban was an opportunity for the commission to examine the facts and determine whether continuing the ban after that time was indeed warranted.⁸

The facts and the science are now in, and rarely has a supposed environmental hazard been so completely debunked. Many of us disputed the science used to justify the action at the time. But the reality is policy was heavily influenced by environmental NGOs whose “bee-pocalypse” hysteria had reached a fever pitch in the media. Environmental NGOs were able to generate enormous political pressure on politicians through a ‘save the bee’

campaign. As Secretary of State for the Environment, Farming and Rural Affairs, I received 85,000 emails denouncing me for my opposition to the ban.

Policy was heavily influenced by environmental NGOs whose “bee-pocalypse” hysteria had reached a fever pitch in the media.

There is a ray of hope, however, that this case is so clear-cut that the commission will do the right thing and allow the two-year ban to expire this winter. That outcome would be a huge relief for our suffering farmers and for my constituent working to restore an indigenous bee species. Just as important, it would be a repudiation of green scare campaigning and an indication that maybe, at long last, Brussels will start putting facts, science and common sense back into process of regulatory decision making.

Economic growth is key to improving the planet

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20 September 2015

For the past 50 years the environmental movement has been in thrall to a simple, powerful and utterly wrong idea: that the best way to save the planet is to curtail human activity, whether in the form of breeding, building, burning or business. Anybody who suggests a different strategy – that economic activity is not just compatible with environmental benefits, but vital to creating and improving them – has been howled down.

But that is changing, and a new idea is gaining ground, under the term “Ecomodernism”. The key idea behind Ecomodernism is that the more technology human beings adopt, the more they can decouple from dependence on the natural environment and live lives that are prosperous but green. The great Green Blob that dominates the public and NGO sector, whose reactionary tendencies I referred to when I left office as Environment Secretary last year, still refuses to recognize this.

A coalition of environmental pressure groups, with budgets running into the billions worldwide, and with unique access to the corridors of power and far more influence in – say – Brussels than large corporations have, are not just badly mistaken in their analysis, but often act like bullies in the way they threaten and cajole politicians and civil servants.

Something remarkable is happening to the human race. Today’s seven billion people have both more food and more nature reserves than the five billion of 30 years ago. We in developed countries are using less land, less fertilizer and less water to produce more food. We are using less iron and less wood to build more buildings. We are using less oil and less gas to achieve each increment of economic growth. We are using fewer trees for paper and copper for wires, to communicate with.

The Green Blob said non-renewable resources, like oil, copper and phosphorus, were going to run out, whereas in fact they grew more abundant

and cheaper. It said hunger was going to get worse, whereas in fact it has vastly improved, except in countries like North Korea. It said population growth was going to explode, whereas in fact it slowed down. It said economic growth was incompatible with nature conservation, whereas in fact the countries with the most growth have the healthiest wildlife. It said genetically modified crops would hurt biodiversity, whereas in fact they have led to a dramatic fall in insecticide use. It said climate change would have created havoc by now, whereas in fact the Sahel has grown steadily greener.

The rich parts of the world, like Europe and North America, are now teeming with far richer wildlife populations than for many centuries, to the point where it is becoming a problem in cities – foxes in London, turkeys in Boston, bears in Philadelphia. Outside the developing world, forests are increasing in extent and diversity all the time. Britain now has more woodland than in the days of Chaucer; I set a target to reach the levels of the Domesday Book by 2060. Whales, penguins and seals have boomed back from near extinction in the polar regions to relative abundance.

What makes this possible is the fact that people don't need so much wildlife or so much land to support themselves. They have coal so they don't cut down forests; they have oil so they don't kill whales and penguins; they have gas so use fertiliser to quintuple the yields of corn and need less land to feed each family; they have chickens so they don't kill wild geese. That's decoupling and it is the real answer to nature conservation.

The reason poor countries have the worst environmental problems is that they have not yet made these transitions. They are still relying on renewable, natural resources such as wood and bushmeat to support their lifestyles. They are still coupled to the natural environment.

Some of my green friends have urged me to tone down the rhetoric about the Green Blob. And it is true that many local conservationists do a fantastic job getting their hands dirty and helping the environment. But their suit-wearing bosses don't. I feel it is necessary to keep drawing attention to the fact that a coalition of environmental pressure groups, with budgets running into the billions worldwide, and with unique access to the corridors of power and far more influence in – say – Brussels than large corporations have, are not just badly mistaken in their analysis, but often act like bullies in the way they threaten and cajole politicians and civil servants.

And this is why I think Ecomodernism is such a critically important and positive influence on environmentalism. It works on both the local scale and on a large scale. Rather than focus in a defensive way on stopping bad things happening, Ecomodernism encourages good things to happen. The best way to grow food is in poly tunnels so you minimize the land and water you need, rather than on huge organic farms with low yields. The best way to generate electricity is a nuclear power plant so you minimize the land

you need, rather than in a vast subsidised wind farm chopping up birds and producing little energy.

Many people find the relentless pessimism of the environmental movement dispiriting. All they ever teach is a counsel of despair. Good news is down-played. It does not matter how many birds of prey – ospreys, sea eagles, buzzards, goshawks, peregrines – recover in number and expand their range, as all these have done in recent years in Britain, the Royal Society for the Protection of Birds still obsesses about hen harriers, because they are rare in England – though even they are thriving in Scotland and Wales.

Ecomodernism lets you escape this negativity and celebrate the measures we can take to improve the world's wildlife if we have enough money and we can spare enough space from servicing human needs. On 24th September I will be hosting a debate about Ecomodernism with three of its inventors, Michael Shellenberger and Ted Nordhaus of the Breakthrough Institute of California, and Mark Lynas of Cornell University, Alliance for Science, together with Matt Ridley who has been making very similar arguments for years. They are from all parts of the political spectrum, but they agree on this new, positive vision of how to improve the planet.

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KEEPING THE LIGHTS ON

GLOBAL WARMING POLICY FOUNDATION ANNUAL LECTURE
WESTMINSTER, LONDON

15 October 2014

I would like to thank Lord Lawson and the Global Warming Policy Foundation for inviting me to deliver the annual lecture – an important event in the calendar.

As a member of the Cabinet for four years I supported Coalition energy policy. However I have become increasingly aware from my own constituency and from widespread travel around the UK of intense public dissatisfaction with heavily subsidized renewable technologies in particular onshore wind.

I have used the last three months since leaving the Cabinet to learn more about the consequences of this policy. And what I have unearthed is alarming.

Current energy policy is a slave to flawed climate action. It neither reduces emissions sufficiently nor provides the energy we need as a country.

Our current policy will cost £1,300 billion up to 2050.⁹ It fails to meet the very emissions targets it is designed to meet. And it fails to provide the UK's energy requirements. I will argue that current energy policy is a slave to flawed climate action. It neither reduces emissions sufficiently nor provides the energy we need as a country.

I call for a robust, common sense energy policy that would encourage the market to choose affordable technologies to reduce emissions, and give four examples:

- promotion of indigenous shale gas
- large scale localised Combined Heat and Power (CHP)
- small modular nuclear reactors
- rational demand management

The vital importance of affordable energy

But first, let us consider what is at stake. We now live in an almost totally computer-dependent world. Without secure power the whole of our modern civilisation collapses: banking, air traffic control, smart phones, refrigerated food, life-saving surgery, entertainment, education, industry and transport.

We are lucky to live in a country where energy has been affordable and reliable.

Yet we cannot take this for granted.

While most public discussion is driven by the immediacy of the looming 2020 EU renewables target; policy is actually dominated by the EU's long-term 2050 target.¹⁰

The 2050 target is for a reduction in greenhouse gas emissions by 80 per cent relative to 1990 levels.

The target has been outlined by the European Commission.¹¹ But it is only the UK that has made it legally binding through the Climate Change Act – a piece of legislation that I and virtually every other MP voted for.

The 2050 target of cutting emissions by 80 per cent, requires the almost complete decarbonisation of the electricity supply in 36 years.¹²

In the short and medium term, costs to consumers will rise dramatically, and the lights would eventually go out. Not because of a temporary shortfall, but because of structural failures, from which we will find it extremely difficult and expensive to recover.

We must act now.

The purpose of my address today is to set out how.

To hit the 80 per cent reduction target, we will have to abolish natural gas in most of our homes. No more cooking or central heating using gas. Our homes must become all-electric. Much of the fuel used for transport will have to be abolished too. 65 per cent of private cars will have to be electric.

The 2050 Target – what it means in practice

By 2050, the aim is to produce virtually all of our electricity with “zero carbon” emissions.

Yet at the moment over 60 per cent of our electricity is produced by carbon-based fossil fuel – mainly gas and coal.¹³ And the emissions of this “carbon” portion have to be removed almost completely.

Yet cutting carbon out of electricity production isn’t enough. Heating, transport and industry also use carbon based fuels.

In fact, to hit the 80 per cent reduction target, we will have to abolish natural gas in most of our homes. No more cooking or central heating using gas. Our homes must become all-electric.¹⁴

Much of the fuel used for transport will have to be abolished too. 65 per cent of private cars will have to be electric.¹⁵

This is a point that is little understood. The 2050 target commits us to a huge expansion of electricity generation capacity, requiring vast investment.

The EU’s suggested route to meet this target – and how it doesn’t work

So where does such a supply of zero-carbon electricity come from? The European Commission offers several possibilities, but its particular

enthusiasm is for renewable energy, under what it calls its “High RES” (Renewable Energy Sources) scenario.¹⁶ In this scenario, most of the electricity comes from wind power.¹⁷

This is regrettably entirely unrealistic.

The investment costs of generation alone are prohibitive. They are admitted by the EU to be staggering. The High RES scenario alone would require a cumulative investment, between the years 2011 and 2050, of €3.2 trillion.¹⁸

Even if you could find such sums from investors, they will require a return and a large premium to de-risk a very hazardous investment. The margins will be astonishing. As Peter Atherton of Liberum argues, the public will not readily accept profits that large for the energy companies.

But if investment is tricky, we only need to consider the scale of construction.

Wind capacity in the EU 27 must rise from 83 GW in 2010 to 984 GW in 2050.¹⁹ It means an increase from 42,000 wind turbines across Europe, to nearly 500,000 wind turbines. This would require a vast acreage of wind turbines that would wall-to-wall carpet Northern Ireland, Wales, Belgium, Holland and Portugal combined.

There, at the heart of the Commission’s “high RES” decarbonisation policy, is the fatal flaw. At any practical level, it cannot be achieved. It simply will not happen. Yet, as far as EU policy goes, it is the most promising option, on which considerable development resource has been expended.

UK’s plans to meet the targets are no better

Knowing this to be unrealistic, no other country in the European Union apart from the UK has made the 2050 target legally binding.

So having signed up to it, how does the UK hope to deliver all this carbon neutral electricity? The target is, in theory, technology-neutral. The Coalition Government acknowledges shortcomings in wind by making only “significant use” of the UK’s wind resources while taking into account ecological and social sensitivities of wind.²⁰

But if wind doesn’t make up the bulk of zero-carbon electricity supply, then that would mean building new nuclear at the rate of 1.2 GW a year for the next 36 years. Put simply, that’s a new Hinkley Point every three years.

In addition UK policy requires building Carbon Capture and Storage (CCS) plants which take CO₂ emissions from gas and coal and buries them in the ground. But these are fuelled by gas or coal at the rate of 1.5 GW a year. While nascent, this technology is known to cut efficiency by a third and treble capital cost.

So the British nuclear-led option is no more realistic than the Commission “high RES” scenario or any other of the decarbonisation options. There is simply no plausible scenario by which the British government can conceivably meet its 80 per cent emission cut by 2050.

And yet, despite this doomed policy, we provide subsidies for renewables of around £3 billion a year – and rising fast.²¹ This is a significant cost burden on our citizens.

Our last three energy secretaries, Ed Miliband, Chris Huhne and Ed Davey, have merrily presided over the single most regressive policy we have seen in this country since the Sheriff of Nottingham: the coerced increase of electricity bills for people on low incomes to pay huge subsidies to wealthy landowners and rich investors.

In fact it amazes me that our last three energy secretaries, Ed Miliband, Chris Huhne and Ed Davey, have merrily presided over the single most regressive policy we have seen in this country since the Sheriff of Nottingham: the coerced increase of electricity bills for people on low incomes to pay huge subsidies to wealthy landowners and rich investors.

Furthermore the cost is rising, not falling. DECC wrongly assumed that the price of gas would only rise. Four years ago the Energy Secretary confidently argued that renewables would be cheaper than gas by 2020. But this was based on a DECC forecast that gas prices would double.

Instead gas prices have fallen. DECC has revised downwards its forecasts of 2020 gas prices to roughly what they were in 2011 – just 60p a therm.²² Wind power just isn't competitive with gas. But the drop in gas prices raises the costs of renewable subsidies, already 'capped' at £7.6 billion in 2020, by 20 per cent. This is unaffordable.

Climate science

Before I go on to outline an alternative, let me say a few words about climate science and the urgency of emissions reduction.

I readily accept the main points of the greenhouse theory. Other things being equal, carbon dioxide emissions will produce some warming. The question always has been: how much? On that there is considerable uncertainty.

For, I also accept the unambiguous failure of the atmosphere to warm anything like as fast as predicted by the vast majority of climate models over the past 35 years, when measured by both satellites and surface thermometers. And indeed the failure of the atmosphere to warm at all over the past 18 years – according to some sources. Many policymakers have still to catch up with the facts.

I also note that the forecast effects of climate change have been consistently and widely exaggerated thus far.

The stopping of the Gulf Stream, the worsening of hurricanes, the retreat of Antarctic sea ice, the increase of malaria, the claim by UNEP that we would see 50 million climate refugees before now – these were all predictions that proved wrong.

For example the Aldabra Banded Snail which one of the Royal Society's journals pronounced extinct in 2007 has recently reappeared, yet the editors are still refusing to retract the original paper.²³

It is exactly this sort of episode that risks inflicting real harm on the reputation and academic integrity of the science.

Despite all this, I remain open-minded to the possibility that climate change may one day turn dangerous. So, it would be good to cut emissions, as long as we do not cause great suffering now for those on low incomes, or damage today's environment.

The inadequacies of renewable energy to meet demand

Let me briefly go through all the renewable energy options and set out why they cannot supply the zero-carbon electricity needed to keep the lights on in 2050.

Onshore wind is already at maximum capacity as far as available subsidy is concerned. Ed Davey recently confirmed, if current approval trends in the planning system continue, the UK is likely to have 15.25 GW of onshore wind by 2020. This is higher than the upper limit of 13 GW intended by DECC.

This confirms what the Renewable Energy Foundation has been pointing out for some time – that DECC is struggling to control this subsidy drunk industry. Planning approval for renewables overall, including onshore wind, needs to come to a halt or massively over-run the subsidy limits set by the Treasury's Levy Control Framework.

However, this paltry supply of onshore wind, nowhere near enough to hit the 2050 target, has devastated landscapes, blighted views, divided communities, killed eagles, carpeted the countryside and the very wilderness that the "green blob" claims to love, with new access tracks cut deep into peat, boosted production of carbon-intensive cement, and driven up fuel poverty, while richly rewarding landowners.

Offshore wind is proving a failure. Its gigantic costs, requiring more than double the subsidy of onshore wind, are failing to come down as expected, operators are demanding higher prices, and its reliability is disappointing, so projects are being cancelled as too risky in spite of the huge subsidies intended to make them attractive. There is a reason we are the world leader in this technology – no other country is quite so foolish as to plough so much public money into it.

Hydro is maxed out. There is no opportunity to increase its contribution in this country significantly; the public does not want any more flooded

valleys. Small-scale in-stream hydro might work for niche applications – isolated Highland communities for example – but the plausible potential for extra hydro is an irrelevance for the heavy lifting needed to support UK demand for zero-carbon electricity.

Tidal and wave power despite interesting small-scale experiments is still too expensive and impractical. Neither the astronomical prices on offer from the government, nor huge research and development subsidies have lured any commercial investors to step into the water. Even if the engineering problems could be overcome, tidal and wave power, like wind, will not always be there when you need it.

Solar power may one day be a real contributor to global energy in low latitudes and at high altitudes, and in certain niches. But it is a non-starter as a significant supplier to the UK grid today and will remain so for as long as our skies are cloudy and our winter nights long. Delivering only 10 per cent of capacity, it's an expensive red herring for this country and today's solar farms are a futile eye-sore, and a waste of land that could be better used for other activities.

Biomass is not zero carbon. It generates more CO₂ per unit of energy even than coal. Even DECC admits that importing wood pellets from North America to turn into hugely expensive electricity here makes no sense if only because a good proportion of those pellets are coming from whole trees.

The fact that trees can regrow is of little relevance: they take decades to replace the carbon released in their combustion, and then they are supposed to be cut down again. If you want to fix carbon by planting trees, then plant trees! Don't cut them down as well. We are spending ten times as much to cut down North American forests as we are to stop the cutting down of tropical forests.

Meanwhile, more than 90 per cent of the renewable heat incentive (RHI) funds are going to biomass. That is to say, we are paying people to stop using gas and burn wood instead. Wood produces twice as much carbon dioxide than gas.

Waste to energy is the one renewable technology we should be investing more in. It is a missed opportunity. We don't do enough anaerobic digestion of sewage; we should be using AD plants to convert into energy more of the annual 15 million tonnes of food waste. But this can only ever provide a small part of the power we need.

So these technologies do not provide enough power. But they also don't cut the emissions. And if you'll bear with me I want to explain why.

Emissions reduction in practice

We know that Britain's dash for wind, though immensely costly, regressive and damaging to the environment, has had very little impact on emissions.

DECC assumes that every MWh of wind replaces a MWh of conventionally generated power.

But we know and they know that this is probably wrong at present, and is all but certain to be wrong in the future, when wind capacities are planned to be much higher.

According to an Irish study, because wind cannot always supply electricity when it is needed, backup from gas and coal power plants are required.²⁴ When the carbon footprint of wind is added to that of the backup energy generators the impact on the environment is actually greater.

System costs incurred by the grid in managing the electricity system, especially given the remoteness of many wind farms, make it worse still.

And a wind-dominated system affects the investment decisions other generators make.

So the huge investment we have made in wind power, with all the horrendous impacts on our most precious landscapes, have not saved much in the way of carbon dioxide emissions so far. What savings, if any, have been bought at the most astonishing cost per tonne?

Four possibilities – achieving emissions targets, supplying energy

So what is achievable? If we are to get out of the straight jacket of current policy, what can be done? I want to explore four technologies which, combined, would both reduce emissions and keep the supply of power on.

The shale gas opportunity

In contrast to Britain's dash for wind, America's dash for shale gas has had a huge impact on emissions.

Thanks largely to the displacement of coal-fired generation by cheap gas, US emissions in power generation are down to the level they were in the 1990s and in per capita terms to levels last seen in the 1960s. Gas has on average half the emissions of coal.

It has cut US gas prices to one-third of European prices, which means that we risk losing many jobs in chemical and manufacturing industries to our transatlantic competitors. We are sitting on one of the richest shale deposits in the world. Just 10 per cent of the Bowland shale gas resource alone could supply all our gas needs for decades and transform the North West economy.²⁵

The environmental impact of shale would be far less than wind. For the same output of energy, a wind farm requires many more truck movements, takes up hundreds of times as much land and kills far more birds and bats. Above all, shale gas does not require regressive subsidy. In fact, it would bring energy prices down.

Not only does shale gas have half the emissions of coal; it could increase energy security. Currently 40 per cent of the coal we burn in this

country comes from Russia.²⁶ Far better to burn Lancashire shale gas than Putin's coal.

So the first leg of my suggested policy would be an acceleration of shale gas exploitation. As Environment Secretary I did everything I could to speed up approval of shale gas permits having set up a one-stop-shop aiming to issue a standard permit within two weeks. But I was up against the very powerful "green blob" whose sole aim was to stop it.

Combined Heat and Power

But there is another advantage of bringing abundant gas on stream. We could build small, local power stations, close to where people live and work. This would allow us to use not just the electricity generated by the power station, but its heat also.

Combined heat and power, or CHP, cuts emissions, cuts costs and creates jobs.

The generous EU estimate of the current efficiency in conventional power stations is about 50 per cent. The best of the CHP plants deliver 92 per cent efficiencies.²⁷

Yet despite these attributes CHP is treated as the Cinderella to the European Commission's favoured Hi Renewable Energy Strategy.

Renewables – especially wind – have been showered with lucrative guarantees, in the form of doubled or trebled electricity prices – thereby absorbing available investment capital.

Whereas the Commission attributes CHP's failure to the "limited" efficiency and effectiveness of its CHP Directive.²⁸

I am a realist. CHP does have high capital cost and limited returns with payback periods longer than normally considered viable. Given the commercial risks, dividends from energy efficiency alone have not been sufficient to drive a large-scale CHP programme.

But the Coalition Government recognise this too in seeking to promote energy efficiency in the NHS.

Its buildings consume over £410 million worth of energy and produce 3.7 million tonnes of CO₂ every year. Energy use contributes 22 per cent of the total carbon footprint and, in its own terms, the NHS says that this offers many opportunities for saving and efficiency, allowing these savings to be directly reinvested into further reductions in carbon emissions and improved patient care.²⁹ In 2013, therefore, it decided to kick-start its energy saving programme with a £50 million fund, aiming to deliver savings of £13.7 million a year.³⁰ CHP comprised a substantial part of this spending.³¹

To kick-start a broader national programme, providing state aid or financial incentives would be appropriate, especially as the effect would be more cost-effective than similar amounts spent on renewables.

In the United States, the value of CHP is beginning to be recognised as the most efficient way of capitalising on the shale gas bonanza. One state – Massachusetts – has delivered large electricity savings in recent years through CHP.³² CHP capacity in the United States is currently 83.3 GW compared with about 9 GW here.³³

Actually, between 2005 and 2010, the production of both electricity and heat from CHP installations in the UK fell, a dreadful indictment of the last Labour government's energy policy. The installed capacity of wind increased by over 500 per cent, despite a massively inferior cost-benefit ratio.³⁴

But I do want to highlight how revolutionary CHP technology can be in affording the localisation of the electricity supply system. Transmission losses, can account for 5–7 per cent of national electricity production. A 20 per cent reduction in transmission loss would be the equivalent of saving the output of another large nuclear installation.³⁵ This is why CHP can deliver efficiency ratings of up to 90 per cent: the system heat is produced where it can be used.

For instance, Leeds Teaching Hospital and the University of Leeds together have financed their own dedicated power station, comprising CHP units and an electricity generation capacity of 15 MW.³⁶

With this model, it is easy to imagine office buildings, supermarkets and other installations operating CHP units of 1.5 MW or less.

In fact, results from Massachusetts shows that 40 per cent of total energy supply could be CHP. Freiburg in Germany is already producing 50 per cent of its energy from CHP up from 3 per cent in 1993.

Implemented nationally, this revolutionary programme of localised electricity production would massively increase the resilience of the system, considerably improve energy efficiency overall, and ease pressure on the distribution system. In total, we would save the equivalent of 9 Hinkley C's.

Small modular nuclear

The third technology is an innovative approach with small nuclear reactors integrated with CHP.

Our policy has consistently favoured huge nuclear and coal plants, remote from their customers. Given that 40 per cent or more of the total energy production from a nuclear plant is waste heat, such plants are ostensibly ideal for CHP, but there is no economic way of using the waste heat.

I think there is a further massive obstacle to achieving 40 GW capacity from large nuclear plants; there are simply not enough suitable sites and not enough time to build them.

Small nuclear plants have been running successfully in the UK for the last thirty years. Nine have been working on and off without incident and the technology is proven.

Factory built units at the rate of one a month could add to the capacity at a rate of 1.8 GW per year according to recent select committee evidence from Rolls-Royce.³⁷

Small factory built nuclear plants, could be located closer, say within 20 to 40 miles, to users and provide a CHP function.³⁸ Installed near urban areas, they can deliver electricity and power district heating schemes or, in industrial areas, provide a combination of electricity and process heat.³⁹

I welcome the Government's feasibility study into this technology. What is holding up full commercial exploitation is the cost of regulatory approval, which is little different from a large-scale reactor.

I also note that the US Department of Energy has commissioned the installation of three different modular reactors at its Savannah River test facility, with a view to undertaking generic or "fleet" licensing.⁴⁰ We should learn from them as a key priority.

Demand management

The fourth leg of my proposal is demand management. The government is tentatively investigating smart meters and using our electric cars as a form of energy storage for the grid as a whole.⁴¹ That is to say, in the future, on cold, windless nights, people might wake to find that their electric cars have been automatically drained of juice to keep their electric central heating on. This is crazy stuff!

It is both impractical and yet not nearly bold enough. Dynamic demand would be a better policy for demand management that would also be cheaper.

It requires the fitting of certain domestic appliances, such as refrigerators, with low-cost sensors coupled to automated controls. These measure the frequency of the current supplied and switch off their appliances when the system load temporarily exceeds supply, causing the current frequency to drop.⁴²

Since appliances such as refrigerators do not run continuously, switching them off for short periods of 20 to 30 minutes is unlikely to be noticed and will have no harmful effects on the contents. Yet the cumulative effect on the generating system of millions of refrigerators simultaneously switching themselves off is dramatic – as much as 1.2 GW, the equivalent of a large nuclear plant.⁴³

In addition, we can imagine a future in which supermarkets' chillers switch off, and hospitals' emergency generators switch on, when demand is high, thus shaving the peaks off demand. We have started this and we need to do much more.

For this reason, I think the Short Term Operational Reserve (STOR), a somewhat notorious scheme whereby costly diesel generators are kept on

stand-by in case the wind drops, is not as foolish as it sounds. It would be even more useful in a system without wind power. At the moment it has to cope with unpredictable variation in supply as well as demand.

With as much as a 25 GW variation during a day and with a winter peak load approaching 60 GW, significant capacity has to be built and maintained purely to meet short-duration peaks in demand. The use and extension of STOR and like facilities can make a significant contribution to reducing the need for peak generation plants.

According to one aggregator, removing 5–15 per cent of peak demand is realistic, as part of the new capacity market.⁴⁴ This could be worth up to 9 GW, effectively the output of seven major nuclear plants, or their equivalent which would otherwise have to be built. As it stands Ofgem has already estimated that demand management could save the UK £800 million annually on transmission costs and £226 million on peak generation capacity.⁴⁵

Four pillars of energy policy

And there you have it. Four possible common sense policies: shale gas, combined heat and power, small modular nuclear reactors and demand management. That would reduce emissions rapidly, without risking power cuts, and would be affordable.

In the longer term, there are other possibilities. Thorium as a nuclear fuel, sub-critical, molten-salt reactors, geothermal plants connected to CHP systems, fuel made in deserts using solar power, perhaps even fusion one day – all these are possible in the second half of the century.

But in the short term, we have to be realistic and admit that solar, wind and wave are not going to make a significant contribution while biomass does not help at all.

What I have wanted to demonstrate to you this evening, is that it is possible to reduce emissions, while providing power.

But what is stopping this program? Simply, the 2050 legally binding targets enshrined in the Climate Change Act.

The 80 per cent decarbonisation strategy, cannot be achieved: it is an all-or-nothing strategy which does not leave any openings for alternatives.

It requires very specific technology, such as supposedly “zero carbon” windfarms, and electric vehicles. Even interim solutions can never be “zero carbon”, so these too must be replaced well before 2050.

In guzzling up available subsidies and capital investment “zero carbon” technology blocks the development of more modest but feasible and affordable low carbon options.

Thus, in pursuing the current decarbonisation route, we end up with the worst of all possible worlds. When there is a shortfall in electricity production, emergency measures will have to be taken – what in Whitehall is known

as “distressed policy correction”. Bluntly, building gas or even coal in a screaming hurry. The UK ends up worse off than if it adopted less ambitious but achievable targets. Reining in unrealistic green ambitions allows us to become more “green” than the Greens.

We are the only country to have legally bound ourselves to the 2050 targets – and certainly the only one to bind ourselves to a doomed policy.

In the absence of a legally binding international agreement, which looks unlikely given disagreement within EU member states and the position of the BRIC countries, the Climate Change Act should be effectively suspended and eventually repealed. Clause 2 of the Climate Change Act 2008 enables the Secretary of State by order to amend, subject to affirmative resolution procedure, the 2050 target which could have the immediate effect of suspending it.

Then, energy efficiency becomes a realistic and viable option. Investment in energy efficiency, including the Government’s very welcome initiatives on insulation, offers considerable advantages over wind energy. It does not raise overall electricity costs, and may even cut them because the investment costs are matched by the financial savings delivered.⁴⁶

The moral case for abandoning the 2050 targets

We have to remember too that the people who suffer most from a lack of decent energy are the poor.

I have already mentioned that we are redistributing from those with low incomes to wealthy landowners through generous subsidies collected in high energy bills.

The sight of rich western film stars effectively telling Africa’s poor that they should not have fossil fuels, but should continue to die at the rate of millions each year from the smoke of wood fires in their homes, frankly disgusts me. The WHO estimates that 4.3 million lose their lives every year through indoor air pollution.⁴⁷

The sight of western governments subsidizing the growing of biofuels in the mistaken belief that this cuts emissions, and in the full knowledge that it drives up food prices, encourages deforestation and tips people into hunger, leaves me amazed.

The lack of affordable and reliable electricity, transport and shelter to help protect the poor from cyclones, droughts and diseases, is a far greater threat to them than the small risk that those weather systems might one day turn a bit more dangerous.

Growth is the solution, not the problem

Among most of those who marched against climate change last month, together with many religious leaders, far too many academics and a great many young

people, the myth has taken hold that growth and prosperity are the problem, and that the only way to save the planet is to turn our backs on progress.

They could not be more wrong. The latest Intergovernmental Panel on Climate Change assessment report states that the scenario with the most growth is the one with the least warming. The scenario with the most warming is one with very slow economic growth.

Why?

Because growth means invention and innovation and it is new ideas, new technology that generates solutions to our problems. The IPCC's RCP2.6 scenario projects that per capita GDP will be 16 times as high as today by the end of the century, while emissions will have stabilized and temperature will have stopped rising well before hitting dangerous levels.⁴⁸

We have some of the finest scientists and universities in the world. A fraction of the money spent on renewables subsidies should go towards research and development and specific, well defined goals with prizes for scientists and companies.

The history of the last century shows that dramatic technical breakthroughs are possible where incentives are intelligently aligned – but it's impossible to know in advance where these will come from. Who predicted thirty years ago that the biggest breakthrough would come from horizontal drilling?

We have some of the finest scientists and universities in the world. A fraction of the money spent on renewables subsidies should go towards research and development and specific, well defined goals with prizes for scientists and companies.

Energy efficiency will develop very rapidly if encouraged to do so, cutting emissions.

A common sense policy climate for climate policy

The fundamental problem with our electricity policy over the last two decades has been that successive governments have attempted to pick winners.

Pet technologies introduce price distortions that destroy investment in the rest of the market, with disastrous consequences.

Even Nigel would admit that the liberalisations he introduced to transform the electricity industry in the consumer interest were frustrated. Sadly, the policies of the last decade or so, have undone many of his reforms.

But like him, I would reliberalise the markets and allow the hidden hand to reach out for technologies that can in practice reduce emissions.

Conclusion

To summarise, we must challenge the current groupthink and be prepared to stand up to the bullies in the environmental movement and their subsidy-hungry allies.

Paradoxically, I am saying that we may achieve almost as much in the way of emissions reduction, perhaps even more if innovation goes well, using these four technologies or others, and do so much more cheaply, but only if we drop the 2050 target, which is currently being used to drive subsidies towards impractical and expensive technologies.

This is a really positive, optimistic vision that would allow us to reinvigorate the freedom of the science and business communities to explore new technologies. I am absolutely confident that by doing this we can reduce our emissions and keep the lights on.

UK 2020 LAUNCH

ROYAL INSTITUTE OF CHARTERED SURVEYORS
PARLIAMENT SQUARE, LONDON

4 November 2014

Introduction

Ladies and gentlemen, I am delighted to see so many friends of UK 2020 here tonight.

I would like to begin by thanking a very generous group of people, my donors, who have helped to get UK 2020 off the ground so quickly.

After 14 years on the Front Bench, I am using my new freedom to set up a think-tank, with a very simple mission: to establish where the UK would be by 2020 if we adopted robust, outward-looking, common sense policies.

As Tim Montgomerie said last week, “Look after the country, its economy and its security, and the opinion polls will take care of themselves. Focus on the opinion polls, and you don’t fix the country and ultimately voters won’t thank you.”⁴⁹

As we launch this evening, I take a really optimistic outlook for our country. We will not shrink from challenging the political consensus, group-think and ‘blobs’ wherever they get in the way of common sense and effective solutions. All too often our political discussions are devoid of plain speaking. No wonder voters are disengaged. We will say exactly what we mean regardless of the prevailing mood if it’s right for the country.

We will work with Parliamentary colleagues, the private sector, multi-nationals, small businesses, other think tanks, academics, the best researchers, and the media to suggest solutions with honesty and clarity.

As someone who has always lived 200 miles from London, I have never aspired to be a member of the metropolitan elite. It is a matter of great personal regret that although the first Parliament met in Acton Burnell in Shropshire in 1283 there has been an unfortunate tendency to hold them in Westminster in recent years.

My front bench posts took me to every corner of the UK and it is my clear intention to get out well beyond London in my new role as Chairman of UK 2020, to listen to a much wider group of people as we develop workable solutions to current problems.

The Conservative Party last won with a proper majority in 1992 with 14.1 million votes under John Major. Even Blair in his landslide only got 13.5 million and in the 2010 election Conservatives were down to 10.7 million. Where have the 3 million gone? They are still out there, but they are not attracted by the Blairite-Clintonite retail politics of focus groups which relegate those on both the right and left of the consensus to “noises off.”

Before we’ve even launched we have started a genuine debate on energy, by challenging the consensus, and made the unsayable about energy and climate change sayable. We have even introduced a new phrase into the English language: the “Green Blob” was a popular Halloween costume last weekend.

And I’m delighted to announce that Chris Bullivant has joined as Executive Director. Chris was an integral part of establishing the Centre for

Social Justice where he was a Director for five years from 2006 to 2011. He worked closely with my good friend and colleague Iain Duncan Smith and was instrumental in turning the CSJ into the powerhouse it is today setting much of the agenda adopted by the DWP, Home Office and Ministry of Justice. We are very lucky to get someone of Chris's calibre.

Over the coming months we are going to make detailed and meticulously researched interventions into the policy debate of this country on: energy and the environment, Britain's relationship with Europe and the world, innovation in business, health, international security, and how we use technology to tackle poverty and starvation in developing countries.

My experience is that when you listen to your constituents and stick to the findings of your research, even in the face of prevailing Westminster culture, then debates progress, voters and the media get involved, and our public discourse takes off. We live in a wonderful country but the reality is we face some very tricky and urgent policy conundrums. And we won't resolve the tough problems without rocking the boat in an honest way.

I want to do my bit for my country and to the best of my ability meet this vital public challenge. We will have honest discussion and treat voters with respect: a lot more evidence and a lot less spin. That's what UK 2020 stands for – and that's why I am proud to be here tonight, launching this think-tank.

This evening, while I have you, I want to make a few simple comments about the one subject we cannot ignore, the one thing upon which everything else depends, and that is the economy.

Beyond post war consensus

Contemporary British politics is still defined by the Post War Consensus. We emerged from the Second World War and embraced the welfare state.

We switched from the low tax, low spend small state beliefs of the Victorian era and accepted the Continental model of corporatism: government, business and unions governing together.

As a result by 1955, total public spending as a percentage of national output was 36 per cent.⁵⁰ According to Eurostat, by 1981, in the grip of a post-Labour recession, public spending had reached 51.2 per cent. The Thatcher government brought it down to 39 per cent. Under John Major financial discipline was maintained.⁵¹

But then Blair and Brown exacerbated the worst financial crisis to strike this country in a century. Spending soared to 49.3 per cent of GDP in 2009.⁵²

Today, despite the best efforts of a Coalition government dedicated to eliminating the deficit and paying down national debt, public spending still soaks up 47.1 per cent of national output.⁵³

It is no consolation whatever that our European neighbours are in a worse state. The French state is spending 57 per cent of its GDP.⁵⁴

Angela Merkel said: “If Europe today accounts for just over 7 per cent of the world’s population, produces around 25 per cent of global GDP and has to finance 50 per cent of global social spending, then it’s obvious that it will have to work very hard to maintain its prosperity and way of life ... All of us have to stop spending more than we earn every year.”⁵⁵

Deficit – a result of spending too much, plus interest

The Coalition Government has slowed the increase in spending.⁵⁶ We’ve also done good things such as reducing corporation tax from 28 per cent to 20 per cent by the end of this Parliament.⁵⁷ And it is a remarkable achievement that the UK has created 1.8 million jobs, more than the whole of Europe put together.⁵⁸

But it is still only a job half done because we have this horrendous deficit. And it is not difficult to understand why.

The brutal fact is that over the last forty years no British Government has ever managed to raise more than 39 per cent of national income in tax in a single year.⁵⁹ Everything above that has had to be borrowed.

In Gordon Brown’s final year, the Government spent £670 billion, but only raised £513 billion in tax. This resulted in a deficit of £157 billion. That meant borrowing £300,000 a minute.⁶⁰

But we should reflect very soberly on the fact that we are still borrowing about £200,000 a minute because the Coalition Government will be spending over £100 billion more than it raised in this final year in office. At the end of the last financial year we had added £437 billion to the national debt, which now stands at £1.5 trillion.⁶¹ The interest alone on this borrowing will rise to around £60 billion.⁶² That’s over half the welfare budget, and more than we spend on defence.

Increasingly, our creditors are foreigners, so much of the interest we pay on our national debt goes abroad, weakening our balance of payments. It is both irresponsible and immoral to keep borrowing at this rate and to expect our children and grandchildren to pay the interest.

The brutal fact is that over the last forty years no British Government has ever managed to raise more than 39 per cent of national income in tax in a single year.

In short, my concern is that we spend too much; we tax too much; and we borrow too much. It is time to remember what Margaret Thatcher said in 1983: “the State has no source of money other than money which people earn themselves ... There is no such thing as public money; there is only taxpayers’ money.”⁶³

There are two solutions to this. First, cut spending and borrowing. And second, grow the economy. The Tax Payers Alliance has identified £120 billion in potential savings. In order to get public expenditure down to 40 per cent, we would have to reduce spending by £50 billion.⁶⁴

One of the most striking features I noticed while attending Cabinet, is that there are too many chairs at the table. We shouldn't shy away from getting rid of departments. It is easy for Government Departments to lose focus of their central mission and to become obese. We must sharpen up Departments and ensure they are effective.

It is unbelievable to me, that well into the second decade of the 21st century, we have to make the moral case for profit, restate the benefits of free markets and the essential contribution of small businesses to a growing economy.

Can we afford BIS, DECC, DCMS or DfID as independent Departments with all the associated costs?

On spending, we must stop valuing government effectiveness by the amount of money spent, and measure its effectiveness by outcomes instead. Take welfare, soaking up £120 billion a year where Iain, in the face of opposition from inside and outside Government, has done wonders in bringing this Department back on mission – ensuring welfare assists people into work rather than trapping them in dependency and poverty. The work at the DWP is a shining example of a team who have bravely tackled the status quo head on, and have begun to steer the ship in a much more productive direction which will also eventually save money.

It is policies like these that have appealed to the vast majority of people in the country who are by nature small-c conservatives: believing in living within your means, providing for your family, and working hard.

If the first thing to do is to cut spending, the second is to grow the economy. One of the surest ways to do that is to cut taxes and encourage a climate in which small businesses can thrive. It is unbelievable to me, that well into the second decade of the 21st century, we have to make the moral case for profit, restate the benefits of free markets and the essential contribution of small businesses to a growing economy.

When I was Secretary of State, state spending represented an incredible 77.6 per cent of the economy of Northern Ireland. Nowhere needed tax reductions more to revive business. I managed to get an agreement between all 5 political parties and the business community, united under “Grow NI”, to campaign for the devolution of corporation tax so that it could compete with the 12.5 per cent prevailing in the Republic.

Ronald Reagan clearly understood “the courage, generosity, and creativity of business” and said, “The more government takes in taxes, the less incentive people have to work ...

“Any system that penalizes success and accomplishment is wrong. Any system that discourages work, discourages productivity, discourages economic progress, is wrong.

“A few economists call this principle supply-side economics. I just call it common sense.”⁶⁵

Reagan understood that if you reduce taxes you grow the economy.

The impact spending and tax has on GDP growth is significant. Over time, this effect compounds into substantial differences in prosperity. Compare the UK with France. In 1980, France had a PPP GDP per capita 20 per cent higher than Britain’s. That lead steadily eroded over the 1980s and 1990s until Britain overtook France in 2002.⁶⁶ Hollande’s recent penal 75 per cent wealth tax has now driven huge numbers of French men and women to work in London. The contrast with Hong Kong and Singapore is even more stark, because the differences in policy are also more dramatic. Britons were 20 per cent richer than citizens of those two countries in 1980. By 1989 both had overtaken Britain. By 2012 people in Hong Kong were almost 20 per cent richer and those in Singapore were 40 per cent richer than Britons.⁶⁷

So the lesson is that taxes need to be lower. Not just lower, but simpler. Our Tolley’s Tax Handbooks fill over 17,000 pages, compared to Hong Kong’s 267.

The Taxpayers Alliance “2020 Tax Commission” with the Institute of Directors under the chairmanship of the excellent Allister Heath have already developed a comprehensive plan for reforming the tax system. We really must take this seriously.

The tax base

As it is, we are seeing a narrowing of the tax base and, with it, an increased tax burden upon those who we really want to encourage to create wealth.

The accumulation of Income Tax, Stamp Duty and Inheritance tax, before even adding VAT, Council Tax and energy subsidies on a utilities bill have a compounding, dampening effect on people.

The amount of tax people pay is much higher than they think. Income tax headline rates of 20, 40 and 45 per cent leap to 40, 49 and 53 per cent once you add in National Insurance.

But it’s not just that tax rates are higher: they catch more people. The 40 per cent tax rate in the late 1980s only applied to 1 in 20; it now applies to nearly 1 in 6.⁶⁸

The current threshold of £41,450 per annum catches senior teachers, senior nurses and middle-ranking police officers. Had the threshold been

indexed in line with growth in wages, the 40 per cent tax would cut in at a salary of £75,700 a year.⁶⁹

Likewise, Stamp Duty used to be levied at 1 per cent and only on the most expensive properties. But now by 2018 four fifths of homes will be hit by it at one level or another.⁷⁰

It is high time we rediscovered the virtues of low taxation. Low taxes encourage effort, initiative and enterprise. They reward society's wealth creators and risk takers, the people who create jobs and build the prosperity that benefits us all. We should start with a significant uplift in the threshold for paying 40 per cent income tax to send a signal that those who work hard and achieve success will be rewarded, not penalized.

UK 2020

When we look ahead to a brighter future, we can see the UK alongside self-reliant, low cost, entrepreneurial economies, starting with the Anglosphere where the economies of Australia, Canada and New Zealand are flourishing thanks to Conservative governments. And we have close links with the emerging economies of the Commonwealth, the Far East, and parts of Eastern Europe which are all growing faster than our local but important partners in Europe.

In conclusion, I am convinced that the majority of people in the country are small-c conservatives at heart, looking for optimistic, common sense policies that deliver results.

So if we are straight with the public – about the importance of balancing the books, about the duty on ministers to spend public money wisely and frugally, and about the dynamic effects of low taxation, this puts the country's best interests at the forefront. If we do all that, forget the focus groups, we will take the Public with us.

Thank you for coming this evening, thank you for joining us at the launch of our think tank. We look forward to working with many of you and letting you know about the progress we make in developing a truly common sense set of policies.

AN OPTIMISTIC VISION OF A POST-EU UNITED KINGDOM

BUSINESS FOR BRITAIN
WESTMINSTER, LONDON

24 November 2014

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I INTRODUCTORY REMARKS

What a pleasure it is to be with Business for Britain today. So much hangs on this organisation and its work. For a long time, the case for deeper European integration rested on an unsubstantiated yet largely unquestioned assumption that the EU suited our businesses. You are blowing that assumption out of the water.

Self-selecting surveys of CBI members may suggest enthusiasm for the Brussels system. But when firms are objectively polled by outside professional pollsters, a very different picture emerges. A major survey commissioned by your organisation earlier this year showed that, by 46 to 37 per cent, businesses believe that the regulatory costs of the EU currently outweigh the benefits of membership.

It will, I suspect, be some time before the establishment comes to understand that the CBI leadership and British business are two very different things. But, when it does, Business for Britain will deserve much of the credit. Patiently, factually, empirically, you are demonstrating that the big professional associations are not representative.

Yes, the EU may suit a handful of multi-nationals and mega-banks. It suits them, frankly, because, in many cases, they have invested time and money in lobbying Brussels to set regulations that help them and handicap their competitors. But these large corporations are not typical of business as a whole, either in this country or elsewhere in the EU. The overwhelming majority of people work in firms that have fewer than 50 employees.

Business for Britain has given them a voice. The thousand supporters whose names you published last month are genuinely representative. They cover manufacture and services, import and export, industry and finance, small medium and large companies. But they have one thing in common. Instead of being lobbyists or corporate affairs types, they are wealth creators, genuine entrepreneurs.

Now, at last, their agenda is being articulated. The case is being made for a relationship with our European neighbours that would suit all British companies whether they trade exclusively in our domestic market, the single European market or with continents beyond Europe.

II HISTORY OF THE EU

*A political project from conception, masquerading
as an economic project*

So today, I'd like to talk about the UK's relationship with the EU. How we have come to be where we are, and how we can get to where we'd like to be.

I will argue that the European project was always political but was sold to the British people as an economic project. We have now come to a fork in the road where we cannot follow the Eurozone into a more integrated

political entity. As they move away from us, we should grasp the opportunity to leave the current political arrangements and negotiate a new settlement, while keeping our vital position in the single market. This will give us huge economic advantages and re-establish our position as a leading player, in our own right, on the world stage.

The European project was always political but was sold to the British people as an economic project.

Let's start at the beginning. Not the entry terms accepted by Edward Heath in the early 1970s. Not even the Treaty of Rome of 1957. Nor the aftermath of the Second World War. The European project was forged in the crucible of the terrible battle of Verdun in 1916, which was observed by a young Frenchman, Jean Monnet. A decade later, working with Arthur Salter at the League of Nations, he devised the structure that was to become the European Union. It was published in September 1929 under the title "The 'United States of Europe' idea".⁷¹

Monnet's idea, therefore, pre-dated Nazism, the decline of European dominance in trade, the rise of the US and the USSR as super powers, the Cold War and the nuclear arms race.

Nevertheless, with an idea already ill-fitted to the new geopolitical realities of the post-war world, Monnet, as a senior French civil servant, was now in a position to push his dream of a politically unified Europe.

Monnet drafted the Schuman Declaration which led on the 18 April 1951 to six men gathering in the French Foreign Ministry's *Salon de l'Horloge*, to sign an accord unlike any other. The Treaty of Paris, which created the European Coal and Steel Community – the first direct ancestor of today's EU – did not just bind its members, including France and Germany, as states. Rather, it created a new structure, superior to national jurisdictions.⁷²

The six signatories, scarred by the horrors through which their generation had passed, looked forward to a time when it would be impossible to wage a European war, because the materials needed to sustain one – coal and steel – would be under the control of a supranational bureaucracy.

Monnet became the first president of what he described as "the first government of Europe." Then, in a fit of hubris, proposed setting a European Army and a European Political Community, bound by a European Constitution.

But after this political project was humiliatingly rejected, Monnet realised that his ambitious dream could only be built gradually, bit by bit, never declaring too openly its ultimate aim.

This became known as the "Monnet method", or *engrenage*, to achieve political integration. The first of those steps was the creation of a unified trading area: a Common Market.

The launching of that “Common Market” with the Treaty of Rome in 1957 was never intended to be just an economic arrangement. It was the beginnings of an eventual “Government of Europe”. If the Common Market had only been intended to be just a trading arrangement, why was it necessary for it to be run by those four central institutions inherited from the League of Nations: a “European” Commission, a Council of Ministers, a Parliamentary Assembly and a “European” Court of Justice?

Right from the start, the “European project”, or “*Le Projet*”, as it came to be called, was always regarded by its insiders as a political venture. We can now see from the Cabinet papers of that time how successive prime ministers, Harold Macmillan, Harold Wilson and above all Edward Heath were made abundantly aware, behind the scenes, that the ultimate goal was full political integration.

But they were equally well aware that they could not admit this openly to the British people.

So the public and Parliament were presented with a “Common Market” – an economic project that joined together those original six nations, led by Germany and France, whose economies in the Fifties had made such a miraculous recovery from the war.

In fact, at the signing of the Treaty of Rome, the French economy had been enjoying growth rates unrivalled since the 19th century. In 1964, for the first time in 200 years, its GDP had overtaken that of the United Kingdom. In Germany, the effects of the *Wirtschaftswunder* were in full flow. In ten years, industrial production had multiplied fourfold and the purchasing power of wages had increased by 73 per cent.

By then, having “lost an empire and not yet found a role”, Britain had become the sick man of Europe.⁷³ Three years after joining the Common Market in 1976, it had the humiliating experience of calling in the IMF to “rescue” the pound.

It took Mrs Thatcher to resolve the very issues which had been dragging down our economy. It was her policies, not membership of the EEC, which set us back on course to economic prosperity.

By then what had become “the European Community” was galloping through the next stages of political integration: first the Single European Act, another step towards a “single Europe”; and then Maastricht, the treaty which turned the Community into a “European Union”. This finally set on its way that supreme symbol of European integration, a single European currency.

We owe a huge debt of gratitude to John Major and Norman Lamont for negotiating at Maastricht an opt-out from the euro. Looking back, our decision not to join the Euro will be seen as the crucial moment in our relationship with the EU. Without that we would be caught in the same death spiral that is now dragging down the entire Eurozone economy.

III MOTIVATION FOR A FULL POLITICAL UNION EXPOSE

Contemporary examples

It is no longer possible to disguise the political nature of the European project now that Monnet's idea of a European Constitution was realised in the Lisbon Treaty of 2009 – despite it being rejected by the French and the Dutch in referendums of 2005.

In this light, we see the same pattern again and again: the adoption of EU national symbols, the euro, the social chapter, the phasing out of national vetoes. First, we'd be told that it wasn't on the agenda at all. Then we'd be told it was technically on the agenda, but not to worry as the UK had a veto. Then, without any intervening stage, we'd find the thing was inevitable, agreed in principle years ago, and that there was no use complaining now.

The euro, was always seen as a crowning achievement of a political project – even at the expense of economic sense. The result, as we see today, is that it has turned much of Europe into an unhappy land of semi-permanent recession.⁷⁴

It is also worth reflecting how our respective fortunes have changed. Now after decades of social Europe the boot is on the other foot.

The bloc is now weighed down by its burdens and unable to deliver the growth which will restore prosperity. The economy is fatally unbalanced. Public spending takes 48.5 per cent of its combined GDP, yet the total employment rate stands at a mere 64.1 per cent.^{75,76}

The Eurozone has to become, in effect, a new country to make a full redistributive federal state where there are legitimate means of transferring funds from the wealth creating areas such as Bavaria, Baden-Württemberg or Noord-Brabant to places like Andalucía, the Mezzogiorno and the Peloponnese where it is simply not possible to create wealth at the rate at which their countries joined the Euro.

As Angela Merkel said recently, “Europe accounts for just over seven per cent of the world's population, produces around 25 per cent of global GDP and 50 per cent of global social spending”.⁷⁷

Nothing more exemplifies the determination to pursue the political project regardless of economics than the manner in which the euro has been supported in breach of treaty provisions. As Christine Lagarde as French Finance Minister said:

“We violated all the rules because we wanted to close ranks and really rescue the euro zone. The Treaty of Lisbon was very straightforward. No bailouts.”⁷⁸

Whatever we think we have agreed to, as long as supreme power is exercised by the European Commission and Court, the rules can be changed after the event.

We have now come to the fork in the road. The Eurozone has to become, in effect, a new country to make a full redistributive federal state where there are legitimate means of transferring funds from the wealth creating areas such as Bavaria, Baden-Württemberg or Noord-Brabant to places like Andalucía, the Mezzogiorno and the Peloponnese where it is simply not possible to create wealth at the rate at which their countries joined the Euro.

In order to make such a shift legally watertight, particularly with reference to German constitutional arrangements, it is most likely that they will eventually need a new treaty.

In short, it is not so much that we are leaving the EU, as much as the political project of the EU has left us.

IV LOSING INFLUENCE WITHIN THE EU

There is little we can do to change things from the inside, as we are outvoted. When we joined, the UK had 20 per cent of the votes in the European Parliament, today we have 9.5 per cent. We had 17 per cent of the votes in the Council of Ministers, now we have eight. The UK has not managed to block a single proposal from the Commission passing through the Council despite trying 55 times.

In the meantime the cost of membership has risen by 200 per cent in the last decade during which our economy has grown by only 14 per cent and adding further insult, since Tony Blair bungled the negotiations on the rebate for non-reforms of the CAP we have lost £10 billion. The latest extraordinary twist was the demand from the EU for £1.7 billion. Much of this is well known and publicly debated but a further damaging feature of the current arrangements is the issue of disallowance. This is effectively a fine imposed in a frequently arbitrary manner on a member state by unelected officials in the Commission bureaucracy.

I was astonished to find on my first day in DEFRA that the UK is paying £600 million in disallowance back to the EU for the incompetent manner in which the last CAP reform was implemented by the last Labour government.⁷⁹ Many people are unaware that UK Cabinet Ministers make daily decisions on issues not according to the merits of the case but on a fine judgement as to whether a certain course of action may incur infraction proceedings followed by a large disallowance claim. Totally unpredicted and capricious interpretations of nuances of European law by Commission officials can also have a catastrophic effect on real people and businesses. Currently, 2,000 jobs may be at risk because the rules on emissions affecting Aberthaw power station in South Wales have been summarily re-interpreted.⁸⁰

I was further alarmed by our inability to influence decisions at European level on the issue of neonicotinoids. I had clear scientific advice that these were safe to use and considerably better for the environment than any alternatives. But I also received 85,000 e-mails as part of a international campaign organized by Green NGOs. The Commission rolled over under this pressure and imposed a Europe-wide ban, ignoring my call for more field trials. It is worth reflecting that the Commission paid €150 million (£119 million) to the top nine green NGOs between 2007 and 2013. It's therefore shocking that Professor Anne Glover, the European Commission President's scientific advisor, was sacked last week and her post abolished. Her views on GM foods supported the UK Government, but were repellent to the "Green Blob".

V LOSING INFLUENCE ON THE WORLD STAGE

1/28th of a chair or a whole chair at 'top tables'

Above all, this illustrates how often our Ministers are over-ruled. We are told that being outside the EU would significantly diminish our influence by removing ourselves from the negotiating table of the world's largest trading bloc.

Nothing could, in fact, be further from the truth.

Decision-making takes place at a global level through a variety of bodies and regulations. And we do not have seats at these "top tables" as we have handed power to the European Commission to represent us along with 27 other Member States. On these global councils, we have one twenty-eighth of one seat.

What so very few understand about this process is that the game changed substantially in 1994. It was then that the EU adopted the WTO's Technical Barriers to Trade (TBT) Agreement.⁸¹ This incredibly important instrument requires the participating parties (including the EU) to adopt international standards in preference to their own. Thus, if any other international body, adopts standards which impinge on the EU's laws, it is obliged to scrap them and implement the new standards.

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This provision is not optional. The Agreement uses the word "shall", which is why the EU has no choice but to progressively replace its laws with international rules.

As DEFRA Secretary, I was only too well aware of how these changes affect us. Many of the Single Market food standards my former department has to implement are no longer made in Brussels. They have gone up a level and are now made by *Codex Alimentarius*, which reports to the UN's Food and Agriculture Organisation (FAO), in Rome. Yet we would often learn of them only after they had been handed down to Brussels and when it was too late to change anything.

This is no small matter. As well as Codex, the FAO hosts two other standard-making organisations, the *Office International des Epizooties* (OIE), which deals with animal health, and the International Plant Protection Convention (IPPC).⁸² Both fix standards which are adopted by the EU as Single Market legislation, only then for it to be passed back down to us. Once they are set at international level, Brussels does not have the power to change them.

I was particularly struck on a visit to New Zealand 18 months ago how my counterparts saw how vital it was to build alliances and work with like-minded nations to promote legislation or amend other countries' proposals. At that time they were particularly exercised about a specific proposal on the OIE affecting the sheep industry crucial to NZ farmers. They were particularly pleased to have got the Australians on side and believed that gaining the support of Canada and the US would see a key amendment through.

When I asked why they had not asked for the UK's influence on this matter, they said that the UK's position was entirely represented by the EU: even though we have one of the largest sheep flocks in the world. I left feeling stung by these comments and totally disheartened by our lack of influence but also galvanised by the belief that we could serve our own industries so much better if we, as a sovereign nation, retook our rightful place on these various global regulatory bodies.

Similarly, Norway's position is abusively dismissed as simply submitting to EU law by fax machine. Norway is a member of the EEA, the area of the 28 EU member states and the three EFTA states. Norway has a huge fishing industry and plays an enormously important role in promoting regulations concerning fish in *Codex*.⁸³

The fact that when a regulation is finally agreed, it is formally disseminated to all members of the EEA including Norway, is wholly irrelevant to their key role in negotiating the detail alongside the EU. Once the regulation is agreed at international level by Norway and the EU it cannot be changed by the EU. Norway makes representation to Codex by itself, and the UK could do the same. These are regulations we will need to submit to either way, so why not submit to them having had a decent chance to influence them as Norway does?

The range of international standards shaping the Single Market *acquis* is staggering. In the all-important car industry, for instance, the regulatory

focus has moved from Brussels to Geneva. There, the EU's Single Market standards start as "UN Regulations" produced by the World Forum for the Harmonisation of Vehicle Regulations. Known as WP.29, it is hosted by the United Nations Economic Commission for Europe (UNECE).⁸⁴

European vehicle production is extraordinarily integrated; the UK produces 1.6 million cars but produces 2.6 million engines.⁸⁵ Most of these engines are exported to Europe. As we move to world standards of vehicle production we would be at a massive advantage if we were directly represented, on the body influencing standards, in our industry's interest.

Then there is the regulation affecting the financial services industry – which is of such great importance to the City of London. In the past, much of this was made in Brussels. Now, most of the important rules come from the Basel Committee on Banking Supervision.⁸⁶

As important is the Paris-based Financial Stability Board (FSB), chaired by Mark Carney. Founded in April 2009 by the G20 and working with the OECD, it has a mandate to coordinate national financial authorities and international standard-setting bodies. It is also tasked with developing and promoting the implementation of effective regulatory, supervisory and other financial sector policies.⁸⁷

In the past, Ministers had to travel to Brussels to make their case, and to keep an eye on new laws, but with the advance of globalisation we now need to be represented in Geneva, Paris, Berne, Rome and elsewhere.

Outside the EU, we would be working directly with these organisations, building alliances with likeminded nations, deciding the rules the EU is obliged to adopt – as do Norway, New Zealand and the United States.

VI BOTH A SINGLE MARKET AND GLOBAL TRADE

a) A single market

It is critical to remember that the economic Single Market and the political EU are not one and the same thing. We are perfectly at liberty to pursue participation in the Single Market without being saddled with the EU as a political project. Membership of the EEA allows full participation in the Single Market without being in the EU, as enjoyed by Norway, Iceland and Lichtenstein. Those such as the CBI, who confuse the memberships of the Single Market and the EU are making a basic error and misleading the British people.

The argument that leaving the EU would damage our ability to continue this trade with our European neighbours massively underestimates the huge selfish and strategic interest that our neighbours have in ensuring our continued lively position in the Single Market.

In 2013 the EU exported £221 billion of goods to the UK supporting 5 million jobs on the continent. We exported £155 billion of goods to the

bloc, leaving a deficit on account of £66 billion, up from £40 billion in 2011. We imported £57 billion-worth of goods from Germany and £24 billion from France, with a surplus between these two countries of £30 billion.⁸⁸

Given these surpluses, it is hard to imagine that our EU trading partners would wish to break off trading relations. To suggest that leaving the EU would put at risk three million jobs attributed to UK exports to the EU is, therefore, puerile because we will continue to export to the Single Market. The EU does not deliver jobs. It is the Single Market comprising the 31-member EEA which delivers.

It is critical to remember that the economic Single Market and the political EU are not one and the same thing. We are perfectly at liberty to pursue participation in the Single Market without being saddled with the EU as a political project.

So we can leave the political project and enter into a truly economic project with Europe via the European Free Trade Association (EFTA) and the EEA. We would still enjoy the trading benefits of the EU, without the huge cost of the political baggage.

b) Global trade

However, freedom from the political trappings of Europe would free us from restrictions and penalties in developing trade with nations outside the EU.

The UK has successfully traded all around the world for centuries. In addition to our trade with Europe post-EU, we can expand trade with global partners. And other bodies exist that can determine regional trade relationships with Europe, free from direct control of Brussels. Every continent on Earth is now experiencing economic growth except Europe. China grew by 7.7 per cent in 2013 while the EU shrank by 0.3 per cent, for example.^{89,90}

The UK should take a lead in kick-starting a programme of regulatory convergence to rebuild the global trading system. Regulation is often much misunderstood. Much of it is restrictive and costly, to be avoided, but a distinction needs to be made between proscriptive and enabling legislation. Well-crafted enabling laws which set global standards, prevent importing countries from creating their own blocking legislation which restricts trade. We should focus on making sure that the global *acquis* is well-crafted and relevant, breaking down barriers rather than building them.

The UK could regain its role as a driver for international free trade. The post-WWII settlement saw the re-emergence of multilateralism, with GATT and then the WTO, only then to have the movement founder on the Doha round, from which it has yet to recover. The Director-General of the WTO,

Roberto Azevedo, says his institution has descended into “paralysis”.⁹¹ By any measure, multilateralism is on life support.

However, bilateralism is not faring any better. Huge regional trade deals, such as that between the EU and the US under TTIP, are in theory immensely beneficial. But having discussed the agricultural element, of the proposed TTIP deal with my then counterpart in Washington, it was clear that a trade deal worth \$300 billion could easily fail on the Greek insistence on an exclusive definition for Feta cheese and the American defence of washing chicken carcasses in chlorine.⁹² It was frustrating to see how much we agreed with the Americans on so many issues and their potential enthusiasm for pursuing a bilateral trade deal with us.

Rather than wasting energy on seeking agreements on things we will never agree, therefore, we need a change of strategy. We should focus more narrowly, concentrating on the things we can agree about.

We should be looking at “unbundling” – separate, unlinked deals, made at sector or even product level. These are deals which can be reached quickly and easily without the baggage that goes with so many free trade agreements.

Two key targets alone could yield huge dividends: the pharmaceutical and automobile sectors. Rationalisation applied to the global pharmaceutical industry, with a turnover close to one trillion US dollars, could deliver annual savings in the order of \$50 billion without any fundamental changes to the regulatory system.⁹³ Lack of regulatory standardisation between the EU and US adds 20 per cent to the costs of exporting cars to the United States.

c) Immigration

While we are talking about the realities of globalisation, it is important to look at the issue of migration – an issue that featured so heavily in last week’s by-election in Rochester and Strood.

In the first instance, immigration in other EU/EEA countries is very much higher than in the UK. Against the UK with its 13 per cent, Norway is 14.9 per cent and Switzerland is 23 per cent.⁹⁴ Outside Europe, the Australian points system much lauded by UKIP has 27 per cent first generation immigrants.⁹⁵ Clearly, there is a lot more to immigration than just the “freedoms” in the EU treaty, and there are many measures we can take – and already are beginning to take – which can help reduce migrant pressure.

Furthermore, much of the problematical immigration into this country stems not just from the EU but from the European Convention of Human Rights. This is exacerbated by the rulings of judges in the court at Strasbourg and by our own UK courts implementing the Human Rights Act. Repeal of the HRA and adoption of new Bill of Rights, breaking free from the ECHR, would also relieve us of migrant pressure, including such absurdities as not being able to deport illegal immigrants who come to us via Calais, because – according to our judges – France is not a “safe” country for asylum seekers.⁹⁶

Outside the EU and freed from the writ of the ECHR, “freedom of movement” within the EEA could be limited to free movement of workers, without having to accept dependents and members of their extended families.

This is exactly what David Cameron wants when he said last year that he thought free movement within the EU “needed to be returned to the original concept, which was the freedom to be able to go and work in another country”.⁹⁷ But, if we are to benefit from the Single Market, we must at least accept that provision.

And we must look seriously at migration as a global issue with massive economic and developmental implications. In Africa alone, the “brain drain” to sophisticated Western economies has cost emergent nations nearly \$9 billion in lost human capital and growth potential since 1997.⁹⁸ It would be so much better if we could work together to expand this capital to our mutual benefit, growing their own economies. The UK needs to be fully involved at a global level, integrating its entire range of relevant policies to that end – foreign policy, aid, trade, defence, and domestic portfolios – all to address the “push” or “pull” factors which drive the mass movement of people.

VII AN OPTIMISTIC, POSITIVE VISION – THE UK AFTER THE EU

So where could we be by 2020? The biggest problem we face is that until now nobody has painted a really optimistic picture of our future should we stand aside and allow the Eurozone to press on, forging a new political entity. This would allow us to embrace wholeheartedly the Single Market through an EEA/EFTA arrangement and claim back our deserved place on the key world decision making bodies.

It is hard to think of any other country that can benefit more from its unique position, its long history of international trade and global cooperation whilst also embracing all the advantages of modern technology in a dynamic 21st Century economy.

We are set to be the largest economy in Europe and the fifth largest in the world. The English language is the language of world trade. We have exceptionally close relationships with not only the US but the whole of the Anglosphere: Australia, Canada and New Zealand. We have unique links to the Commonwealth whose trade is worth around \$4 trillion.⁹⁹ From within this great organisation, we can work closely with large numbers of African nations who are beginning to emerge into prosperity. We have especially close links to the growing nations of South Asia.

Likewise, strong historical ties with Hong Kong, Malaysia and Singapore which have in no way marred our ability to work with the emerging superpower of China. Our geographical position, equidistant from Los Angeles and Hong Kong gives London, the world's most international city, a huge advantage.

It is hard to think of any other country that can benefit more from its unique position, its long history of international trade and global cooperation whilst also embracing all the advantages of modern technology in a dynamic 21st Century economy. We should grasp this opportunity to gain an enormous advantage for our children and grandchildren.

Our democratic institutions and not just our common law system but our respect and adherence to the rule of law, have been exported around the world. We simply do not need to have our lives ruled by an organisation in which our own elected politicians can be overruled by unelected civil servants and whose concept of government emerged from the horrors of the First World War.

I would like to see our Government brought back within the control of our own Parliament. Ministers should be properly accountable to Parliament for all aspects of Government. This would give the British people the ability to remove their real rulers by voting. Our politics would be reinvigorated. I find it extraordinary that many in our establishment mock this prospect. As a nation we are second to none in so many spheres of human activity. Our universities, scientific research, medicine, arts, music, literature and sports lead the world. Why do we doubt our ability to represent ourselves on the world stage?

VIII AN ORDERLY EXIT – INVOKING ARTICLE⁵⁰

There is too little discussion on how we should engineer an orderly transition from our position as a half-hearted member of the EU to a confident, independent member of the global community.

In my view, the public will never fully commit to the independence they most likely want unless we can show that a smooth, orderly transition is possible. In other words, answering the question of how we leave the political arrangements of EU is every bit as important as addressing the question why. Even people who are broadly in favour of withdrawal are unlikely to commit to the process unless they are assured that all the angles have been covered. A definitive plan will give the necessary reassurance.

Voters have not been presented with a clear vision of what life outside the EU would look like for the UK and in the absence of any detail I am convinced that if an “in-out” referendum were held today, there would be a natural tendency to vote for the status quo. The establishment view will be clearly to stay within the political organisation of the EU.

The answer to this is to invoke Article 50 of the Lisbon Treaty. It is the only legally binding mechanism that we can use to require the rest of the EU to enter formal negotiations with us, on setting out a new relationship. It allows two years for negotiations, so there would still be time for a referendum in 2017. This would now be on the outcome of the talks, when the details of the settlement would be known.

There should be a manifesto commitment to invoke Article 50 after a successful General Election. Such a commitment could be enormously attractive to uncommitted voters and would give our negotiators a very clear mandate.

On such a basis, the referendum can allow the British people to make an informed choice, as between leaving the political project of the European Union, whilst enjoying the advantages of the Single Market, or committing fully to political integration, which should include participating in the single currency.

Once the decision to invoke Article 50 has been made, agreement should be concluded as rapidly as possible. But speedy negotiations impose certain constraints. We should remember that the Swiss bilateral agreements with the EU took 16 years to negotiate.¹⁰⁰ The much-vaunted EU-South Korea FTA took almost 18 years to come to fruition – in the form of a 1,336-page trading agreement.¹⁰¹

We need, therefore, to pick a proven, off-the-shelf plan. However, our participation in the Single Market is fundamental to protecting the UK's economic position. This brings us to the only realistic option, which is to stay within the EEA agreement. The EEA is tailor made for this purpose and can be adopted by joining EFTA first. This becomes the "Norway option". We have already seen that Norway has more influence in international decision-making than we do as an EU Member State. Using the EEA ensures full access to the Single Market and provides immediate cover for leaving the political arrangements of the EU.

To ensure continuity and avoid any disruption to the Single Market, we would also repatriate the entire Acquis and make it domestic law, giving us time to conduct a full review in good order.

However, we should reflect that it took 40 years to progress to this stage of integration and we are not going to resolve all the issues in one stage. For the longer term, we would need to progress from the EEA to ensure a genuine Europe-wide Single Market, working on a truly intergovernmental basis. One possible alternative would be to strengthen the regional UNECE regime to administer this as an economic project. By negotiating directly across the board, we would cut out the middle man, and substantially enhance the transparency of the system.

With a more durable European solution, we would be better able to promote our economic interests, we would also be able to take a lead in revitalising international trade. Free from the EU we would have real influence on

shaping the global regulatory models where true power lies. The UK would have a key role in building transparency with enormous benefits to tackling organised crime, such as human trafficking, addressing issues of migration constructively.

In conclusion, the Eurozone has already embarked upon a path that we can never follow. We are simply recognising that reality. We must either be fully committed to “Le Projet” or we must build an entirely new relationship. The British people must be allowed to make that decision. Article 50 is the best method of making this happen.

By this means we would forge ahead and resume our rightful place as a global leader. With our own independent status, working closely with our many allies, we would massively increase our influence.

As Churchill said, “We have our own dream and our own task. We are with Europe but not of it. We are linked but not comprised. We are interested and associated but not absorbed”.¹⁰² He was right then and he is right now. Get this message across and the UK has a spectacular future as a flourishing world power.

GREEN BLOB VERSUS GREEN REVOLUTION

ANNUAL SOUTH AFRICAN AGRICULTURAL BIOTECHNOLOGY
INDUSTRY ISAAA MEDIA CONFERENCE
PRETORIA, REPUBLIC OF SOUTH AFRICA

24 February 2015

Introduction

Thank you all very much. Thank you, Doctor Obokoh for that kind introduction. It's a great pleasure to be able to speak at the Annual South African agricultural biotechnology industry/ISAAA media conference. You are all doing so much important – indeed life-saving – work to bring the benefits of modern agricultural technology to this continent.

This is a time of extraordinary opportunity for Africa. Progress in the plant sciences is opening up the promise of a second Green Revolution, one that can not only feed the 9 to 10 billion people that will inhabit our planet in 2050, but feed them well – one that can finally end the shame of the nearly one billion who still go to bed every night hungry and malnourished.

No place on Earth holds more promise in this respect than Africa. With its vast, and as yet underutilized resources of land, soil, water and sun, Africa is wonderfully situated to match or exceed the success of Brazil.

It is a revolution, powered by cutting-edge science, that can drive economic development from the bottom up. I'm talking about authentic, indigenous growth – the only kind that really takes root ... that empowers individuals ... that breaks the cycle of aid and dependency and can make every nation on this Earth a strong, competitive player in global economic growth.

No place on Earth holds more promise in this respect than Africa.¹⁰³ With its vast, and as yet underutilized resources of land, soil, water and sun, Africa is wonderfully situated to match or exceed the success of Brazil – a nation that agricultural development helped catapult into the front ranks of world trade – but it will only happen if African countries embrace farming systems based on modern technologies.

The “Green Blob”

This is also a time, however, of great mischief, in which many individuals and even governments are turning their backs on progress. It's a strange time, really, in which the privileged classes increasingly fetishize their food and seek to turn their personal preferences into policy proscriptions for the rest of us.

Not since the original Luddites smashed cotton mill machinery in early 19th century England, have we seen such an organized, fanatical antagonism to progress and science. These enemies of the Green Revolution call themselves “progressive,” but their agenda could hardly be more backward-looking and regressive.

They call themselves humanitarians and environmentalists. But their policies would condemn billions to hunger, poverty and underdevelopment.

And their insistence on mandating primitive, inefficient farming techniques would decimate the Earth's remaining wild spaces, devastate species and biodiversity, and leave our natural ecology poorer as a result.

I call them the “Green Blob” – a reference to a 1950s Sci-Fi movie starring Steve McQueen in which a blob-like alien attacks Earth and swallows everything in its path: the environmental pressure groups, renewable energy companies and some public officials who keep each other well supplied with lavish funds, scare stories and green tape. This tangled triangle of unelected busybodies claims to have the interest of the planet and the countryside at heart, but it is increasingly clear that it is focusing on the wrong issues and doing real harm while profiting handsomely.

The Blob operates on two levels. First, by a pernicious grab for funding dollars with literally hundreds of them orbiting the honey pot of Europe. Secondly, with an ideological belief that Europe should abdicate its fundamental responsibility to feed its own people.

Neo-colonialism at its worst, Europe sits on some of the most fertile land on the planet, and yet imports food from the rest of the world which requires the equivalent of 35 million hectares of farmland to produce.

There are many impediments standing between the vision of agricultural progress and Africa, of course, but none is more pernicious than the Blob. It is supported by massive funding provided by the EU itself,¹⁰⁴ as well as numerous church and humanitarian groups, and the well-meaning but misguided generosity of the privileged classes in Europe and elsewhere. It has undue influence in the media, government and international institutions. Unfortunately, few question either its credentials or motives.

I will be speaking more about the Green Blob and how we need to push back and reassert the fundamental primacy of science. But first I want to talk about the good news – and there is a lot of good news to talk about.

The Good News About Biotech

As you know, the International Service for the Acquisition of Agri-biotech Applications, ISAAA, has just come out with its latest report on the worldwide adoption of genetically modified crops. As before, it records a remarkable success story.

2014 was the 19th year of successful commercialization of biotech crops, 18 million farmers, of which 90 per cent were small and resource-poor, planted a record 181 million hectares of biotech crops in 28 countries.¹⁰⁵

GMO-versions of food staples like potato in the United States and eggplant in Bangladesh have been approved for planting.

The United States continues to lead the way and saw a 5.5-fold increase in hectares of drought tolerant maize planted.

Biotech continues to be the most rapidly adopted agricultural technology in history. During the 19 years GMO crops have been commercialized, we have seen a more than 100-fold increase in the area planted.¹⁰⁶

The facts also completely belie the propaganda that GMOs are only for the wealthy nations. In fact, more than 90 per cent of the farmers planting biotech are smallholder farmers in nations in the developing world.¹⁰⁷ For the third year in a row, less developed countries planted more biotech hectares than the entire developed world.

Farmers are famously risk-averse. They know that the misapplication of resources can spell the difference between a bumper harvest and total crop failure. That's why it's even more remarkable that nearly 100 per cent of all those farmers who plant biotech crops have yet to go back to the old ways.¹⁰⁸

In the global context, over 80 per cent of the world's cotton crop has been GM for several years. The success of insect protected GM cotton has given Burkina Faso, one of the poorest countries in the world, a new tool to boost their main economic activity: cotton production. Farmers have seen at least 66 per cent less pesticide applied, 20 per cent increase in yield, and at least \$87 per hectare increase in their profit.

They continue to choose to plant biotech year after year because biotech plants work. It's really that simple.

ISAAA report a number of very heartening breakthroughs.

The drought-tolerant maize technology donated to Africa by Monsanto is expected to begin commercial planting in 2017.

Field trials have been given the go-ahead in Cameroon, Egypt, Ghana, Kenya, Malawi, Nigeria and Uganda while trials have been conducted on a broad range of new crops, from biotech bananas to maize to cotton and cow-peas.¹⁰⁹ One can certainly hope that as the trials reveal the dramatic benefits of GMO, these countries too will make them available to all their farmers.¹¹⁰

They can certainly look to the success in South Africa, which is still the leader on this continent, with 2.7 million biotech hectares planted. But they might also take in the dramatic example of insect resistant Bt cotton in Burkina Faso, where farmers are rapidly and overwhelmingly embracing the efficiencies and improved yields represented by the GMO variety.¹¹¹

By 2013, in fact, almost 70 per cent of all cotton grown in Burkina Faso was Bt, which increased farmers' yields on average 20 per cent over non-GMO cotton. It has also dramatically decreased pesticide applications – which in Africa are often done by hand, a 40 to 80 pound backpack filled with older

pesticides strapped to one's back. Bt-cotton has cut those applications from 6 to 2 or fewer and delivers a solution that is eminently more effective.¹¹²

Within one season, Bt can transform the life of smallholder farmers, turning their farms into profit-making enterprises that allow them to send their children to school rather than out into the fields, and to buy their families enough to eat – and of course with better nutrition comes better health.

Even where farmers have voted overwhelmingly for a choice of GM technology and the benefits have been tested and demonstrated in numerous studies, the Green Blob has been tireless in myth making and misinformation. Take the allegations of Indian farmer suicides. Anti-GM green groups stated that the introduction of GM crops had brought about an increase of suicides among India's farmers. It is imperative in the case of such tragedy to be accurate about causes if you are to help people driven to suicide.

Professor Ian Plewis from the University of Manchester clarifies that farmer suicide rates in India are similar to the best estimates of the rates in Scotland and France, around 30 per 100,000 farmers. While these rates are still tragic, they existed at the same level prior to the introduction of GM cotton to India. He states, "In fact, the available data does not support the view that farmer suicides have increased following the introduction of Bt cotton. Taking all states together, there is evidence to support the hypothesis that the reverse is true."¹¹³

And in the global context, over 80 per cent of the world's cotton crop has been GM for several years. The success of insect protected GM cotton has given Burkina Faso, one of the poorest countries in the world, a new tool to boost their main economic activity: cotton production. Farmers have seen at least 66 per cent less pesticide applied, 20 per cent increase in yield, and at least \$87 per hectare increase in their profit.¹¹⁴

Green Blob myths like "GM Indian Farmer Suicide" are retarding the adoption of new science in the developing world. Yet Africa is showing Europe the way.

In 2014 the 28 member states of the EU recorded 12 field trials of GM crops. This compares with 13 projects in Uganda, Kenya and Nigeria.¹¹⁵ These three countries are doing more active biotech field research than the entire rich continent of Europe.

Four Anti-GMO Myths and the Truth About Biotech

Around the globe, in fact, the increasingly widespread adoption of biotech is exploding the myths of the anti-GMO campaigners. It is worth taking a moment to examine four of these myths, taking them one at a time:

Myth #1 is their recurrent implication that farmers are stupid, fooled by biotech companies into paying more for GMO seeds when they would be far better off without them. Well, I tend to think farmers have a pretty good understanding of their bottom line, and I can't imagine any farmer – in my

own country or in the developing world – spending one extra dollar, euro, pound, or rand that he absolutely didn't have to spend.

As it happens, the most current and extensive research on the subject bears that out. A recent analysis of previous major studies – conducted by researchers at Germany's Göttingen University, found that globally since their introduction almost two decades ago, biotech crops have increased crop yield overall by 22 per cent, increased farmer profits by 68 per cent, and reduced chemical pesticide use by 37 per cent. They also found that these yield and profit gains are the highest in less developed countries, not the industrialised countries.¹¹⁶

In other words, the supposedly dumb farmer of Blob mythology is actually a lot smarter than the Green Blob itself.

Myth #2 is that forsaking modern agricultural technology – going organic – will benefit the environment. The opposite is actually the truth.

A few years ago, another group of researchers at Stanford University in the United States found that without the advances in agricultural technology since 1960, we would need more than twice as much land to grow all the food we produce today.¹¹⁷ That's almost two billion more hectares of ploughed land than today, more than the entire landmass of Russia, the largest nation on the globe spreading over nine time zones. Two billion hectares is more than twice the entire area of the United States. The equivalent of three Amazon rain forests.¹¹⁸

I can remember as a child seeing traumatic news bulletins with images of starving people on the Indian subcontinent. The father of the Green Revolution, Norman Borlaug – “The man who fed the world” and Nobel Peace Prize Laureate in 1970 – changed that by transferring wheat with new genetics from the Americas to the Indian sub-continent in the 1960s. India is now a major food exporter.¹¹⁹

As Borlaug said, “There are 6.6 billion people on the planet today, with organic farming we could only feed 4 billion of them. Which two billion would volunteer to die?”

Borlaug and others harnessed innovation to completely change the way we farm. For example, it has been estimated that the production of a given quantity of a crop now requires 65 per cent less land than it did in 1961. Between 1967 and 2007 world food production increased by 115 per cent but land use only increased by eight per cent.¹²⁰ Indur Goklany has calculated that if we tried to support today's population using the production methods of the 1950s, instead of farming 38 per cent of all land, we would need to use 82 per cent.¹²¹

As Borlaug said, “There are 6.6 billion people on the planet today, with organic farming we could only feed 4 billion of them. Which two billion would volunteer to die?”¹²²

Agriculture always needs to balance our demands for more food whilst improving the environment and biodiversity. It is clear that sustainable intensive agriculture produces more food on less land, and therefore protects wild lands for wild life, for recreation, for urban development.

There is less pressure on land that is being used for wildlife and recreation. And the whole huge area generates tourism cash and employment for local economies.

In other words, modern agriculture – with its GMOs, nitrogen fertilizer and modern pesticides – has probably done more to save natural habitat, support biodiversity, and save endangered species than all the other environmental, NGO and UN conservation activities put together.

The Keystone Alliance, a collaborative effort of industry and conservation groups in the United States, has demonstrated the environmental benefits of modern agriculture on the micro-level as well. In each of the major crops studied, inputs of water, fertilizer and energy have been slashed and the environmental impact dramatically diminished at the same time that yields have skyrocketed.¹²³

Maize yields, for instance, increased by 64 per cent in the 31 years between 1980 and 2011. Land use, however, decreased by 30 per cent, soil erosion by 67 per cent, irrigation water by 53 per cent, and energy use by 44 per cent.¹²⁴

The revolution in no-till farming, was invented in the later 1960s a long time before GMOs. Modern herbicides and GMO crops have significantly extended its scope because farmers in many locations no longer have to plough the land to manage weeds. Tractor fuel is saved and topsoil is increasingly returning to its original structure and beneficial microorganism content and, in the United States, rivers and streams are spared the soil runoff that the EPA used to define as one of the top environmental problems in that country.¹²⁵

And the most widely used herbicide in no-till – the glyphosate that NGOs so love to criticize – is enormously healthier for the environment and the humans and animals that live there than the chemistries it replaced. While glyphosate is indeed bad for weeds, its toxicity to animals is less than – not equivalent, but significantly less than – vinegar.¹²⁶ Something to think about next time you dress your salad.

Which brings me to **Myth #3**: the insistence by anti-GMO campaigners that biotech crops are somehow unsafe to eat. It’s a claim they continue to hang onto in the face of many hundreds of studies testifying to GMO safety – the overwhelming majority of all the studies that have been conducted,

a large number of them sponsored by governments and completely independent of industry.¹²⁷

It's a claim they persist in despite the universal opinion of every independent scientific institution globally, (including the European Commission!) that GMOs are as safe as any other food,¹²⁸ and the fact that people in the United States have been consuming diets replete with GMOs for over 15 years now without one documented adverse health effect – not so much as a sniffle or a tummy ache.¹²⁹ Even in Europe, overwhelmingly all the animal products produced – meat, milk, cheese, eggs – come from animals fed on imported GM maize and GM soya meal. Most European farmers have, for the last almost two decades, not been permitted to grow these crops – with the one exception of a single strain of maize.¹³⁰ But European livestock farmers import millions of tons annually – without these imports currently the European livestock market would have collapsed.

In a rational world, a recent study out of the University of California Davis (one of the leading agricultural universities in the United States) would end the call for 'animal studies' of GMOs once and for all. The study compared health outcomes in over 100 billion cattle and other livestock before GMOs were introduced in 1996 and after – when quite quickly GMOs accounted for approximately 90 per cent of all animal feed. In effect, US livestock production has amounted to the largest animal feeding study ever conducted.¹³¹

And what was the difference in health outcomes found by the researchers? Zero. None. The animals were just as healthy after GMOs were introduced as before.

Of course, as with the other myths, the myth of GMOs' adverse health effects isn't just wrong – it's the inverse of the truth.

Generally ignored, for instance, is the widespread problem of mycotoxin contamination, often the result of insect chewing and especially boring into the growing crop, which allows the entry into the plant of fungal pathogens. The problem afflicts a wide range of foods and feed, such as maize, sorghum and peanuts.¹³² Without doubt, many mycotoxins are most effectively controlled by planting GMO crops engineered with Bt insect resistance.¹³³

The FAO estimates that up to half of some food crops are affected.¹³⁴ Globally, it is estimated that more than five billion people in the developing world are exposed to these naturally occurring toxins, which can suppress the immune system, retard growth and cause cancer and liver disease in both livestock and humans.¹³⁵ In Africa, the rural poor are chronically exposed to unsafe levels of these poisons. In 2003, 120 people died in Kenya after eating maize with very high aflatoxin levels.¹³⁶

In the industrialized nations, organic growers have long sprayed with spores of the whole Bt bacterium to control for insects. This organism occurs

naturally in the soil, after all, and has proved safe for mammals and humans. But when scientists engineered a plant that produced one protein found in the Bt cells as a part of its built-in defenses, the Blob fought tooth and nail to deprive the developed world of its benefits.

In a nationally funded trial conducted at the respected University of Milan, two varieties of maize were involved. Compared with conventional maize, Bt-maize not only increased yield by 28–34 per cent, but reduced the fungal toxin fumonisin from 6,000 parts per billion in the non-GMO maize to 60 parts per billion or less in the Bt-maize. The conventional maize containing over 6,000 parts per billion was unfit for human consumption under both Italian and European law. Despite the health implications, these results were shamelessly suppressed by the activist influenced Italian government which organized it.¹³⁷

Once again, the myth is turned on its head: it's not GMOs, but the anti-GMO Green Blob that is the real danger to human health.

Myth #4 is that biotech is only good for farmers and has no consumer benefits.

Once again an inverse of the truth. I count increased protection of wild lands by focusing production sustainably, and cheaper food, as being fundamentally important “consumer benefits”. There are more specific examples too.

Biotechnology has already given us soybeans with higher oleic acid that don't produce cholesterol-elevating trans fats when heated.¹³⁸ Currently, a new biotech tomato is being tested that mimics good cholesterol.¹³⁹ Tomatoes are coming with high concentrations of cancer-fighting anthocyanins.¹⁴⁰ Non-browning apples have recently been approved by US regulators, which should potentially greatly reduce waste through less spoilage.¹⁴¹ Healthier GMO potatoes have also been approved¹⁴² and peanuts are currently under development that lack two of the most intense allergens that pose such a danger to so many of our children.¹⁴³

Only ten days ago, I was in Canberra and saw real progress on oilseed crops that will provide a sustainable source of long chain omega-3 fatty acids providing better nutrition to humans and farmed fish.^{144, 145} This could stop the obscenity of feeding huge numbers of farmed fish with wild fish.

In addition, in future, it might be possible to have the oil yields of oil palm replicated and even exceeded from GM broad acre crops that contain oil in their leaves and stems.¹⁴⁶ So GM developments in oil producing plants could help save vulnerable orangutan habitats encroached by palm oil plantations.

Few people know that the first biotechnology product approved for food was rennet, an enzyme used to make cheese. Today, 90 per cent of the cheeses we eat use GMO rennet because it's safer and more effective.¹⁴⁷ GMO-enzymes are routinely used in the production of bread, wine and beer.

All the insulin routinely used to keep diabetics alive is from GMO-bacteria. Previously insulin was produced from the pancreases of cattle and pigs. A single diabetic would require the pancreases of 50 pigs for a year's supply. Before GMO-bacteria produced insulin, one major industrial insulin producer processed eleven tons of pig's pancreases every day – from a daily slaughter of 100,000 animals.¹⁴⁸ Unfortunately, hugely promising GMO techniques that could protect yoghurt starter cultures from infection have been kept off the market due to fear of consumer backlash.¹⁴⁹

Perhaps the most promising development, however, is biofortification, especially for the developing world, where so many lack the nutrients essential for health and well-being.

Golden Rice, Greenpeace and the Anti-Humanitarians

The flagship biofortified technology was developed 15 years ago by two German Professors Ingo Potrykus and Peter Beyer. Called Golden Rice, it is a miracle grain enhanced with vitamin-A-producing beta-carotene. In 2001 the inventors donated the technology as a potential additional intervention for vitamin A deficiency, for development and deployment by the public sector in developing countries so that it could benefit the poor of the world.¹⁵⁰

Absence of a source of vitamin A in the diet, vitamin A deficiency, is the principal cause of childhood blindness globally, affecting 500,000 children annually of which half die within a year or two.¹⁵¹ Vitamin A deficiency is also a nutritionally acquired immune deficiency syndrome, so common diseases which should be survivable are lethal. Two million young children die as a result every year.

So let's be clear. Although these deaths are preventable, 6,000 children alive today will be dead tomorrow. (By comparison Ebola has tragically killed about 9,000 in the last year: about 25 a day.)

Many of those millions of lives could have been saved if Golden Rice had been available in their diet, and it could have been already for several years, but for the on-going opposition of well-financed anti-GMO activist groups and their ceaseless campaign to frighten people and pressure governments to keep Golden Rice off the market.

The leader of that opposition, with a combined global war chest estimated to exceed US \$500 million, has been Greenpeace, with its combination of highly sophisticated PR and un-scientific scaremongering.

Greenpeace originally claimed Golden Rice wouldn't work, but once its efficacy had been proven beyond a shadow of a doubt, they switched to saying that the poor should simply buy vitamin supplements and eat fresh vegetables instead¹⁵² – as if families living on less than \$2 a day can afford such luxuries.

But Greenpeace doesn't content itself with mere PR.

In 2013, an organization in the Philippines who lists Greenpeace amongst its partners, used a tactic that has been used all over the world by Greenpeace – violently attacking and destroying agricultural research they oppose.¹⁵³ The group, known as MASIPAG, claims to be a “farmer-led network,” destroyed a field trial of Golden Rice. But local officials reported that the thugs who attacked the fields had been bused in from the city.¹⁵⁴

When did so many of our “humanitarian” organizations become so disdainful about the lives of the desperately poor, whom they are supposed to be helping? How long have they been putting ideology over humanity? Do Greenpeace supporters understand that the conduct of the organization that they give to has been truly wicked?

Shamefully, Greenpeace isn’t alone in its support for the MASIPAG anti-GMO eco-terrorists. MASIPAG’s list of supporters reads like a directory of misguided European church and government sponsored social justice and development groups. Perhaps one should put the words “so-called” before social justice. A short list of MASIPAG’s funding sources include:

- The Swiss Catholic pastoral development group known as The Fastenopfer Catholic Lenten Fund;¹⁵⁵
- Misereor, the German Catholic Bishops’ Organization for Development Cooperation, which receives financial support from the German government;¹⁵⁶
- The Swedish Society for Nature Conservation, which is funded by the Swedish Ministry for Foreign Affairs;¹⁵⁷
- Trocaire, the official development agency of the Catholic Church in Ireland, which receives funding from the Irish, UK and EU governments;¹⁵⁸

It should be stressed that MASIPAG is just one of a proliferating network of anti-GMO groups and assorted activists that are operating in the developing world, often with NGO and EU support.

In 2011 Greenpeace attacked GM wheat in Australia which was part of exciting research to enhance the health benefits of this staple food crop. It was heartening to observe the very widespread backlash and condemnation by the Australian community against this criminal vandalism of trusted research. On 14 July 2011, the CSIRO Experimental Station at Ginninderra in Canberra was broken into and research plants were cut down. Some of the GM crop trial plots were partially destroyed. Greenpeace admitted liability.

This incident was investigated by the Australian Federal Police and two Sydney women were charged in relation to the incident, and both women later pleaded guilty to charges of damaging Commonwealth property. On 1 August 2012, CSIRO received a reparation payment of \$282,560 from Greenpeace. In November 2012 the two women received a 9 month suspended sentence, to be of good behaviour for 12 months with \$1,000 security, for each defendant.¹⁵⁹

The question must be asked, when did so many of our “humanitarian” organizations become so disdainful about the lives of the desperately poor, whom they are supposed to be helping? How long have they been putting ideology over humanity? Do Greenpeace supporters understand that the conduct of the organization that they give to has been truly wicked?

Patrick Moore, one of the early leaders of Greenpeace in the 1970’s when it took account of science and respected human life, has broken with his old organization for just this reason. He now works to expose Greenpeace’s actions in the developing world and has joined with Golden Rice inventor Ingo Potrykus in calling for the organization to be tried for crimes against humanity.¹⁶⁰

So I say to my friends in Europe and in the United States: next time some young volunteer stops you on the street to ask for money for Greenpeace, ask them about Golden Rice. They’ll want to talk about all the polar bears and whales they claim to have saved, but ask them instead about the millions of children that their organization is helping condemn to blindness and early death.

It should also be recognized, however, that there are some humanitarian and environmental groups that are coming to recognize the important role that biotech can play in alleviating human suffering and spurring development. I’m thinking particularly of organizations such as Oxfam and the Nature Conservancy, whose initial opposition to GMOs has softened in the light of the overwhelming scientific evidence of their efficacy and safety. It’s time for these organizations to step up and show leadership on this urgent humanitarian issue.

Where also are the UN organisations WHO, FAO, UNICEF – all with nutritional improvement and development mandates? They have recognized the scourge of vitamin A deficiency as a very major – and cheap to control – problem for the last 25 years. Undoubtedly current interventions have saved millions of lives. But VAD (Vitamin A Deficiency) induced preventable deaths continue, and now, as a result of Golden Rice, the half of the world where rice is the staple could benefit from a free nutritional trait. But, cowed by activist polemic, these huge and capable institutions have chosen not to believe in science.

Here is my plea to them: You have rejected the world of activist myth for scientific fact. Now use your moral authority to appeal to your colleagues

in the NGO community. Convince them to do the right thing and support giving the developing world the GM tools it needs to feed its growing, and too often malnourished, population.

The EU's Retreat From Science

Of course, the greatest offender of all is the European Union itself, which in a twisted version of neo-colonialism has imposed its affluent organic affectations and anti-scientific policies on Africa.

The Kenyan-born Calestous Juma, professor of the practice of international development at Harvard Kennedy School, is a former executive secretary of the UN Convention on Biological Diversity, who has repeatedly slammed the EU for strong-arming African nations not to grow GM crops and threatening to cut off imports if they dare to assert their independence.¹⁶¹

I am proud that when I served as the Secretary of State for Environment, Food and Rural Affairs, we were able to convince the European Council of Ministers to change European policy so that now individual countries can decide for themselves whether to plant GMOs or not. This is a significant reform. I hope that when we look back over these years it will prove to have been a watershed moment, as nation after nation in Europe seizes the enormous opportunity offered by this exciting technology.

But we shouldn't fool ourselves into thinking that one reform will solve the problem. The EU's retreat from science has become more like a rout. Just last November, the incoming president, Jean-Claude Juncker, refused to renew the contract for the professor of cell biology, Anne Glover, who had been so ably filling the role of the Commission President's scientific advisor.

For months, Greenpeace and other NGOs had been conducting a concerted campaign against Professor Glover, largely because of her outspoken, science-based support of GMOs. In response, some forty leading scientific organizations and over 770 individuals sent a letter in support of Professor Glover and her position.¹⁶²

The EU finds itself in the ridiculous position that, according to its own pesticide regulations, it would have to ban coffee – and beer, and a thousand other consumer items – if they were sprayed on fields rather than sold in grocery stores.

It is emblematic of Europe today – once the birthplace of modern science and home to many of its greatest achievements – that the anti-science know-nothings won the day. And to think that the Lisbon treaty was meant to ensure that Europe developed a knowledge-based economy! No chance when scientific evidence is only merited with the same influence

as public opinion, which as we have seen, is so easily influenced by political activists.

The European retreat from science is often dressed up as the precautionary principle, which has the advantage of sounding “sciency,” but is in fact neither science-based nor by any legitimate definition a “principle.” It’s more like an impulse, or reflex, as clichéd and inept when it comes to the serious work of regulation as saying “better safe than sorry.” No one can really define it adequately. The best its advocates can do is say that if something could possibly cause harm, ban it.

Former Greenpeace UK director Stephen Tindale now urges Europe to “move on from the theological dispute with respect to GMO crops”.¹⁶³

Everyday, activists warn us of “risks”. But everything, everywhere and always, could cause harm. You can drown in an inch of water. Coffee in large enough doses causes cancer. And let’s not get started on cell phones.

The EU finds itself in the ridiculous position that, according to its own pesticide regulations, it would have to ban coffee – and beer, and a thousand other consumer items – if they were sprayed on fields rather than sold in grocery stores.¹⁶⁴

The precautionary principle is so broad it effectively gives regulators the cover to ban or restrict anything at whim or according to whomever is exerting the most pressure. In other words, it replaces science-based regulation with politics. This drives the limits on the amount of pesticides in tap water, set at 0.1 parts per billion – the equivalent of one paracetamol tablet in an Olympic-sized swimming pool.¹⁶⁵

We also saw the precautionary principle in action with startling clarity in the battle over neonicotinoids, or neonics, which activists accused of causing a “bee-pocalypse,” an imminent extinction of bees. Large-scale field studies and massive real-world science do not back up this claim.¹⁶⁶ The EU’s own science didn’t back it up. Even at its most basic level, it was faulty: bee populations aren’t falling at a rapid rate. They’re not falling at all. For the last two decades that neonics have been on the market, bee populations have been rising, both in the EU and around the world.¹⁶⁷

But the Green Blob was fierce on this one. I myself personally received 85,000 emails; very few of them were complimentary. Insisting, as we did at DEFRA, that policies be based on science – and the science did not support a ban – wasn’t a popular position. Nor was it, as we know, the winning position. The EU Commission, as is its habit, caved in to the activists. Working with allies, I ensure that they couldn’t muster a qualified majority for a ban among the member states, despite holding two votes on the issue. But democracy only goes so far in Brussels. So EU officials simply took it on themselves to make the final decision. They overrode their own scientists and banned neonics starting at the end of 2013.¹⁶⁸

The result was predictable. I say that because it was indeed predicted by farmers and others who said the ban would remove their best defence against insect pests and force them to use older, less effective pesticides that are worse for bees. Which is precisely what has happened: despite multiple sprayings with pyrethroid, England's oil seed rape crop has been devastated, with losses over 40 per cent in some counties.¹⁶⁹ Europe as a whole is looking at a 15 per cent reduction in rapeseed this year as a result of the ban.¹⁷⁰ Another example of the precautionary principle creating realised risks.

Just recently this scandal developed further – some have called it Beegate – when a blogger in Brussels by the name of David Zaruck uncovered a memo that had mistakenly been left on the web by one of the scientists who was most vocal in pushing for a ban. That memo – the minutes of a meeting held back in 2010 – detailed in their own words how he and other leading scientists working for the EU-funded “Task Force” on neonics conspired to manufacture studies to support a ban.¹⁷¹ Perhaps one should put the word “scientists” here in quotes. Deciding on the outcome of your research before you even conduct it is not how science is supposed to be done. But we have apparently entered a brave new world in the EU where everything is backward.

For instance, there's the startling fact that the “technologically advanced” EU, which boasts incredibly fertile soils and extremely friendly climates for agriculture, cannot even feed itself and has been reduced to becoming a net importer of food.¹⁷²

One in three children in many developing nations today has been stunted by hunger. Sixty-six million attend school classes hungry every day. Poor nutrition causes nearly half of all the deaths of children less than five years of age – over three million children every year. This is the state of affairs that the EU's precautionary principle would effectively preserve.

What that means, of course, is that we simply export our environmental footprint elsewhere. It also means Europe is not only not contributing, we are a net drag on humanity's foremost imperative in the 21st century – growing enough food to feed everyone on this planet, and to feed them well.

Today, nearly 805 million people do not have enough to eat, about one out of every nine people in the world. The majority of them are children, who will never have the same chance at a good life as others because hunger will stunt their development, shrink their innocent capacity for hope, and leave their small bodies prey to any number of terrible illnesses.¹⁷³

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This is the state of affairs that the EU's precautionary principle would effectively preserve.

The world population is seven billion today and will burst through the ten billion mark by 2050 or sometime soon after. Not long ago, one of our English celebrities was delivering a petition to our Prime Minister protesting against genetically modified foods. Being a famous and wealthy fashion designer, apparently, has given her particular insight into this field. In the process she was asked by a BBC interviewer what she would say to those who can't afford to eat the high-priced organic food she recommends. Her answer was simple. They should simply "eat less."¹⁷⁵

Too many of our fellow human beings are already eating less. I don't believe that we, as Europeans, can really say that we belong to a humane society, a decent society, until every single one of them has access to good, nutritious food. Until every human being on this planet has enough to eat.

That means that somehow we have to get right again with science. We need every possible tool available to meet this challenge. We simply cannot afford to take the most promising plant technologies off the table and keep them locked away in the regulatory drawer while children continue to go hungry.

Many centuries ago, science pulled the European continent out of the Dark Ages and established a whole new concept – one of on-going human progress.

In our own time, the extraordinary science promoted by one-man, Norman Borlaug, accelerated that progress in the plant sciences just in time to save over a billion people from mass starvation in the 1960s and 70s. That was called the Green Revolution. We stand today at the beginning of a second Green Revolution – a period of extraordinary breakthroughs that can do the job if we let them.

We must let them. Despite the flack. Despite the propaganda. Despite the political setbacks we sometimes encounter. We must all push forward.

Myth versus fact; Green Blob versus Green Revolution.

There is literally no challenge today that is more important.

I commend African Nations for showing Europe the way.

I am sure that science will overcome superstition.

I am confident that together we will all succeed.

Thank you very much.

THE ANGLOSPHERE, TRADE, AND INTERNATIONAL SECURITY

MARGARET THATCHER CENTER FOR FREEDOM
THE HERITAGE FOUNDATION
WASHINGTON, DC, UNITED STATES OF AMERICA

25 March 2015

Thank you.

It is an honour to speak here at the Margaret Thatcher Center for Freedom at the Heritage Foundation.

Under the leadership of Senator Jim DeMint and my friend Nile Gardiner, the Center is a pillar of support for the Special Relationship of the United States and the United Kingdom – a relationship that has shaped the modern world.¹⁷⁶ It is a forum for discussion and debate about the role of the entire Anglosphere.

The alliance between our two countries and the parallel alliances with Australia, Canada and New Zealand – are unique in history. They were central to the outcomes of World War I and II and of the Cold War. But the fruits they sought from those successes were neither conquest nor hegemony.

This year we celebrate 800 years since Magna Carta was sealed. Absolutely central to all our countries. It established the primacy of property rights and defence of them by rule of law. They delivered greater political, intellectual, religious, and economic freedoms. The result was greater personal opportunity and happiness for more people in more countries than ever before in human experience.

This Anglosphere alliance is central to what I will propose to you today, which is a new global role for the United Kingdom and why America should support it.

Today, every continent on Earth is experiencing steady economic growth. The exception is Europe, where the economy actually shrank in 2013 and grew by a miserable 0.3 per cent in 2014.

Americans tend to see the EU primarily as an economic project. But it was always and still is primarily a political one. It uses economic means to secure political integration, with the end game the creation of a supreme government of Europe. When Brits such as myself expose the false perceptions, as, in her time, Margaret Thatcher did – many Americans raise fears that the alternative to the political union is chaos.

My argument today is that British withdrawal from the European Union will reinvigorate rather than degrade those states of affairs that, from America's point of view, the original European Community was established to secure. I mean broadly shared prosperity and a Europe at peace with itself. Beyond that, I will argue that our exit will strengthen both the global trading system and the foundations of global security.

This is in tune with what Churchill told the House of Commons in June 1950 when he said,

With our position as the centre of the British Empire and Commonwealth and with our fraternal association with the United States in the English-speaking world, we could not accept full membership of a federal system of Europe.

He went on to say,

We must find our path to world unity through the United Nations organisation, which I hope will be re-founded one day upon three or four regional groups, of which a united Europe should certainly be one. By our unique position in the world, Great Britain has an opportunity, if she is worthy of it, to play an important and possibly a decisive part in all the three larger groupings of the Western democracies. Let us make sure that we are worthy of it.¹⁷⁷

I am very aware that America was deeply involved in the creation of the original European Coal and Steel Community, the predecessor of the European Common Market and the European Union. Indeed without the active encouragement and intervention of the American High Commissioner to Germany, John J McCloy, Jean Monnet and others might not have brought the Community together when they did.

But the American vision was always economic – to create a Europe-wide free trade area that would ultimately have room for America ... as well as Australia, Canada and New Zealand, and a larger collection of nations where the values of freedom, democracy and rule of law held sway.

From the American point of view, opening the European continent to the free flow of goods, services, and money was part of a larger plan for global prosperity and security. The hope was that, as the economies of once-warring nations flourished, the people of those nations would reject Communism, National Socialism and nationalist ambitions. This would ensure that the two World Wars, into which you had been drawn, were permanent relics of a nightmare past. It was always a clear American intention to establish a bulwark against further advances of Communism.

This is not the time to debate the extent of the Common Market's role in Europe's postwar economic success. But turning to recent decades, Brussels's expanding web of prescriptive regulations, the growing weight of its social spending, and the distortions brought on by the misconceived and disastrous euro must surely be held to account for the strangling of that growth.

Today, every continent on Earth is experiencing steady economic growth. The exception is Europe, where the economy actually shrank in 2013 and grew by a miserable 0.3 per cent in 2014 (last quarter).¹⁷⁸

Even worse, over the past four decades, including periods of robust GDP growth, there has been a catastrophic lack of European job creation.

The stagnation of GDO – “gross domestic opportunity” – is a major reason for the outbreaks of the civil unrest we have seen of late in Greece and Italy.

When the people of France rejected a wider and deeper Union in a referendum in 2005 by 55 per cent and Holland rejected it by 62 per cent, their wishes were ignored and the rejected Constitution was revamped as the Lisbon treaty. When Ireland then held a referendum with 54 per cent rejecting that Treaty, they were told to vote again and get the answer right. The UK and Denmark were denied a vote in the face of defeat elsewhere. So strong is the desire to establish a political project, that the democratic rights of its people are ignored in order to achieve it.

The EU’s more-than-a-generation-long tilting at the windmill of an “ever closer union” and its Quixotic infatuation with the Dulcinea of the euro has distracted the countries of the area from the essential task of delivering to their peoples strong, broadly shared individual opportunity and job growth. And that failure has spawned a permanently unemployed underclass which undermines internal security and prosperity. I am personally astounded that there has not been more unrest given shameful levels of youth unemployment, which in Spain reached well over 50 per cent.¹⁷⁹

From the very inception of the Schuman Plan back in 1950 and the establishment of the Coal & Steel Community, “le projet” has been primarily political, rather than economic.

The euro may be the post-Maastricht EU’s crowning achievement – it was the cornerstone of that political agenda but now, with consequences that we read in our headlines almost by the day, it never made economic sense.

And before anyone gets too carried away with romantic notions of the democratic achievement of bringing 28 countries into a political union, let me sketch how entirely bankrupt the institution is democratically.

There is no European demos and there has been no citizens’ engagement in the creation of the project. When the British people voted in a referendum in 1975, it was to remain in a Common Market. Such an economic project was sold to both Parliament and the people by the prime ministers at the time; while all along, declassified papers now reveal, they knew it was a political project.

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their wishes were ignored and the rejected Constitution was revamped as the Lisbon treaty. When Ireland then held a referendum with 54 per cent rejecting that Treaty, they were told to vote again and get the answer right. The UK and Denmark were denied a vote in the face of defeat elsewhere. So strong is the desire to establish a political project, that the democratic rights of its people are ignored in order to achieve it.

Furthermore, I don't think it is always realised just how much the process of EU law-making is almost wholly removed from democratic accountability. Sure, national politicians and MEPs have some small opportunity to vote on things, but much of the regulation emerges from secret, back-room dealing. This is particularly the case with "green laws". These are unduly influenced by unelected big green pressure groups ... whose very lobbying budgets are themselves subsidised by grants from the officials they are influencing, in a beautifully circular process that would count as perpetual motion if it did not require continual topping up by taxpayers.

The whole process is shockingly corrupt and its lack of accountability would make a dictator blush.

So, predictably, after 65 years of pursuing "ever closer union", the bloc is now weighed down by unsustainable burdens. Public spending takes 49 per cent of its combined GDP, yet the total employment rate stands at a mere 64 per cent. As German Chancellor Angela Merkel said recently, "Europe accounts for just over seven per cent of the world's population, produces around 25 per cent of global GDP and 50 per cent of global social spending".¹⁸⁰

Nothing more exemplifies Brussels's determination to pursue its political project regardless of economics than the manner in which the Euro has been supported in breach of treaty provisions while the EU and its central bank bailed out Greece. Christine Lagarde, the then French Finance Minister, spoke the truth recently when she said: "We violated all the rules because we wanted to close ranks and really rescue the euro zone. The Treaty of Lisbon was very straightforward. No bailouts."

Understand that the 2007 Treaty of Lisbon provides the current constitutional basis for the European Union. To sweep it aside with impunity is a major – perhaps ultimately a fatal – transgression.

Whatever the countries of Europe think they have agreed to, as long as the European Commission and Court exercise supreme power, the rules can be changed after the event. It is inconceivable that you would treat the US Constitution in such a cavalier manner.

We have now come to a fork in the road. And wasn't it Yogi Berra – forgive me, but he was a baseball player wasn't he, not a cartoon character – wasn't it Yogi Berra who said, "When you come to a fork in the road, take it"?

The result of its accumulated contradictions and distortions is that the Eurozone must become, in effect, a new country, a United States of Europe

like the United States of America. Only then can there be a fully redistributive federal government with legitimate means of transferring funds from wealth creating areas such as southern Germany or Holland to places where it is simply not possible to create wealth at the rate at which their countries joined the Euro, places like southern Spain, southern Italy and Greece.

In 2013 the EU exported \$342 billion of goods to the UK supporting 5 million jobs on the continent, with 1 million of those in Germany. We exported \$240 billion of goods to the bloc, leaving a deficit on account of \$102 billion, up from \$62 billion in 2011. We imported \$88 billion-worth of goods from Germany and \$37 billion from France, with a surplus for these two countries totalling \$46 billion. It is hard to imagine that our EU trading partners would wish to break off such a lucrative trading relationship.

In order to make such a shift legally watertight, particularly with reference to German constitutional arrangements, it is most likely that the EU will eventually need a new treaty.

In short, and this is critical for Americans to understand, it is not so much that Britain should leave the EU, as that the EU is leaving us.

It is critical to understand that the economic Single Market and the political EU are not one and the same thing. The Single Market is a formal fact under an arrangement called the European Economic Area (EEA). It is an agreement between EU member states and three of the four members of the European Free Trade Association (EFTA) – Norway, Iceland, and Lichtenstein minus Switzerland. By switching our membership to the EEA, Britain can pursue participation in the Single Market without being strapped in the EU’s political and judicial straightjacket. And if we joined EFTA, often described as the “Norway Option”, it would become the fourth largest trade bloc in the world.¹⁸¹

Confusing membership of the Single Market with membership of the EU is a common error. You can stay in the Single Market and not be in the EU. And the argument that leaving the EU would damage Britain’s ability to continue its trade with our European neighbours – thereby damaging the economy of the entire developed world including the US – massively underestimates the huge strategic and selfish interest that our neighbours have in ensuring our continued vigorous participation in the Single Market.

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goods from Germany and \$37 billion from France, with a surplus for these two countries totalling \$46 billion.¹⁸²

It is hard to imagine that our EU trading partners would wish to break off such a lucrative trading relationship. To suggest that leaving the EU would put at risk three million jobs attributed to UK exports to the EU is simply wrong.

Here are the essential points:

- It is the Single Market comprising the 31-member European Economic Area that delivers jobs, not the EU.
- Britain can leave the political project and enter into a solely economic project with Europe via the European Free Trade Association and the European Economic Area.
- We would still enjoy the trading benefits of the EU, without the huge cost of the political and judicial baggage.
- The benefits to international trade and global stability that Americans have historically looked to the EU to provide would remain undisturbed. Indeed, as I will now argue, they would be enhanced.

So let's say Britain makes the switch – out of the European Union, into the EEA. Where would we – America as well as Britain – be by 2020?

Some Americans have insisted that having Britain in the EU gives you a friend inside the councils of Europe. Few have noticed the high price you pay for having that friend on the inside rather than outside.

In the world today, decision-making – true decision-making – takes place at a global level through a variety of bodies deciding regulations. It is at the global level that having a friend counts. Yet as things stand, Britain has no seats at these “top tables.” We have handed power to the European Commission to represent us along with 27 other Member States. On these global councils, we have one twenty-eighth of a chair. Hardly a leg to stand on.

What I am about to say is critical and almost entirely missed, not just in the United States but in the United Kingdom and everywhere else.

What very few understand about global processes is that in 1994 the game changed substantially. It was then that the EU adopted the WTO's Technical Barriers to Trade Agreement.¹⁸³ This incredibly important instrument requires the participating parties (including the EU) to adopt international standards in preference to their own. Thus, if any global body adopts standards that impinge on the EU's laws, the EU is obliged to scrap its rules and implement the new standards.

This provision is not optional. The Agreement uses the word “shall”. The EU has no choice but to replace its laws with international rules as they are adopted. That compulsion applies to the United States, as well.

As Britain's Secretary of State for Environment, Food and Rural Affairs, I was only too well aware of how these changes affected Britain. Many of the food standards my former department must implement are no longer established in Brussels. A commission of the UN's Food and Agriculture Organization in Rome now makes them.

This multinational commission goes by the name of the Codex Alimentarius. It was established in the early 1960s. It has 186 members, including the EU and Britain, although we hand our vote to the EU, so that we are not functional members.¹⁸⁴ As a result, we in London would often learn of new Codex rules only after they had been handed down to Brussels – and then it's too late to change them.

My Ministry was also subordinate to two other FAO standard-setting organisations: the World Organization of Animal Health and the International Plant Protection Convention. The EU is obliged to embrace their standards and then those standards are passed down to us unamended in London.

If I had any illusions about what this means, I lost them on an official visit to New Zealand. My counterparts were particularly exercised about a specific proposal of the World Organization for Animal Health. It affected the sheep industry, which is crucial to New Zealand. They told me how pleased they were to have got the Australians on their side and believed that gaining the support of Canada and the US would see a key amendment through.

I wondered why they had not asked for the UK's assistance. They said that the UK's position was entirely represented by the EU. In other words, though we have one of the largest sheep flocks in the world, we had no effective voice on this key, global body.

In contrast, Norway is a member of the EEA but, as I said, not the EU. Norway has a huge fishing industry and, appropriately, plays an enormously important role in promoting regulations concerning fish in Codex by chairing the Codex Fish and Fish Products Committee. These are regulations to which Britain (which also has a sizable fishing fleet) must submit. So why not have a decent chance to influence them as Norway does by building alliances with like-minded countries?

Regarding our discussion today: Isn't it at this global level where our friendship with America most matters to Americans?

The range of international standards shaping EU laws and rules is staggering. In the European car industry, for instance, the regulatory focus has moved from Brussels to Geneva. There, the EU's standards start as "UN Regulations" produced by the World Forum for the Harmonization of Vehicle Regulations. Known as WP.29, it is hosted by the United Nations Economic Commission for Europe.¹⁸⁵ European vehicle production is

extraordinarily integrated; the UK produces 1.6 million cars but 2.6 million engines. Most of these engines are exported to Europe and many of them are reimported as components of finished cars.¹⁸⁶

As we move to world standards of vehicle production, you and we would be at a massive advantage if we could work together on the body influencing standards especially as Brussels is getting over-powerful.

Then there is the regulation affecting the financial services industry – of such great importance to both the City of London and Wall Street, which are, in many respects, a single economic entity.

Many of the important rules come from the Basel Committee on Banking Supervision.

Equally important is the Financial Stability Board founded in April 2009 by the G20 and working with the Paris-based OECD. It coordinates national financial authorities and international standard-setting bodies and itself develops and promotes implementation of financial sector policies.¹⁸⁷

In other words, key decisions on financial regulation may be made in Geneva, Paris, Berne, or Rome. They are not made in Brussels. If Britain were not in the EU, we would be working directly with these organizations, building alliances with like-minded nations – such as the United States.

So here again, in today's world, it is outside the EU where America needs our friendship and where we need yours. This is particularly necessary in view of what Columbia Law School Professor Anu Bradford called the “Brussels effect”, where the EU is increasingly dominating the global regulatory system, even being able to dictate regulation to the United States.¹⁸⁸

As I said at the outset, the enhanced alliance of which I speak extends beyond our two countries. It includes the Anglosphere – the English speaking countries of Australia, Canada and New Zealand. We are all nations that could line up on the same side of most major questions of trade and finance.

And beyond the Anglosphere, there is the Commonwealth of Nations. The UK has, of course, unique links to the Commonwealth whose trade is worth around \$4 trillion and where in some countries the United States is not entirely trusted.¹⁸⁹ From within this great organization, we can work closely with large numbers of African nations who are beginning to emerge into prosperity.

We have especially close links to the growing nations of South Asia. As India opens its economy and continues to rise among the world's most dynamic nations, India will become a natural ally on matters of commerce and investment. Likewise, our strong historical ties with Hong Kong, Malaysia and Singapore are not only critical in themselves but strengthen our mutual ability to work with the emerging superpower of China.

The need to strengthen the Anglosphere's global hand is particularly urgent just now. The global trading system is breaking down. To rebuild it, our nations must take the lead in a program of regulatory convergence.

EU-style regulation is restrictive and costly, to be avoided. But as Adam Smith would have understood, well-crafted promissory laws that set standards for cross-border transactions and exchange are needed to prevent a return to protectionism.

Freeing the world's 5th largest economy to participate directly in international regulatory bodies would strengthen the Anglosphere's influence, creating real pressure in those bodies for expanded international trade.

Freeing the world's 5th largest economy to participate directly in international regulatory bodies would strengthen the Anglosphere's influence, creating real pressure in those bodies for expanded international trade.

And let me add, as a first step to increasing the Anglosphere's robustness and for our own sakes, after Britain leaves the EU, our two countries should forge sectoral agreements in vital areas, such as pharmaceuticals and cars, where our two countries could rapidly agree. This should then lay a solid base towards embracing the Heritage Foundation's proposal for a speedy conclusion of a US-UK free trade agreement.

I have said that the benefits of Britain dropping out of the EU are exactly those that led the United States to support the creation of the European institutions after the Second World War – higher Gross Domestic Opportunity, greater and more widely shared freedom, democracy and happiness: together the domestic foundations for international peace.

But global security policy is also at stake.

Leading British historian Andrew Roberts has pointed out that the high command of the modern American military was structured to mesh with the high command of the United Kingdom.¹⁹⁰ That was during World War II and remains the case today. But intertwining goes further.

For three quarters of a century, both countries' intelligence services have operated as nearly a single entity, as have the services of the other Five Eyes, that is, of the Anglosphere.¹⁹¹ Throughout our various national security establishments, capacities are complementary. This means that if one cannot hold up its responsibilities, all are compromised. Today Britain is not holding up its part of the defence bargain.

This is because the EU is not just confining its activities to trade. The Lisbon Treaty brought a concerted move to develop an EU foreign policy, with the launch of the European External Action Service (EEAS) – intended to be the European equivalent of the State Department. Only two weeks ago, we saw Commission President Jean-Claude Juncker, revive the ambitions for a European Army.¹⁹²

If this ambition was ever realised, it would cut across the close relationship between the UK and the US. It would undermine the structure of Nato and weaken the resolve of individual member states to maintain their own militaries, using the European force as an excuse for cutting back their own defence expenditure.

Even as Vladimir Putin makes his moves, ISIS continues its barbaric slaughter in the Levant and Africa, and Iran continues to fund terrorist activity around the world, we are succumbing to that temptation. We are relying on double-hatted “rapid reaction forces” available both to the EU and Nato as part of a multinational force, thus legitimising reduced defence spending. You currently spend 4.4 per cent of your national budget on defence, although some estimates – such as the World Bank – put it at 3.8 per cent.¹⁹³

As recently as the mid 1980s, when the Soviet Union was a real threat, we were spending 5 per cent of our GDP which served us well at the time of the Falklands.¹⁹⁴ We still spend over the NATO goal of 2.0 per cent – but just over. 2.1 per cent. Our current budget would put us at 1.38 per cent within a decade, making us more and more reliant on the Europeans for defence. Unsurprisingly, your military already is reported to believe that we lack the capacity to act as an independent ally.

The UK, leaving the EU, would regain our independence to devise our own foreign policy. Working with like minded allies, we would forge our own defence policy and the practical requirements that should follow on from that. It is the first duty of a government to defend its citizens. I believe we should provide the necessary funds required by an appropriate foreign policy. Whether it is aircraft carriers or improved cyber defence, I don't wish to be bound by a particular per centage. It is the required defence outcome that should be decisive. If foreign and defence requirements change, we should not be afraid to override established per centages.

The essence of this is that continued membership of the EU requires the progressive surrender of much more than national regulatory capacities. With its long-standing political ambitions, Brussels is demanding that we let other national capacities wither. We are learning that a nation cannot give up its national responsibilities in just one area. Nationhood is indivisible – because it is not just material. It is a state of mind and heart. Companies can divide themselves up and spin off divisions. A nation cannot divide its soul without losing its spirit.

America needs Britain as an ally on many fronts. It needs us to reassert ourselves as a nation ... to take our place once again in the counsels of the world.

For as Churchill said, “We have our own dream and our own task. We are with Europe but not of it. We are linked but not comprised. We are interested and associated but not absorbed”.¹⁹⁵ He was right then and he is right now.

CHECK YOUR GREEN PRIVILEGE – IT'S NOT ENVIRONMENTALLY FRIENDLY TO ALLOW MILLIONS TO DIE

ALLIANCE FOR SCIENCE, CORNELL UNIVERSITY
ITHACA, NY, UNITED STATES OF AMERICA

21 September 2015

It's a real pleasure to be able to speak to you here at Cornell and to support the Cornell Alliance for Science – a great global initiative for promoting biotechnology.

What better place to discuss this subject than at a university, where students are often first exposed to a broad new world of ideas, beyond those shared by immediate family and friends. The university is a place to escape the parochial and begin thinking about how one's actions as an individual can have a broader impact.

You can see this desire expressed in the list of a thousand student organizations available on this campus. Among those devoted to sports, religion, music, recreation and other pastimes,¹⁹⁶ you'll find dozens with mission statements that commit to saving the planet, or at least to making it a better place.

No organizations have loftier proclamations than green advocacy groups. Environmental non profit organisations are supposed to be protecting our natural resources and wildlife from various harms. They save the whales, the birds, polar bears, the Amazon rainforest and prevent holes in the ozone layer. Certainly, nobody wants a hole in the ozone layer. And nobody wants a natural catastrophe. Conserving nature and improving habitats are truly universal goods.

But are these groups actually as angelic as they sound? Or is it just possible, that their campaigning sometimes has a darker side? Do they, in fact, sometimes have feet of clay? Is it possible, that in the name of "saving the planet," some of these groups are actually doing more harm than good?

In the list of fashionable environmental causes, opposition to Genetically Modified food is certainly right up there. The list of environmental and activist groups that have taken this on as their calling includes almost all the big names, from National Resources Defense Council to the Environmental Working Group, Friends of the Earth, Center for Food Safety, and of course Greenpeace.

By some counts, these groups and their allies access a US war chest of some \$2.5 billion a year in their campaign against GMO technology – money that comes from the organic food industry as well as private foundations.

You can't say they haven't been successful either. Anti-GMO regulations dominate in Europe, while here in the US there is a rising tide of opposition. Certainly, being anti-GMO has become highly fashionable in some circles. Trendy restaurants proudly proclaim "GMO free" menus – even popular fast food outlets like Chipotle are eradicating GM ingredients. While "made without GMO" labels are slapped on products in high-end grocery stores.

But how informed is this anti-GMO fashion? Do most people even know what they are opposing, or why?

Late night TV host and comedian, Jimmy Kimmel recently sent a camera crew to a farmers' market to find out whether shoppers understood what

these GMO-free labels meant. What he found was that opposition to GMOs is as universal as ignorance of what a GMO is.¹⁹⁷ As one participant put it: “It’s like some corn bad stuff, right? I know it’s bad, but to be completely honest with you I have no idea.”

What is a GMO?

So allow me to take a few moments to explain just what GMOs are ...

Why they are as safe – why they are in fact safer – than conventionally bred crops ...

Why they are one of the most environmentally friendly advances that this world has ever seen ...

And we will not forget ... how they can save millions of lives that today are squandered by the ideology of massively supported environmental campaign groups who should know better.

The first and most important fact to understand is that genetically modifying crops are nothing new. Mankind has been doing this since the Stone Age, about 12,000 years ago, when hunter-gatherers first settled into permanent communities and started domesticating plants and animals.

Since that time, farmers have bred and crossbred plants in order to modify their genetic makeup so they would produce higher yields and better resist pests and disease.

We call this plant breeding. But what that means in reality is the almost completely blind exchange of thousands of genes with each breeding attempt, with only the most general idea of what genes or attributes are being combined in the new plant.

At first breeding was simply a matter of taking the strongest stalks of corn, say, the ones with desirable traits, pairing them and hoping that the offspring stalks of corn would be taller and stronger. Weak looking plants were tossed aside. As agricultural understanding advanced, breeding experiments became much more elaborate and systematic. By the 19th century, Gregor Mendel established the scientific principles behind breeding, and his rules still apply.

The plants produced by this traditional process underwent massive genetic change – so much so that they often bear little resemblance to their ancient forefathers. Those wild ancestors were generally much smaller and much less tasty – if they were even edible.

Take teosinte, for instance, the ancestor of corn,¹⁹⁸ which looks nothing like the robust corncob of today. It’s a skinny green stalk with two rows of seeds covered in an unappetizing, dark shell. We think of corn as the bright yellow cob with 8 to 12 rows of exposed kernels. In fact, teosinte and maize are so dissimilar that it wasn’t until 1930 that George Beadle, a graduate student at Cornell and future winner of the Nobel Prize, discovered the family relationship.¹⁹⁹

Think about it. Over 10,000 years of domestication, teosinte was bred and crossbred millions of times, with uncounted traits and genes randomly exchanged. Slowly, the better traits were advanced until we ended up with the desirable crop we enjoy today.

There is, in fact, very little in our diet today that hasn't been transformed by this process.²⁰⁰ As author and authority Henry Miller points out, “with the exception of wild berries, wild game, wild mushrooms, and fish and shellfish, virtually everything in North American and European diets has been genetically improved in some way.”²⁰¹

Activists claim that it's only with GMO technology that we've been able to transfer genes from different species. But that's simply not accurate. For over half a century now we have been using “wide cross” hybridization to move genes from one species to another.²⁰² The process was used, for example, to combine the best attributes of wheat and rye to create triticale, a grain that's high in protein and fibre, packed with vitamins, and low in sodium.²⁰³ It's used in flour to make bread, and it's found in cereals you can buy at Whole Foods bearing an organic seal of approval.²⁰⁴

For over half a century now we have been using “wide cross” hybridization to move genes from one species to another.

That's nothing, however, to induced mutation breeding, which began in the 1950s, and uses ionizing radiation – the stuff emitted from exploding nuclear weapons – or caustic chemicals to trigger random mutation. These are both considered conventional techniques – even nuclear mutagenesis – and don't require any sort of label. Organic food activists don't protest against foods that have had hundreds or thousands of genes randomly mutated, or even had whole chromosomes deleted, through these processes. The food varieties that result from them are as available in the organic food section of the grocery store as they are in the affordable produce section.

There's nothing wrong with this. But why rely on chance to come up with the right traits, when you can control and specify the process? That's what happened in the 1980s, when biotech scientists perfected a technique for adding desirable traits that harnessed a process found in nature to precisely transfer genes in a controlled lab environment, and then, select the useful transformants and discard the rest, just as seed breeders have weeded out the undesirable crosses for hundreds of years. The GMO was born. Using this advanced process, scientists know exactly what they are doing. They can transfer a single gene, or several specific genes from one plant into another. There's no guesswork. There's no chance. Only the desired genes are transferred. Scientists know what they are doing at every step of the process.

Thus, a GMO is nothing more than a plant that has had its genetic makeup adjusted in a highly precise and scientific way.

GMO safety

This precision is what makes transgenic plants inherently safer. Unwanted characteristics are far less likely to make their way into a GM plant, while there are no such guarantees with random breeding. Every step in the creation of a GMO is closely watched. The Environmental Protection Agency (EPA), Food and Drug Administration (FDA), and US Department of Agriculture (USDA) are looking over the shoulders of scientists who are performing safety tests on every GMO crop before it comes anywhere near the dinner plate.²⁰⁵ That's just in the United States. Regulatory bodies in 59 countries conduct their own studies and approvals.²⁰⁶

The proof is there: out of the two trillion meals served containing biotech crops, nobody has ever made a credible claim of adverse reaction – not one tummy ache, not one rash, not one sniffle.²⁰⁷

There's another element of safety in GMO plants that comes from expressing traits that, for example, shield against contamination from mycotoxins – a severe threat to human and animal health and which are responsible for perhaps one billion tons of food spoilage every year. The United Nations estimates that up to half of some food crops are affected,²⁰⁸ exposing not millions but billions of people in the developing world to these naturally occurring toxins that suppress the immune system, retard growth and cause cancer and liver disease in both livestock and humans.²⁰⁹

GM crops also have the potential to eliminate allergens. Biotech peanuts, to give one example, may one day be enjoyed by anyone without fear of a severe reaction. Gluten-free GM wheat may soon offer bread that won't be harmful to those who suffer from celiac disease.²¹⁰ This product is now undergoing human trials, and as soon as it passes the extensive regulatory review, it will be available to consumers – unless it's blocked by activists.

GM crops can fortify food with vitamins and antioxidants, so that the food we eat will make us healthier and stronger. For example, new biotech soya beans can produce higher oleic acid. When heated, they don't transform into the trans fats that elevate cholesterol levels.²¹¹ Similarly, a biotech tomato is in development that mimics good cholesterol,²¹² which would help fight heart disease, which kills one out of every six men in the UK²¹³ and ends 611,000 lives in the United States every year.²¹⁴

But what about those who experience food scarcity? The U.N. just dramatically increased its estimates of world population growth, which they expect to soar by over 1 billion in the next 15 years and reach 9.7 billion by 2050 – well within all of your lifetimes.²¹⁵ How are we going to feed them all when we cannot even feed everyone who is on this planet today?

It is a shameful fact that in 2015, almost 800 million people on this globe suffer from malnutrition and the terrible and debilitating diseases, stunted growth, and diminished life chances it causes.²¹⁶ It doesn't have to be so.

I can remember as a child seeing traumatic news bulletins with images of starving people on the Indian subcontinent. The father of the Green Revolution, Norman Borlaug, put an end to this shame. He is now known as “The man who saved a billion lives” and was awarded the Nobel Peace Prize for his pioneering work in transferring wheat with new genetics from the Americas to the Indian sub-continent in the 1960s. He used genetic modification to save a billion lives from starvation, and now India is a net food exporter.

Progress in the plant sciences marches on and is opening up the promise of a second Green Revolution, one that can not only feed the nearly 10 billion people that will inhabit our planet by 2050, but feed them well.

It is a revolution – powered by cutting-edge science – that can drive economic development from the bottom up. I'm talking about authentic, indigenous growth – the only kind that really takes root ... that empowers individuals ... that breaks the cycle of aid and dependency and can make every nation on this Earth a strong, competitive player in global economic growth.

The results

What I am telling you is not speculation. Biotech is already making many of these things happen.

We have had commercialized biotech crops for almost two decades now. Eighteen million farmers, of which 90 per cent were small and resource poor, planted a record 181 million hectares of biotech crops in 28 countries last year. Biotech continues to be the most rapidly adopted agricultural technology in history. Since their introduction nearly 20 years ago, we have seen a more than 100-fold increase in the area of GMO crops planted, which today covers a landmass one and a half times the area of China.²¹⁷

More than 90 per cent of the farmers planting biotech are smallholder farmers in nations in the developing world.

The facts also completely belie the propaganda that GMOs are only for the wealthy nations. In fact, more than 90 per cent of the farmers planting biotech are smallholder farmers in nations in the developing world.²¹⁸ For the third year in a row, developing countries planted more biotech hectares than the entire developed world.

I was in South Africa earlier this year, visiting sites where local smallholders use GM maize. When they had used conventional seed, production was

1 ton per hectare in a good year. But since switching to GM, production is now at 5 tons per hectare. With improvements in irrigation, farmers will see an increase to 10 tons per hectare.

They use these crops because they need them to withstand drought and a plague of destructive insects. They need the income it provides, which spurs development. Modern agriculture lets developing nations maximize the use of their resources. It's good for these nations, and it's good for the planet.

Environmental benefits

Even if we look through a strictly environmental lens, modern agriculture and biotechnology have been an incredible boon for this planet. Look for instance, at what it has meant here, in the US, and compare the environmental benefits between 1980 and now.²¹⁹

It now takes 30 per cent less land to grow a bushel of corn or cotton.

A ton of potatoes today can be grown on a plot of land 37 per cent smaller than was needed in 1980.

The same is roughly true of rice and soya bean.²²⁰

Herbicide-resistant biotech crops allow the use of no-till farming techniques, in which there's no need to plough – leaving the soil in a field undisturbed. Thanks to the advances of biotech, soil erosion is down by two-thirds for corn, cotton and soya bean. With no-till, there's less need for a tractor and other energy-hungry farm implements. The net result of this and other technological advances has been a 48 per cent reduction in energy used to grow a bushel of soya beans, and all the other crops have seen energy usage drop between 12 and 44 per cent.

It takes 75 per cent less water to grow a bushel of cotton, and it takes half as much water to grow a given amount of corn and rice.

For those who believe carbon dioxide is a bad thing, greenhouse gas emissions per unit of production are down 49 per cent for soya beans, 36 per cent for corn and 22 per cent for potatoes and cotton.

Overall yield per acre is up 64 per cent for corn, 58 per cent for potatoes, and 43 per cent for cotton.

By contrast, Europe's reluctance to adopt the latest innovations in agriculture diminishes potential yield and uses up more land than is needed. US maize yields have overtaken those of France in the last 20 years.²²¹ This is not just because France doesn't use GM crops, but is part of a broader failure to embrace better seed breeding or the rapid adoption of data driven support tools.

As a result, France is missing out on 0.9 tons per hectare of maize yield across their whole production area of 1.5 million hectares. If French yields had kept pace with those in the USA they could be growing the same total maize harvest on 150,000 less hectares, land that could be spared for nature.

Or, by more efficiently farming the same area, they would have 1.4 million tons of maize. This “missed yield” is worth \$150 per hectare to each farmer and could be worth \$225M to French agriculture.

That is why as UK Minister in the European Union negotiations, I warned that Europe’s hostility to technology, exemplified by the capricious ban of neonicotinoids and continued hostility to GM, risked turning Europe into “the museum of world agriculture”. It is for this reason that I worked with allies, both pro and anti GM, to create a new regime where positive countries could forge ahead, and negative countries could opt out.

I warned that Europe’s hostility to technology, exemplified by the capricious ban of neonicotinoids and continued hostility to GM, risked turning Europe into “the museum of world agriculture”.

I am dismayed, but not surprised, that the Scottish government has chosen recently to ignore their own scientists and use their freedom to opt out, setting their face against the fact that – thanks to modern agriculture – it takes less water, less carbon dioxide, and less energy to produce a given amount of food. Most of all it takes much, much less land.

A Stanford study found that, if not for modern agriculture’s improvements since 1960, we would be using 6.8 million more square miles of land for cultivation.²²² How much is 6.8 million square miles? It’s the equivalent of saving twice the area of the continental United States – or 3 Amazon rain forests.

Green Privilege

These remarkable achievements should have environmentalists thrilled. Who is there that does not see each of these things as a positive good?

Who is there who wants to stand up as a champion of poverty, malnutrition, under-development and dependence?

Amazingly, there is one group. They don’t put in in those terms, but that’s effectively what they stand for. They’re the people, organizations and media who suffer from what can only be called “green privilege.”

They are the favored few – mostly inhabitants of the First World, surrounded by relative abundance and luxury and never more than an arm’s length away from their iPhones. The beneficiaries of generations of scientific endeavor, they now make careers standing in opposition to science, technology and progress.

But if they are willing to condemn others to a fate of malnutrition, hunger and stagnation, it is because the condemned are mostly well out of sight, living far from the social circles of London, Brussels, Manhattan and

Washington where the schemes for turning back the clock on agriculture are hatched.

A fabulously successful entrepreneur, who has made a fortune as a fashion designer, now spends her time opposing GMO and promoting organic farming. When asked by a BBC reporter last year what people should do who can't afford pricy organic food she announced – like a modern day Marie Antoinette – that those people should simply “eat less.”²²³

The best that can be said about people afflicted with green privilege is that they don't really think about what they are saying, or truly consider the consequences of their green ideology.

They're too concerned with turning their own food fetishes into policy proscriptions for the rest of us, opposing modern agriculture and calling for a return to primitive farming techniques because somehow it seems more picturesque to them.

Though they would never consider taking on themselves the backbreaking labour it entails, or condemning their own children to a life of want.

They prefer to live in an “Organic-fed delusion” that they are saving the planet with each trip to the Whole Foods market. Of course, what they are actually doing is ensuring the less privileged, already undernourished parts of the world will have to “eat less.”

Golden Rice vs. Green Privilege

Nowhere is that seen in starker relief than in Greenpeace's war on Golden Rice. Developed 15 years ago by Professors Ingo Potrykus and Peter Beyer, Golden Rice is a miracle grain enhanced with vitamin A-producing beta-carotene. In 2001, the professors donated their invention to the world in the hopes that it would be used to end the scourge of vitamin A deficiency.

Absence of a source of vitamin A in the diet, vitamin A deficiency, is the principal cause of childhood blindness globally, affecting 500,000 children annually. Of those half a million children, about 50 per cent die within a year or two. Vitamin A deficiency is also a nutritionally acquired immune deficiency syndrome, so common diseases which should be survivable are lethal. Two million young children die as a result every year.²²⁴

So let's be clear. Although these deaths are preventable, 6,000 children who were alive this morning will be dead tomorrow.

Had Golden Rice been a part of their diet – this crop could have been introduced years ago – millions of young eyes and millions of young lives, primarily in Africa and South Asia, would have been rescued. Although there have been legitimate delays in development, it hasn't happened because organizations like Greenpeace, armed with a war chest estimated at US\$500 million, have rallied the forces of green privilege in a global campaign to

frighten the public about GMOs and to pressure governments into keeping Golden Rice off the market.

Greenpeace originally claimed Golden Rice wouldn't work, but once its effectiveness had been proved beyond a shadow of a doubt, the group switched to saying that the poor should simply buy vitamin supplements and eat fresh vegetables instead²²⁵ – as if families living on less than \$2 a day can afford to stop by the nearest Whole Foods market and pick up some kale and a bag of rocket.

If only Greenpeace stopped at a mere war of words. Or if it lived up to its message of “peace.”

In 2013, an organization in the Philippines that lists Greenpeace amongst its partners violently attacked and destroyed the agricultural research facilities they oppose.²²⁶ The group – known as MASIPAG – based in a mob of anti-GMO thugs from the city who trampled their way onto the field so they could rip the young plants out of the ground.²²⁷

In 2011 Greenpeace attacked GM wheat in Australia which was part of exciting research to enhance the health benefits of this staple food crop. In January I visited the CSIRO Experimental Station at Ginninderra in Canberra. They told me how they were broken into and research plants were cut down.²²⁸ Some of the GM crop trial plots were partially destroyed. In one of the few occasions in which Greenpeace has been called to account for its criminal and immoral behavior, the organization admitted liability and had to pay \$282,560 in restitution to CSIRO.²²⁹

The question must be asked, when did this “humanitarian” organization and so many others like it become so disdainful about the lives of the desperately poor? Do Greenpeace supporters understand that the conduct of the organization that they give to has been truly wicked?

Patrick Moore, one the early leaders of Greenpeace in the 1970s when it took account of science and respected human life, has broken with his old organization for just this reason. He now works to expose Greenpeace's actions in the developing world and has joined with Golden Rice inventor Ingo Potrykus in calling for the organization to be tried for crimes against humanity.²³⁰

So next time Greenpeace volunteers approach you on campus and ask you to donate to “save the whales” or “save the polar bears,” ask them about the children who are going blind and dying today because of their callousness and disregard for basic human decency. Ask them, instead, who will save the children from Greenpeace?

Not all green groups suffer from green privilege

It should also be recognized that there are some humanitarian and environmental groups that have come to see the important role that biotech can play

in alleviating human suffering. I'm thinking particularly of organizations such as Oxfam and the Nature Conservancy, whose initial opposition to GMOs has softened in the light of the overwhelming scientific evidence of their effectiveness and safety. It's time for these organizations to step up and show leadership on this urgent humanitarian issue.

Conclusion

We all have a duty to do our bit – to act as responsible citizens of the world to fight back against the superstition and fear spread by over-privileged, First-World activists.

Genetically modified food is just one tool for feeding the world, but it is a critical one.

For too long the voices of fear and superstition have dominated the debate. It will be up to us – largely, it will be up to your generation – to break free, to stand up for reason and rationality. To stand up for humanity.

There's no better place to begin spreading the truth than at a university, the place that is supposed to be the home of free intellectual enquiry.

From there, we need to take our message on-line. Don't let the hucksters dominate your media. Don't let it become the toxic playground of the shallow and misinformed. Take back the web. Fight superstition and fear with facts.

Then take your messages to Government, to the halls of the US Congress, the European Parliament, and other parliaments around the globe.

Tell your professors, your social media contacts, your elected representatives, to check their green privilege at the door. There is nothing environmentally friendly about letting millions needlessly die from malnutrition.

That is why I support progress in science and the critical work the Alliance for Science is doing – especially in that most important science of all – the science of feeding a hungry planet. That is why we should all check our green privilege, face down superstition, and support biotechnology.

Thank you all very much.

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