Heywood Foundation Public Policy Prize - "Environment"

11.7.2021

Categories: Environment

Entry IDs: 92-11, 332-11, 97-11, 931-11, 1194-11, 1382-11, 1362-11, 1353-11, 966-11, 901-11, 103-11, 1370-11, 1349-11, 1193-11, 929-11, 795-11, 394-11, 333-11, 111-11, 2278-11, 2028-11, 1756-11, 1209-11, 997-11, 2022-11, 560-11, 115-11, 1065-11, 2237-11, 2229-11, 2212-11, 1893-11, 1891-11, 1851-11, 1748-11, 1728-11, 1580-11, 1164-11, 977-11, 958-11, 268-11, 131-11, 19.Nov, 3061-11, 1966-11, 645-11, 199-11, 2052-11, 1769-11, 2155-11, 2033-11, 1855-11, 1410-11, 1103-11, 1053-11, 1010-11, 842-11, 738-11, 326-11, 1549-11, 1104-11, 1783-11, 1766-11, 1036-11, 1688-11, 1552-11, 741-11, 198-11, 1780-11, 1765-11, 1112-11, 921-11, 907-11, 569-11, 528-11, 454-11, 389-11, 266-11, 56-11, 50-11, 786-11, 783-11, 225-11, 1550-11, 1385-11, 1638-11, 1524-11, 1246-11, 1052-11, 749-11, 440-11, 2279-11, 1946-11, 1919-11, 1634-11, 1351-11, 1148-11, 1119-11, 898-11, 644-11

ID: 92-11 - Category: Environment

Getting people to use public transport again

In order to encourage people to get “back on public transport” why not change the tax laws and allow costs of travel - to and from a place of work - to be classified as genuine expenses which can be claimed or off set against a tax return.

At the moment people on PAYE have to fund their own expense to get to a place of work out of their personal net income. Hence a lot of people drive, especially those who have a designated parking space which is often provided by their employer.

To get these people out of cars and onto public transport, if they could offset - even a proportion - of the public transport costs against gross pay - I believe a lot of people would consider leaving cars at home.

In addition a lot of people who have now seen it is possible to work from home - who before COVID worked in an office and commuted daily - are now loathe to return as they have seen the savings in travel costs possible. Again if some of the future public transport costs were now allowed to be expensed against gross pay - I am sure a number of people would be more inclined to go back to commuting.

This is a simple idea, which is would be very easy to implement as the government can allow employers to credit against pay, public transport costs for getting to work. It does not require a huge investment nor a massive admin change, just a directive out to companies from the HMRC. It can be implemented quickly, it could be announced as a specific COVID policy to help "get people back to work", it could be for a limited period (say 12 months) or for a single tax year? It could also be of great political benefit if presented properly by the government. Another way we are helping the country get back on its feet. It also is a very green idea.

I am convinced if personal expenditure on travel to work is allowed to be seen as a legitimate expense, even just a portion, more people will happily return to cities and towns by public transport. This would be a boon to the various transport operators and really good to support the green initiatives for cleaner air.

I hope you find this idea interesting, I really believe it could make a difference. Incidentally I would like you to know, I personally would NOT benefit from this idea.

ID: 332-11 - Category: Environment

2071 Pay Parity Act

Legilsation is required to ensure that the highest paid individual in any business does not exceed the pay of the lowest earner by a given multiple.

That multiple is found by subtracting the year from the number 2071. So in the current year, the maximumallowable multiple would be 50 times (2071 - 2021)

This multiple would reduce year by year in a steady and transparent manner, eliminating the egregious pay differentials over time. The legislation would apply to all employers - whether companies, educational institutions, charities or whatever.

As ever, detail is crucial. Three points come to mind.

(a) Pay wil include all aspects ofremuneration including bonus, share options, pension contributions et cetera. DIversion of payments abroad, or other avoidance tactics, will be outlawed.

(b) The lowest paid individual will either be a direct employee or an out-sourced employee suchas a cleaner or security person who mi ght otherwise have been on the payroll.

(c) All company returns will equire an annual satement to confirm compliance with the legislation, showing that the multiple is within the permitted maximum and how this has been calculated.

The government should review the legilation every 5 years to see whayt changes might be appropriate

---

ID: 97-11 - Category: Environment

Regeneration in areas of greater suffering caused by the pandemic

The extra income generated could and should be ploughed back into investing in all areas where the economy has produced the most hardship.

1 We capitalise by creating an equal opportunity for companies by doing away with the current unfair advantage of hiding real profits offshore.

2 Employment would benefit in both retail and online services.

3 This employment in itself would then generate further income from personal and business taxes that have been lost due to the pandemic.

4 Local councils would be able to benefit in increased income from business rates.

5 Finally the health service would have the benefit of people suffering less from stress and mental health issues.

ID: 931-11 - Category: Environment

How VAT could be replaced with a "no-value-added tax"

Summary

This proposal is for a policy change that will help the environment, help businesses, and help level-up poorer parts of Britain.

The proposal is to reform Value-Added Tax.

Specifically, it is to replace a tax on adding value with a tax on not adding value.

Current Situation

At the moment, almost all food bought at a British supermarket is effectively VAT-free, even if it's battery-farmed, picked by child-labourers, flown in from far away and wrapped in plastic.

All food from restaurants has VAT of 20% added to the price, no matter how ethically sourced the food is, whether the staff are paid a "living wage" or how beneficial the restaurant is to the local community.

At the moment, all vehicles have a 20% VAT added to their price, whether it's a bicycle or a high-polluting car.

And VAT is applied at the same rate, no matter where in the UK the product is being made or sold, meaning the same proportion of turnover is taken as tax whether the sale happens in Hampstead or Hartlepool.

VAT is charged even when a product or service is provided to a 'VAT-registered' business, meaning both the seller and the buyer must complete a VAT return even though the exchequer gains nothing from it.

And the reclaimable nature of VAT allows criminals to make fraudulent claims, costing the exchequer billions of pounds.

As VAT is levied on revenues and not profits it harms low margin businesses disproportionately. Indeed, it forces most businesses with profit margins below 20% out of business.

And VAT is just one of a dozen indirect taxes, such as alcohol duties and air passenger duty, that all aim to raise tax revenue on discretionary spending and alter consumer decisions.

This means there are a dozen different compliance burdens, rules and rates, very few of which are understood by the average taxpayer.

Yet taxes should be transparent and understandable. But how many people know how much tax is on a pint of beer? Or a flight to Marbella? Or a litre of petrol? Having so many different indirect taxes removes transparency and makes ethical decision making more difficult.

Surely the businesses that should pay the most are the ones that don't recycle, that emit carbon dioxide, that blight local neighbourhoods, that encourage addictions, and a dozen other ethical wrongs?

It seems we have this tax the wrong way round. We shouldn't be taxing businesses that add value, but those that do not. This proposal is for Value-Added Tax to become No-Value-Added Tax ("NVAT").

Opportunity

If there was a single, clearly visible "NVAT" number that was added to all goods and services then consumers could easily alter their buying choices, led not just by price but by the NVAT rate – a rate which would indicate the societal and environmental harm caused by the product.

Producers would have to alter their manufacturing and business practices to ensure they can charge a low rate. The government could still collect the same total amount of tax. Everybody would win.

Imagine choosing between two packets of salad, but one costs more because its packaging is not recyclable, and the NVAT percentage clearly shows it to be worse for the environment.

Cars would cost more as their CO2 emissions rise, and bicycles would become cheaper.

Fish from unsustainable stocks would cost more, and it would be clear to the consumer why this was.

Businesses in parts of Britain that need to be “levelled-up” would charge lower rates of NVAT than those areas that don’t need assistance.

High street stores could charge lower rates than Amazon.

Clothes makers that could prove their cotton wasn’t picked by forced labour would have lower prices.

Private schools would charge different rates depending on how much they shared their resources or offered bursaries.

This change would mean businesses become liable to pay for their “negative externalities” – that is, the harms they cause society and the world, whilst being rewarded for ethical business practices.

Practicalities

To reduce fraud and reduce ‘red-tape’, NVAT would only be charged (and thus become payable to HMRC) when a sale is made to a consumer who is not registered for NVAT. The purchaser of the good or service would be informed of the correct NVAT rate to use in their own onward sale.

To make the transition to NVAT as smooth as possible it could be introduced at the same rates as VAT is at currently. The NVAT rate would then be calculated as an adjustment to that base rate, depending on government policy.

For instance, imagine a business selling sunglasses online. The standard rate of NVAT would be the same as VAT is now – 20%. The seller would then select their product or service from existing classification codes, then follow a short questionnaire to determine the correct NVAT to charge, such as:

• Is this product made from recycled materials? (If no, add 6%; if yes, deduct 4%; if unsure, add 6%)

• Is your business based in an officially designated economically disadvantaged region: (If yes, deduct 5%)

Businesses over a certain size could be asked:

- Are at least 25% of your board members women?
- Is your average director remuneration less than 10 times the average pay of your employees?

And if the answer was ‘no’ a percentage point or two could be added to their NVAT rate.

If sufficient businesses improved their conduct to qualify for lower rates of NVAT then the base rate of NVAT could be raised, ensuring that the overall revenue collected from sales taxes remains the same.

Conclusion

With the adoption of an NVAT rate we could help make business practices fairer, we could support businesses that are more environmentally friendly, we could encourage a fairer distribution of resources, we could help consumers make more ethical choices, we could reduce fraud, we could encourage economic activity in poorer parts of the country, and we could do all of this without changing the overall amount of tax collected

---

ID: 1194-11 - Category: Environment

How COVID and climate change may reinforce social cohesion at a domestic level

1. Apart from COVID, a major challenge for government, in both the long and short term, is meeting climate change targets for the reduction of carbon outputs. But the White Paper on Energy and the provisions of the Environment Bill can make the targets and objectives appear

inaccessible (even incomprehensible) to the average consumer.

2. COVID 19 has led to an upsurge in community spirit/neighbourliness. It would be beneficial to find a way to link improving social cohesion with controlling government spending, and to integrate high level aims with grassroots projects at a local level.

3. One of the most pressing problems likely to affect people directly, is the need to replace domestic gas boilers with low emission forms of heating in our homes. A key issue is how to 'retro-fit' new forms of energy into the existing housing stock, rural or urban, and whether in a large detached house with grounds, an isolated farmstead or a terraced city Victorian house, or serving a 15-storey block of flats in a densely populated urban centre.

4. There are practical implications across several areas, financial, technical & legal. The Energy White Paper Foreword shows Government has billions to spend on improving energy efficiency, especially in supporting vulnerable or low-income homes. But there's a range of circumstances which mean many will not be able to 'buy into' the project. Tenants, or people with terminal illnesses or reaching the end of their natural life span will have no reason to instal a heat pump or join any 'District Heating Scheme'. Previous research on that topic should be re-evaluated.

5. There's always a risk that Government funding for Intermediaries' fees may soak up money intended for the infrastructure improvements (as in neighbourhood planning). Ideally Government funds will be channelled more effectively, whilst also building social cohesion. So projects involving numerous households sharing a scheme could include incentives to share/work together, and/or tapering reliefs and model legal agreements. Collaboration on schemes of mutual benefit is known to help social cohesion. Such schemes must build in proper maintenance costs over the long term, and legally enforceable access to shared facilities (as in many leases), plus flexibility for a few to 'buy into'/join a scheme later, as their circumstances change or property changes hands. NB: leasehold enfranchisement arrangements may offer a comparison, and the buy-in provisions for LB Bexley in the TFL + Five Boroughs Agreement (quasi s.106) for the abandoned Thames Gateway Bridge.

6. There is a range of devices for reducing carbon outputs, such as the “ground source heat pump”, the “air source heat pump”, or a much larger shared geo-thermal installation, (as in Swaffham Prior Village). Larger underground schemes count as “engineering operations” which need planning permission (cf Castle Howard’s pump under its Lake). Smaller wall-mounted air source devices may not. But thought should be given to instituting a licensing system for the smaller schemes, conditional on use of an approved Eco-design & compliance with any registration process), to keep them out of the delay and complexity of getting full planning consent.

7. The cost of individual installations seems to range from a few £1,000 to £20K. The possibility of sharing installations has not been explored in depth across the range of dwellings and landscape nationwide. What suits London will not suit Cumbria. Local authorities will already know their local landscape and housing stock, and hopefully can assess which types of heat pumps etc would be most appropriate in their area. This is not something that central government authorities can deal with so effectively. It would be helpful to undertake a consultation with local authorities on this issue, to calculate number and type of installations required, and likely cost & potential subsidies. Feedback from Eden District Council in Cumbria will be very different from (eg) LB Brent. Councils may already have a “Green Energy” specialist, but if not, they could be funded to develop this expertise, straddling planning and environmental health, and to provide monitoring & annual progress reports (and enforcement).

8. Installations must also have their details recorded on a public register, so that any new owner can confidently discover the exact size, type and location of any retro-fitted system. Any linked financial liability should be noted as a ‘financial charge’ in the Local Land Charges Registry. Details would be in the routine Local Search when ownership changes. This would be a routine conveyancing check.

9. Schemes like the Green Homes grant inevitably have glitches and delays. For many people the capital cost will be a big deterrent to replacing their existing heating system. So Government

Funds - held by a public authority - could be used both: - To smooth out such glitches and get contractors paid promptly (once they prove compliance by lodging any registration details required), and: - To subsidise installations until they have paid for themselves (often 7 - 10 years). Rather than a massive outlay, the owners/users would simply continue to pay their bills at the old rate, and the monthly amount saved would be off-set against the capital cost allocated to the individual property. At any point it should be possible to find out how much was outstanding on any property individually or in a shared scheme. Once the capital was re-paid, the owners' energy bills would reduce substantially. Planned regular maintenance must be in-built as part of the calculation. Linking public funds to compliance should provide better control over their spending and effectiveness.

10. Summary Shared schemes, such as at Swaffham Prior (Times 9.1.21, p19), and properly regulated subsidies could provide a long term boost to a temporary uplift in good neighbourliness, provided too much red tape and delay is avoided. They would encourage job creation in technical areas, and a useful niche specialism in local government, whilst not adversely affecting the housing market and minimising landscape impact over a wide national area.

ID: 1382-11 - Category: Environment

Can renting the world's forests, with help from the foreign aid budget, lead the way?

We know relatively little about the world's forests and what they might ultimately be able to give us by way of chemical and biological resources. Might they also prove to be our salvation, if only we knew it? We know they are being cut down at a catastrophic rate. We know we are only too rapidly losing the lungs of the world. We know the loss of forests causes untold environmental damage in various ways. We also know that they provide a habitat for animals and that this loss of habitat drives these creatures into closer contact with us. We also know that this increases the risk of us becoming infected by Zoonotic diseases. We know millions of us are catching Covid-19 and it is killing us (1.9 million so far). How much more do we need to know before we wake up and do something to address this situation? Those who destroy the forests (rain or otherwise) do so either for direct income (a business) or survival (to grow food they lack the means to pay for). So one very obvious way of taking that first step towards saving these forests is to replace the internal income generated by destroying the forest with an external source of income to protect and enhance the forest. In other words 'rent' them from their owners. Pay them to look after the forests just as we are now looking to pay our farmers to look after our countryside. In the UK the obvious source of this rent should be the foreign aid

budget; particularly when you consider that 7.73 billion (and rising) foreigners will benefit from such action. If the rules don't allow it; change the rules. Of course ideally global action is required, but we could start with the next G7 Summit, which the UK is hosting and which will include climate and environmental action as one topic. We should seek to get as many nations as possible on board to each contribute towards this annual rent. Why not include some of the world's wealthiest, for example Bill Gates, Mark Zuckerberg, James Dyson, Jeff Bezos, Elon Musk et al? A global organisation would be the tenant and any benefits accruing, from the carefully controlled activities permitted within the areas rented, would be shared globally.

ID: 1362-11 - Category: Environment

Make companies pay for non-recyclable products they produce

Currently there is a massive problem in that many companies are producing products (many of which are single use) that are not recyclable. These end up in landfill where the true cost of these products are felt by the environment, and the taxpayer who ends up having to fund landfill and all the associated problems. Currently, companies can avoid putting these costs onto their product, meaning the shelf price of these goods is much lower than the cost to wider society. Companies benefit. Society loses out.

With landfill still continuing to grow in the UK, companies need both a carrot and a stick to reduce the number of products they produce that are not recyclable. The stick would be to add a tax onto companies that varies depending on the proportion of products they produce that are single-use and non-recyclable. Whilst companies would likely pass on this cost to consumers, consumers would then be encouraged towards the lower prices of goods that are recyclable. The carrot in the equation could be a certified sticker on products that says a company is producing below a certain percentage of goods that are not recyclable - incentivising good behaviour for companies.

There would be exemptions for the production of medical products - such as syringes - which for obvious reasons are rightfully single use.

This should also be a hypothecated tax so that money raised from the companies, and from

consumers buying these products, would go towards paying for the associated issues from landfill. It could also be used to fund the research of new recyclable materials that have a better environmental impact than existing single use materials. This research could then be made freely available to companies and the public, providing a public good that contributes towards the reduction of landfill.

The main effect of this policy would be that it pushes the onus for the lifetime of product onto the company that made it. Ultimately, this would hopefully stop companies from producing environmental harmful products and packaging, meaning they wouldn't be available for consumers to buy in the first place.

ID: 1353-11 - Category: Environment

Personal carbon allowance

To reduce the movement of goods we need to promote better use of our existing products. We need to create a personal carbon credits which are used for everything we purchase. These credits Will be equally distributed across the population and could be traded. All products would be clearly labelled including air travel. You can gain credits by sola installation, recycling, repairing electric goods . This would help the poorest who normally consum the least.

ID: 966-11 - Category: Environment

Environmental Problem. Drinks cans and plastic and glass bottles, littering, pavement and open spaces

Solution.

Ten pence recycle charge added to purchase price. Like the charge for plastic bags in supermarkets introduced recently this would not be a tax. Council waste disposal sites would accept the return of plastic bottles and drinks cans 25 at a time. £2.50 would be credited to the relevant bank account, which might be that of the parents of children who had collected the items. Glass bottles would be returned ten at a time for a one pound refund

Additionally the increased charge for the high calory drinks would lead to a reduction in sales and thereby a drop in problems of obesity, in particular diabetes.

It would be difficult for manufacturers to argue against the charge since it is widely accepted that the sugar full drinks are bad for one's health and especially for children. Provision would need to be made to stop manufacturers switching to tetrapack type containers, possibly by adding ten pence to these too with an equivalent refund for return of 25 boxes

---

ID: 901-11 - Category: Environment

Thoughts to bring climate change to the consumer so stimulating demand for UK products

This is a simple idea to implement, has low cost but will have a significant impact on both:

- The global crisis of climate change by bringing it gently and daily to the consumer,

- while also stimulating demand for UK manufacturing and farming which will help with the re-levelling across the UK, post-Brexit.

My Idea: I would like to see all UK sold goods, labelled simply to show their use of raw and scarce materials (especially water and carbon) and impact on the environment on their production, delivery and packaging.

Consider strawberries sold in a supermarket. In June, UK grown strawberries will have a ‘low rating’ because transport costs will be low whereas, for strawberries bought in December, the rating will be much higher because of the carbon impact of flying in overseas grown strawberries.

Similarly, the labelling will show that items made of cotton have a significant environmental impact because of the high-water requirement in production.

I don't believe in telling people what they should do but without information, we can't make any effective and informed decisions. To be successful, the labelling system needs to be simple and accessible.

I suggest a simple 1 to 5 scale.

The scale also needs to be understandable by children. I know that if we educate children about the labels by including them in the national curriculum, they will drive buying parental preferences and so I recommend matching children accessible pictures (maybe level 1 could be a polar bear sitting alone on a tiny ice flow) to the scale.

The impact of all of this will be to:

• increase awareness and show what we can do individually to have a positive impact on climate change.

• Change buying behaviours towards environmentally friendly products.

• Encourage consumers to buy UK and locally sourced goods (which will always be more environmentally friendly because of lower transport costs) stimulating UK business.

• Provide a focus for continuing education and understanding.

ID: 103-11 - Category: Environment

Employment-Poverty-Energy-Solution

The Government is faced with the three challenges as briefly outlined in 1.b. and is hosting the Climate Summit in Glasgow, which this solution could highlight as available to all wealthy western nations, as well as the UK.

Very simply, it would legislate that all new housing should have photovoltaic cells, to generate electricity, installed on every new property built. (This could also include industrial premises) The cost, relative to the total cost of a new dwelling, is minimal and should be borne by the builders, or individuals if building their own house. Thus no cost to the exchequer. These houses would use mainly electric heating, thus a reduction in carbon emissions. The home owners or tenants would have lower utility bills, reducing poverty. Employment in terms of developing our local manufacturing base for this; as well as R. & D. would increase. Employment for installing the panels would increase; all helping to reduce poverty. It would help to facilitate the move to electric vehicles. For sensitive areas or wealthy house owners, the cells can be in tile form. The power supplies would benefit from decentralisation and the UK would be less reliant on foreign supplies.

This is a completely win-win scenario!

ID: 1370-11 - Category: Environment

Improved plastic recycling.

Current proposals for recycling plastic bottles is to have local "reverse vending" machines. To have sufficient numbers, convenient enough that the public would use them would be prohibitively expensive.

A more cost-effective solution would be to have centralised readers at each recycling centre and use the existing household recycling system. The readers would utilise a similar universal data detector as used in supermarket checkouts. Plastic bottle manufacturers would be required to provide a blank space alongside the existing bar code to receive a sticker or stamp to be placed there by the member of the public doing the recycling. Members of the public would register for the refund system and be issued with their bespoke stickers or stamp that would be read at the recycling centre and that data used to credit their account.

Penalise any manufacturer not prepared to be involved and use the funds to fund the development of the registration / reader software and sticker / stamp technology.

The barcode could also contain information about the plastic to facilitate waste sorting.

Litter picking could be encouraged if anyone finding discarded unstamped bottles might be allowed to get the refund.

Incentives in addition to the refund might be lottery entry, possibly.

Enhancements to the scheme would be to extend to other packaging, develop a cheap laser etcher for the stamp.

ID: 1349-11 - Category: Environment

Direct soft sea power aid projection while maintaining levels of readiness for desaster relief

Currently the UK has some naval assets that are not fit for front line combat duties. The UK also has excellent military and naval engineers that are kept in a highly trained state to be able to deal with crises if they occur. It could be possible to marry these together with UK based engineering facilities to create a kind of mobile aid flotilla with a stock of ready to assemble systems for the quick assembly of infrastructure and buildings. There is sufficient expertise to deploy several flotillas that could sail on a type of goodwill tour near areas known to experience seasonal natural events that may require immediate aid and infrastructure support which could be rendered directly from the supplies carried by these flotillas. If no such events occur during the good will portion of the tour then other defined projects could be undertaken with the prefabricated elements carried within the flotillas directly helping communities (coastal) around the world and leaving a lasting legacy from green power plants to bridges to ports etc. Such activities would be in line with the UK's stated desired to help developing countries and be funded from the foreign aid budget while using UK produced prefabricated parts and maintaining the training of UK forces as the required deployment could draw staff from all branches of UK uniformed services.

Such an approach to projecting british values and engineering would have to be supported where necessary through diplomatic activities and operational endowments and local training to operate and use the resultant legacy constructions. This would clearly allow for direct aid bypassing several issues currently garnering negative publicity such as corruption and missuse of funds and allow the UK population as a whole to see local value to the overseas aid (through local fabrication and provision of the necessary supplies for the constructions) and worldwide value from these gifts from the British people in line with our value system.

ID: 1193-11 - Category: Environment

A Proposal: A Green Funding for Lending Scheme

In 2012, the Bank of England launched a Funding for Lending Scheme (FLS) to provide stimulus to the housing, and subsequently SME sectors, with strong documented impact. Under the scheme the Bank effectively lent to the banking sector at preferential interest rates, contingent on the commercial banks making new loans to the designated sectors.

Our proposal? A Green Funding for Lending Scheme. If the environment of close to zero interest rates prevails, implementing a system of 'dual interest rates' as outlined below provides limitless scope for further monetary support, deployed to targeted sectors - in this case greening energy, transport, buildings, construction - without compromising the independence of the Bank of England or relying wholly on fiscal policy.

How would a GFLS work? A number of central banks, including the Bank of England, the European Central Bank (ECB) and the Bank of Japan (BoJ) have embarked on targeted lending programmes through the banking system to provide additional stimulus.

These programmes have two major advantages over conventional monetary policy. They can be targeted at specific areas of the economy, where investment is required - for example:

- The BoJ's programme aimed at reconstruction in the area of Japan most affected by the 2011 Fukushima nuclear disaster.

- The European Central Bank has shown that there are no limits to this form of stimulus. During the Covid pandemic, the ECB has left official interest rates unchanged but has cut the interest rate on its targeted lending scheme further into negative territory. Under this scheme banks can borrow at interest rates as low -1%, subject to them providing new loans to the economy.

The Bank of England could launch a new programme at substantially negative interest rates, perhaps starting at -2%. To be clear, this would not affect money market rates, deposit rates or mortgage interest rates. This interest rate would only apply to loans made under the GFLS. The Bank would make loans available to the commercial banking system fixed at these interest rates

for up to five years, on condition that the banks extend loans to finance investment in sustainable energy development.

To safeguard operational independence, the Bank of England would be responsible for the timing, quantity, implementation and pricing of these loans. However, as with the original FLS, cooperation with the Treasury would be required. The necessary criteria for assessing which investment projects qualify as either eligible sustainable energy investments or significant regional development projects would need to be determined by Ministers. It would then be down to commercial banks to determine which specific projects to lend to. Government would set the overall criteria for eligibility, but the private sector would play a dominant role in execution.

It is important not to underestimate how powerful this policy could be. For example, the UK is already meeting approximately 20% of national electricity demand from onshore and offshore wind energy, and capacity can be built from start to finish within less than five years. These are relatively low-risk capital investments, with predictable returns based in part on guaranteed revenues. Under a Green Funding for Lending Scheme (GFLS), loans could be made from the Bank, fixed at -2% for five years, the industry would be supercharged and capacity could be doubled. This level of ambition would provide both substantial immediate stimulus to the economy and contribute to the UK's carbon targets. It would ensure a more balanced economic recovery, led by capital investment and could transform energy sustainability in the UK, and role model catalysts for the rest of the world.

The same programme could be extended across green infrastructure, from solar power, to auto-finance for electric vehicles, to charging infrastructure. The most rapid and effective way to accelerate the take up of electric vehicles is to create a significant pricing differential in their favour. A GFLS aimed at green investments could achieve this.

In addition to sustainable energy investments, there could be a Regional Funding for Lending Scheme (RFLS) for which commercial bank funding at negative interest rates would be made

available for investments made in targeted regions for “levelling-up” in the UK.

We identify three criteria for success of this programme.

1) Ease of implementation: It must be easily identifiable whether an investment project is eligible. The Bank of England and the Treasury would need to draw up clear and transparent criteria for eligibility - which the commercial banks implement.

2) Transparency of benefit: The Bank of England will also require evidence from commercial banks that the preferential funding terms they are receiving are being substantially passed on to end borrowers. This could be done by either referencing existing credit facilities a borrower has obtained, or market interest rates for equivalently-rated borrowers.

3) Design of separation of powers: This facility must preserve the operational independence of the Bank of England, and protect the separation of monetary and fiscal policies. The Bank would be responsible for the quantity and price of money being created to finance this stimulus.

On an an ongoing basis, this form of targeted monetary policy may eventually be deemed preferable to a policy centred on a single money market interest rate and asset purchases.

ENDNOTE: Setting the interest rate substantially below bank rate would be an innovation for the Bank of England. Prior schemes provided funding at close to Bank Rate. There is no practical or theoretical reason why Bank Rate should be the floor, as the European Central Bank has demonstrated. Were it not for the existence of the effective lower bound and the threat of a reversal rate, Bank Rate itself would be a lot lower. A steeply negative GFLS rate would be closer to the r*, and therefore not a subsidy. Arguably the rate on these facilities should be much lower, perhaps -4% or -5%. This should be determined by the BoE, subject to its inflation target. As recent research suggests, concerns regarding the effect on the Bank of England’s should be secondary to the importance of delivering on its inflation-targeting mandate.

ID: 929-11 - Category: Environment

A system to filter out potential Covid 19 virus burdens in free air

I am a retired engineer. I have seen no mention of attempts to mitigate the effects of Covid19 by filtering free-air in public places/transport. I have no experience of virological research and offer this electro-mechanical solution from an engineer's point of view. Also, I have no evidence that the device would be efficient enough to neutralise Covid19 aerosols. The device would have a small, low speed fan at one end of a cylinder (dimensions should be concomitant with expected aerosol burden) between the fan and the other - open end - of the cylinder; there would be interposed, a magnetron (self-excited microwave oscillator i.e. microwave generator) irradiating the incoming air. The cylinder would probably need a right-angle bend between the input and the magnetron to stop any stray uhf diffraction. Having a fine grill to stop accidental ingress by persons and random access by rodents/insects etc. I haven't the necessary resources/construction and testing equipment, to test the viability of this device but I feel it could be possible to build and use the device to good effect. Further: I believe such a device could be cheaply manufactured in large quantities. Initially the magnetrons might be taken from the thousands of micro-wave ovens that are disposed of yearly.

ID: 795-11 - Category: Environment

ONE SIMPLE FIX FOR THE PROBLEM WE HAVE WITH NON-RECYCLABLE WASTE

The UK has exported many thousands of tonnes of waste to countries, such as Vietnam and Malaysia, which are not necessarily equipped to recycle or process it properly. As we know, much of it ends up in the sea.

The UK imports thousands of tonnes of goods from abroad and with it comes vast amounts of non-recyclable packaging, including plastics and polystyrene. It is in the interests of at least some non-UK sellers (on Amazon, for example,) to keep their packaging costs as low as possible, and it is not their concern that we are unwilling to pay for the real cost of recycling the mountains of rubbish they send to us. Much of this waste is then sent away to far-off nations whose problem it should not be and where it might not be processed at all. Providing this service to us provides these countries with a quick buck, but the cost to all is vast! It also builds resentment and mistrust of the UK – about to host COP26 in November.

My big idea is to allow goods to be imported to the UK on condition that all the packaging (at least) can be completely recycled within the UK. The technology probably already exists, and if not, our brilliant engineers and scientists are likely to come up with alternatives and improved recycling facilities very quickly.

In the short term, we should at the very least allow consumers to make an informed decision by

requiring vendors to list the materials used for packaging. We should be generous in advising poorer nations on how to set up the production of these products.

And we might even consider exporting them ourselves!

ID: 394-11 - Category: Environment

How can the nation reduce freight transit times and emissions?

The answer to this question is surprisingly obvious and simple: reduce the amount of road haulage and increase the amount of bulk movements.

Finance

The proposed government spend of £27bn on roads and road improvements could instead be spent on Freight Railway improvements, Freight Staging Areas and a unified Freight Movement Database. Superficial research indicates that parts of this proposal already exist.

Freight Railway

The freight railway network would be improved from major ports / ferry terminals / airports by removing any restrictions that impedes the free flow of freight rail traffic. The network would link to a number of strategically place staging areas designated for rail freight transfer to road haulage.

Freight Staging Areas

These are areas that are geographically significant for industry and major conurbations. They will provide services for loading and unloading of freight and temporary storage. Last road mile delivery from these staging areas will use electric or hydrogen powered tractor units.

Freight Movement Database

The database would broadly have two functions: the equivalent of parcel tracking (but for freight) and a “click and collect” function. Freight entering the country can be pre-booked before arrival or booked on arrival. Pre-booking would reduce bureaucracy and hence time. Freight leaving the country would be pre-booked before movement and then booked out of the country at a port / ferry terminal / airport. The identification of the freight can be by simple bar code or QR code. Freight requiring real time tracking such as: high value / dangerous / perishable / urgent medical supplies etc. could use GPS tags with data fed back to the database over the mobile phone network (3G / 4G and future 5G).

Overview

It is possible that some ports may also function as Staging Areas where they are geographically close to the freight final destination. Examples of these would be Liverpool and London Docks. However, Freight Staging Areas such as Birmingham, Manchester etc. would send and receive freight from seaports / airports by train. Last road miles would be completed by electric or hydrogen powered tractor units. These types of tractor units already exist but hydrogen fuel supplies are currently very sparse. Therefore, a hydrogen fuel service could be incorporated at these Staging Areas. It should be noted that the intention of Staging Areas should lead to haulier tractor units not actually covering long distances and as such refuelling may be immaterial.

As freight enters or exits the country it will be registered and tracked using the Freight Movement Database. Like a parcel tracking service, companies will be able to log into the database to find out where their freight is. As mentioned above, depending on the freight type this information could be in real-time.

As inbound (to the UK) freight arrives at a Staging Area the database will send a notification to the company that owns the freight. They will arrange for a haulier to collect the freight. The haulier will book a collection slot. This will manage traffic into and out of the Staging Area and reduce the amount of temporary storage required. It is possible that fines could be levied if freight collection is not prompt.

Dover Example

The effects of the new variant of COVID-19 starkly demonstrated how the existing freight transport quickly descends into chaos.

If freight crossing from Europe to Dover had been towed onto and off the ferries using a mule tractor unit then the chaos could have been adverted as the drivers would not have been crossing the channel.

If Dover were to be a Freight Staging Area and for example the freight was destined for Birmingham (around 200 miles away) then this would be loaded onto a freight train at Dover and taken to the Staging Area near to Birmingham where it would be collected by a local haulier.

The proposed system does not preclude European hauliers driving freight to its final destination in the UK. The Freight Movement Database would have a number of “available slots” that could be pre-booked. The control of these slots would act as a tap for controlling the flow of long distant road haulage. Additionally a fee could be levied for UK road congestion and emissions particularly if the tractor unit was diesel. These fees could be used to finance Freight Rail, Freight Staging Areas and UK haulier’s costs in the switch to cleaner vehicles.

Final Thoughts

This entire proposal could be implemented given the political will. Parts of the proposal already exist but may require some enhancement and further integration into a common system.

The IT functions exist as features used by many different commercial companies.

Using this approach will reduce the opportunities for deliberate or inadvertent people trafficking.

Less European heavy vehicles on UK roads will lead to less congestion and more importantly fewer accidents.

UK haulier electric tractor units, if designed to support vehicle to grid power, could supply the National Grid with significant standby power and would also provide the hauliers with an extra stream of income.

Birmingham could be a key hub for the integration of freight and rail commuters.

If the development of Heathrow were to be switched to Birmingham airport this would further improve the hub and would signal to the rest of the country that the government is serious about creating a powerhouse in the North and spreading the benefits of our economy across the whole of the nation.

ID: 333-11 - Category: Environment

Senior national service

As above.

ID: 111-11 - Category: Environment

Accelerate the green revolution in the built environment

1] Across the UK there is a rolling programme of introducing LED light bulbs to STREET LAMPS but since this programme started, technology has moved on. In Northern Europe there are already solar powered street lamps being deployed, proven to work in our climate. Furthermore they can integrate all the requirements for the development of 'smart cities'. Generating more electricity than they use, these solar lamp posts should be viewed as an asset class rather than a capital cost, as their excess capacity can be sold to the grid. SOLUTION: The government should mandate that all public sector tenders for street lighting must henceforth include a requirement for solar lamp posts to be evaluated against existing technologies so the opportunity is properly explored. Because of their asset class potential, street lighting upgrades and new installations might therefore be funded by private sector investors alleviating the cost from local authority budgets. Manufacturing and installation can be by UK employers. The World Economic Forum website carries details of the EU's ambition to install 10 million smart lamp posts along these lines. We should follow suit.

2] The government has a strong commitment to renewable energy and yet sites for solar farms are hard to secure planning for. In Europe and beyond, CAR PARKS at hospitals, sports grounds, retail locations, workplaces, airports and train stations are adopting solar car ports that, as well as providing shelter from the elements for vehicles and their occupants, generate electricity to support electric vehicle charging (for which there is growing demand and insufficient supply currently) and can feed excess generation into the grid. Arguably the visual amenity of a solar

farm is no worse than that of staring at a car park. SOLUTION: The government should ease planning rules and incentivise car park operators to install solar car ports wherever possible. According to the RAC Foundation there are between 17,000 and 20,000 non-residential car parks in the UK with between 3 and 4 million spaces. That equates to between 6 and 8 million standard solar panels - a significant increase in our solar farm capacity without impinging on farm land or the visual amenity of the countryside. That equates to at least 2425 acres of solar capacity. The UK's largest solar park at Shotwick in North Wales covers 250 acres, has a capacity of 72.2 megawatts, reduces CO2 emissions by 202,000 tonnes each year and powers 11,000 homes. Covering our car parks with solar car ports has the potential to therefore provide at least ten times as much benefit as Shotwick. The government could go further and mandate all car park operators of over a certain size (say 20 or 50 bays) to undertake a commercial cost benefit analysis of installing solar car ports, by going out to tender. As with solar lamp posts, ca port solar farms would be an asset class that investors would support. Solar car ports can be manufactured and installed by existing UK facilities creating job opportunities.

ID: 2278-11 - Category: Environment

Turning over a new leaf: a plan for cleaner air

To tackle the problem of air pollution, particularly in urban areas, we need to improve our green infrastructure. In particular I am suggesting that urban hedges should be planted to reduce air pollution.

In the 2019 general election political parties competed in their pledges to plant millions of trees to combat climate change and to achieve Net Zero suggesting that there is political will to improve the UK's green infrastructure. However, it was predicted that the scope for these planting initiatives was relatively low in urban areas due to lack of space and the cost. 99% of Londoners live in areas exceeding the World Health Organisation's recommended guidelines for air pollution levels and the European Court of Justice ruled that the UK has broken legal limits on air pollution for a decade. Already one nine-year old Londoner has air pollution as a cause of death on their death certificate. There is a significant need to tackle the problem of air pollution and specifically in urban environments where there is a lack of green infrastructure to absorb air pollution, such as emissions from cars on busy roads.

A solution to the problem of air pollution is to plant and manage hedges in urban areas to

create a dense filter to absorb air pollution at its source and to provide protection to those effected by air pollution. In particular urban hedges should be planted alongside high level sources of pollution, such as busy roads, and alongside areas frequented by people particularly vulnerable to air pollution, such as schools and in residential areas.

A recent study by the Global Centre for Clean Air Research suggests that trees are not effective at reducing roadside pollution at breathing height whereas hedges are. Unlike trees, hedges are able to trap air pollution at the level it is produced and provide a barrier at breathing level between the pollution sources and the person breathing. Simply brushing up against a roadside hedge will demonstrate the volume of dust and particulates that the mesh formed by the hedge's leaves filters. Trees, on the other hand, can sometimes trap air pollution at street level as the mesh of leaves of trees can trap the air. Hedges are a more effective and immediate solution than trees as they are quicker to grow and take less long-term development planning than trees in terms of size and shape. Additionally, managed hedges are more suitable for urban environments as they can easily be shaped to the needs of urban spaces.

Beyond improving air quality and air pollution reduction, urban hedges have benefits such as carbon sequestration which would help contribute to UK Net Zero initiatives; they can improve biodiversity and can be a source of pollination support; they can help with water management and rainfall capture; and they can reduce soil pollution. Urban hedges can also have insulating properties and in summer can help keep air cool; they can also reduce wind speed in streets that have high buildings that create a wind tunnel. Some studies also suggest that urban hedges can reduce noise pollution. Depending on how they are implemented, for instance between a footpath and a road, urban hedges could provide pedestrians and possibly cyclists protection from cars and reduce traffic accidents by preventing pedestrians from jaywalking. Urban hedges can add aesthetic value to built-up areas that lack green spaces with some studies suggesting that there are psychological and mental health benefits associated with proximity to plants and green infrastructure.

Planting and maintaining urban hedges may also have the advantage of creating new jobs. These jobs would be green jobs and providing more technical skilled opportunities in urban areas while preserving the technical skills in hedge growing and maintenance that otherwise

might be at risk of being lost.

In terms of the practical implementation of urban hedges as a policy, this is an active area of research with experts and academics already specialised in this issue who could consult on the best way to implement it as a policy. There is a growing field of research as to the most effective plants to be used as urban hedges. Consideration has already been paid as to which plants are the most effective at absorbing roadside pollution with the Royal Horticultural Society suggesting Cotoneaster franchetii. Other studies look at how issues like allergenicity can be managed. Thought will still need to be paid as to how to manage invasive species and prevent issues like excessive shading. There may be some areas with urban planning requirements, such as the need for driver visibility on roads, that prevents the policy being utilised in some areas or may cause it to take a different from, for instance plant boxes as opposed to hedges in the ground. However, at a minimum urban hedge can provide a great deal of benefit to schools, playgrounds, and community centres.

A concern might be the cost of urban hedges as a policy but in the long-term the monetary saving made by the reducing air pollution levels would almost certainly outweigh the initial start ups costs of urban hedges as a policy. The long-term running costs of urban hedges are likely to be low and these are costs that are already incurred in the countryside maintaining hedgerows and in cities maintaining trees and other green infrastructure so there is data that can be consulted to estimate a cost. Depending on the implementation of the policy it may also be the case that local community members would volunteer to help with the maintenance of urban hedges thereby reducing the cost. Ultimately, the improvement to public health and quality of life by reducing air pollution through this policy make the cost of the implementation and maintenance worthwhile.

ID: 2028-11 - Category: Environment

A Green Army

Summary:

The MOD is a major source of the UK government’s carbon emissions. However, it could also be

a major driver of the fight against climate change, using the same principles of military innovation and procurement that led to developments in medical treatment and the creation of GPS.

Policy:

General Nugee is soon to release his report on the MOD and climate change, and he has already created the Defence Green Network to seek sustainability ideas from personnel. Several projects have been launched, such as reducing plastics and disposable coffee cups, but there is a risk that the MOD simply seeks to replicate common actions from other organisations rather than taking the lead itself.

This is the wrong way for the military to address the problem.

Instead, they should view carbon emissions as a weapon system and respond accordingly, analysing the threat, developing a strategy to combat that threat, and then implementing it with maximum energy and aggression.

Such a response should focus on developing new technologies to address the threat, much like the MOD has always done in wartime; those new technologies can then be passed over into civilian life and expanded, much like military technology has done for centuries.

While an obvious area of development is electric tanks and planes, some other ideas for what the MOD could do are below:

1) Develop small-scale nuclear power for electricity generation. Large scale nuclear power stations face massive building costs and huge challenges disposing of nuclear waste. However, smaller nuclear power plants could provide vital baseload power, alongside battery technology, to overcome the limitations of intermittent renewable energy. The MOD's decades of nuclear experience place them in a strong position to develop and pilot small scale nuclear power, while also providing the security needed through their military infrastructure.

2) Develop carbon capture and conversion technology to create zero-emission fuels. Jet aircraft are likely to run on fossil fuels for decades, so they need clean fuel. A Canadian company has already developed a machine that converts the carbon in air into aviation fuel. The MOD should invest in, and deploy, that technology, innovating to reduce costs and enabling it to be scaled up. If combined with small-scale nuclear power, such machines could provide the MOD with zero-emission fuel for its entire vehicle fleet, enabling the achievement of net zero without undermining equipment capability. In the short-term it is likely to lead to higher fuel costs, but the long-term benefit of the technology justifies such investment, possibly including from the UK's new green bank to reduce pressure on an already tight MOD budget.

3) Develop geothermal deep-drilling technology to enable the use of geothermal power almost anywhere in the world. By developing deep-drilling capabilities, the earth's internal heat could be used to provide hot-water heating to MOD bases and also to generate steam to drive electric turbine generators. Civilian research in this area is already under way, but it is another area the MOD should seek to invest into to drive the technology forward and enhance its own capability.

4) Develop deployable 'steam-solar' power. Morocco has developed a large 'steam-solar' power plant, using mirrors to concentrate the sun's rays onto water to create steam to drive turbines. The MOD should seek to develop smaller, deployable systems to be used in bases around the world, particularly in theatres of war, to provide free power to support operations. It would reduce dependency on diesel generators and the logistical supply chain required for them, and also drive battery development to be able to store power when the sun does not shine. Furthermore, since the system is super-heating water, it should also be designed to provide potable water, to reduce dependency on bottled water. Such a system would not only help the

MOD, but also has widespread application for remote grids in hot countries, and reduces the need for the rare-earth minerals used in solar panels, which is a limitation on the widespread deployment of those panels.

5) Change how MOD buildings are constructed. The MOD should adopt new building techniques and materials on all their bases, using and testing the latest innovations to drive their widespread adoption. For example, when constructing new mess accommodation, instead of the standard 'university-style' concrete accommodation buildings, they could be constructed from wood, using the techniques Norway has adopted to build wooden skyscrapers, for example. This would reduce emissions from concrete, improve energy efficiency, and contribute to net-zero by locking in emissions from the timber used. All toilets should use rainwater for flushing to reduce water usage as well. The MOD should also be testing the ballistic capabilities of such new materials; if they are effective, they could provide an alternative to concrete barriers, providing eco-friendly defence without sacrificing effectiveness.

6) Instead of selling-off MOD real estate where bases are closed, a commercial team should be created to monetise MOD land, all maximising sustainability and usability. For example, a former Army base could be converted into a hotel and spa, with the grounds rewilded to provide a tourist attraction. The hotel would generate revenue, justifying keeping the land, rewilding would help offset some of the MOD's emissions and offer opportunities for scientific study, and the land would still be owned by the MOD, so could be reconverted in future if the need arose. Similarly, a former RAF base could be converted into an office and warehouse facility, designed to be low-energy and eco-friendly, which would be rented out to businesses. It generates revenue and provides a space for innovation in design, but could also be converted back into a military installation quickly if needed.

These are just a few ideas for what the MOD could do. The key is the principle - that the MOD should lead, not follow. The military has for centuries led innovation, including medical advances and GPS; they should do the same on climate change, helping to develop and deliver game-changing technologies to defeat the global threat of climate change.

ID: 1756-11 - Category: Environment

Converting Student Activism into Student Action

Summary:

Young people want to push forward the fight against climate change, but are struggling to achieve change. The government should help them achieve change and learn about the practical difficulties of doing so by creating a competition for universities to achieve net-zero status, with students at the fastest universities rewarded with debt-forgiveness.

Policy:

Climate change has risen to become one of the big political issues of the day, especially for young people whose futures will most be affected by the consequences of a warming planet.

Pupils in schools and students in universities have walked out of their studies to protest against climate change and demand action, and there is growing frustration among young people in Britain. Young people should be given more encouragement and support to bring about the changes they wish to see with regard to the movement of the UK economy to net zero status and to better understand the practical challenges of doing so.

A simple way to help achieve this is to run a competition for students to make their universities net zero as soon as possible.

Universities conduct and publish the research showcasing the threat of climate change and are home for more than 2 million students a year in the UK, yet they are not yet net zero themselves. They are therefore an obvious location to start the shift to net zero.

To encourage such a change and show that the government is serious about tackling climate change, the government should run a nationwide competition to challenge students to make their universities net zero as quickly and effectively as possible (ideal in Scope 1,2 and 3 emissions, but at the very least in both Scope 1 and 2 emissions).

To incentivise such a transition and to show how the intelligent use of financial markets and demand pressures can help achieve social and environmental change, the government should offer to cancel all student debt of British undergraduate students enrolled at the time the first university achieves net zero status.

The second and third universities to achieve the goal should have half of the student debt of British undergraduate students enrolled at the time cancelled, and students at any university that achieved net zero within 12 months would have £10,000 of debt forgiven to incentivise rapid change at all universities.

By way of example, if the first university to achieve net zero status had 5,000 UK undergraduate students enrolled at the time, the full 3 years of student debt of those students would be written off by the government.

Such a scheme would create a bold and powerful project to effect change in the country and show the challenges and opportunities of transitioning to a low carbon economy.

It would also show that fighting climate change can be profitable; students could get upwards of £50,000 of debt written off. Since most student debt is written off eventually anyway, the cost to government would not be that large, yet the impact on the drive for net-zero could be

significant.

Bold action is required to fight the global threat of climate change, and young people who are passionate about the issue need to be given more support to empower them to drive the change to a low carbon economy as well as an insight into the practical challenges of achieving such change.

This proposal would offer clear financial incentives for students to drive change and help showcase the way forward for the country at large. Perhaps most interestingly of all, even students who were climate change sceptics would be incentivised to push their university to net zero to benefit from debt forgiveness.

The fight against climate change has focused too much on moral calls and not enough on engaging people's self interest. This proposal would help to show the value of engaging that self-interest to drive change.

As the saying goes, 'there is only one green issue everyone agrees on; the more Greenbacks in their pockets, the better'.

ID: 1209-11 - Category: Environment

Help people, help nature - fairly

The proposed Community Areas of Landscape Value (CALV) will be part of a national network – a grid – of green spaces that are accessible to us all wherever we live. People will not have to travel to find green spaces, the green spaces are already amongst us where we live. CALV will be areas that complement the existing ‘family’ of designated green spaces. They will inevitably have considerably lower levels of legal protection than the leaders such as National Parks and AONBs but their importance should not be seen as diminished. In order to make CALV fulfil their purpose of being available for everyone they will need some security through designation. This must be organised at grass-roots level. It is for communities to identify and nominate the green

and grassy spaces that matter to them, rather than potential places to be judged or allocated at a national level. Neighbourhood Planning has successfully shown how this can be done, and the same framework and process could be extended to designating CALV. Once the CALV are identified by the local community, they will then be managed by local people drawing on the knowledgeable, often passionate, expertise that comes from people who feel they are part of a place. This concept is not new. To quote Baba Dioum, 1968: In the end we will conserve only what we love, we will love only what we understand, and we will understand only what we are taught. The pandemic has shone a light on the natural assets that are an essential part of people's lives – the places where they go to sit in the sun, walk the dog or build a snowman. These are urban as well as rural, and encompass, for example, a canalside, a redundant cemetery, moorland or wetlands. It will not be difficult to involve communities in creating and managing CALV. It will build on the learning of the success of over 9000 community businesses, approximately 100,000 social enterprise companies and the growing number of Community Land Trusts which are all legally structured, supported by professionals working for organisations like Co-ops UK, Locality, Plunkett, Community Land Trusts, many supported by Power to Change. The monolith of central government can be slow to react to the needs of individual communities. But in order to make CALV work the Department for Environment, Food and Rural Affairs (DEFRA) and the Ministry of Housing, Communities and Local Government (MHCLG) must provide sufficient national oversight to allow communities to move forward and be more self-sufficient. The benefits of CALV are considerable - Health: The evidence base linking health and greenspace is compelling, and supports innovative thinking about its potential to help achieve local priorities. Already there are successful health interventions, such as green social prescribing initiatives where people are helped to begin using greenspace and at the same time get to know other people in their community. Education: When children are engaging with the natural environment, both formally and informally, they develop specific knowledge. They show appreciation and concern for the natural environment when they explore the relationships with other living and non-living things, and develop an awareness of the impact that human activity has on the environment. Resilience of communities: Communities will be brought together in the care of a protected landscape. They will understand how shared actions and a connected management of resources can develop resilience. For example to help protect homes with water management, improve river quality, link people with local food producers and suppliers or find opportunities for community green energy schemes. Climate Change: Biodiversity loss and climate change present significant risks to everyone's well-being and way of life. The creation of nature-rich greenspace and the restoration of habitats will help mitigate and provide adaptation to the environmental and economic impacts of climate change and biodiversity loss. Each CALV may be relatively small, but their combined acreage across the country will be significant. The enterprise and capabilities of local people working in their communities will make a considerable difference –

for example: • Urban greening – from planting street trees to the creation of pocket parks and vertical gardens on buildings – can provide habitats for wildlife at the same time as keeping our cities cool. By linking these areas we create valuable wildlife corridors. CALV could extend along rivers and canals in towns to link the urban with the rural. • Restoring upland habitats such as peat bog and woodland removes carbon from the atmosphere, protects soils, helps replenish aquifers and can reduce the severity of flooding thus protecting communities and businesses. • Restoring nature in the countryside can improve food security by reversing the losses of bees and other pollinators. New nature-rich areas are attractive to people as well! • Accessible, protected Community landscapes will encourage more people to walk and cycle around these areas thus reducing the use and reliance of the car to access green spaces. Economy: Local Authorities have shrinking budgets and are finding it harder to manage even the current protected greenspace; another solution has to be found. Communities are resourceful and here is an opportunity for them. Investing in nature generates future employment opportunities and supports economic productivity in the tourism and related environmental goods and services sectors The opportunities post COVID 19 CALV will become a vital part of our national natural asset. They will connect more people more closely with nature – one of the aims of the recent Planning White Paper. They will increase the natural capital of the places where we live and help us achieve Climate Change targets. But above all there is a fundamental moral imperative that drives this initiative. National Parks and AONBs emerged after WWII when the country 'built back better'. The traumatic year, or more, of COVID 19 has ruthlessly exposed the inequalities in our society. By creating CALV we have an opportunity to help people, help nature - and to do it fairly.

ID: 997-11 - Category: Environment

Requirement for a Reserve of former officials to support the Civil Service in a crisis.

Summary

Requirement for a Civil Service Reserve.

Although the Covid 19 pandemic put immense pressure on the NHS, it has also put great strain on the wider Civil Service which has had to react to new challenges, spilling over from Covid, while keeping the country running with all its normal needs. The Civil service needs to establish and formalise a Civil Service Reserve of former officials, which it can call on to support, supplement and reinforce existing officials when a similar crisis strikes. These are an increasing likely to occur given environmental and global challenges. Cost for the Exchequer should be low

or negligible. Such a system would also mitigate the costs of calling-in civilian consultants, or volunteers, which may nevertheless be needed at some stage.

Proposal

The UK Civil Service should institute a programme among its staff, similiar to that adopted by UK armed forces, so that the Civil Service can in the future call back to its ranks those essential and experienced staff which could be deployed in a crisis to support the existing, full-time staff over an extended period.

Ministers, with advice from senior officials, would decide when the threshold to call on the reserve had been reached.

This would have to be run on a voluntary basis for staff presently coming up to retirement or leaving the Civil Service for other occupations. But in time, the requirement to be deployed in a crisis after leaving the Civil Service could be a condition of service.

Departments would be in a position, by accessing records of service, to identify just which former officials were well-placed to fill gaps that surfaced during the crisis, best to fit requirements.

To ensure former officials were as up-to-speed as practical with new developments, policy and procedures in the department, as well as maintaining necessary clearances to a standard necessary for supporting day to day work, they would attend the department for, for example, five working days a year. During this time they would support the department's daily operation, but also aim to refresh a working knowledge and familiarity of the Department sufficient to fulfil as best as possible a supporting role in a crisis.

Like the UK's military reservist programme, the employers of former civil servants would be asked to maintain the salary of those attending their former Department for the annual refresher update of five days, or longer as needed during the crisis up to an agreed time limit, perhaps two months. Former civil servants drawing a pension who had retired could be entitled to travel expenses.

To mitigate travel cost to the exchequer for the annual refresher period, former Civil Servants in the Reserve who lived a distance further than 50 miles from the place of work could be asked

either to work from home, or to attend a nearby Civil Service department office from where they could operate. In a major crisis, the Civil Service would retain the right to deploy former staff where necessary, but every effort would be made to minimise disruption and distance from home. If required for longer than the two month period suggested, then HMG would need to consider covering the salary of the Reservists. Not to do so could disincentivise employer firms from agreeing to support the programme and freeing up their staff.

ID: 2022-11 - Category: Environment

Have you dropped the bottle?

I propose a widespread advertising campaign with the above title and focussing particular on the plastic bottle.

Being seen in public with a single-use plastic bottle must become socially unacceptable. It needs to be seen as equivalent to wearing a fur coat, or even worse.

I suggest that everyone should be encouraged to reduce the amount of plastic they buy by at least fifty containers/bottles a year. We should be incentivised to post on social media about the bottles we did NOT buy. We will be incentivised also to complain about the poor practice/laziness of manufacturers.

Substantial prizes (mortgage paid off, for example) should be awarded annually to at least ten families who can demonstrate their commitment to reducing plastic usage, and school students nationally should also be rewarded generously (free university tuition, for example) for putting their minds constructively to this problem. All schools should be obliged to pay annual visits to their nearest landfill site.

The cosmetics industry has grown out of all proportion. New more sophisticated manufacturing processes have led to a great abundance and diversity of enticing and attractive products for everyone. But manufacturers of cosmetics will need to come absolutely clean. All those selling

into the UK must be obliged to sell products in bottles and tubes that they will subsequently accept back and recycle. Each time a bottle is returned they must return to the customer a small deposit. They can outsource this system but it must be accredited and a video on their website must show the recycling process. They will also be obliged to contribute to research into biodegradable plastics and new methods of recycling.

Large portals such as Amazon and Ebay must only be allowed to sell to the UK if they are complicit with a range of new regulations and prepared to pay a stipulated amount per purchase of any plastic item towards research and recycling. The same rules should apply to supermarkets and food packagers. Moves are already being made in this direction but not enough is being done and the speed of change is far too slow.

There will be annual booby prizes and bad publicity (perhaps with a comedy angle) for the worst manufacturers and websites.

Government will appoint a high profile recycling tzar - someone effective (of course) and non-political.

Please, let's do this.

ID: 560-11 - Category: Environment

How to finance the Government's Covid Deficit.

By the time the Covid-19 pandemic is behind us - so at least until the end of 2021 - the Government's borrowing requirement will probably have increased by somewhere around £350 billion.

To help the Government finance this the aim would be to take as much as possible of this

effectively 'off balance sheet'.

This would be achieved by issuing a variant of ' War Loan' to retail and wholesale domestic and international Investors. The Country has been through a traumatic event in financial terms that is not dissimilar to fighting a War. As on previous occasions to pay for this the Treasury and Bank of England need to come up with a new financial instrument that will attract wide domestic but also international support to finance viably the costs that have been incurred.

For this measure to be successful some of the previous features of War Loans raised would be followed with additional elements to attract widespread market support:

- the size of the Issue will clearly depend on market appetite which will in large part rest on the features outlined below but the object would be to raise not less than £100 billion.

- The loan/ Issue would have a 30 year maturity and a ring fenced sinking fund contributed by the UK Governemnt of not less than 3.333% per annum. The sinking fund would either be rolled up or used, after an initial 3 year grace period, for a window of annual redemptions up to the amount of the accumulated sinking fund with priority given to UK resident domestic investors. On a £300 billion issue there would be an annual sinking fund of £10 billion which is eminently financeable by the UK government.

- the Issue would carry a fixed coupon sufficient to attarct domestic and interantaional support. In current market conditions this would probabaly need to be in the region of 2.5% to attract wholesale investsors such as Institutional pension funds and life assurance companies and funds. On a £300 billion loan this would amount to an annual servicing cost of some £7.5 billion. Again this additional annual cost is well within the Government's capacity.

The above is not an exhaustive list and it will need to be refined but such an Issue if well structured should attract very sizeable demand. Clearly the Government can continue to fund its bugeoning borrowing requirement on the current 'pay as you go' basis of issuing short and

slightly longer term gilts without any ring fencing and in the short term this may be the cheaper option at the current level of interest rates. There are several reasons for thinking however that the more prudent and forward thinking approach is to take the maximum possible amount off balance sheet while benign conditions prevail:

- Interest rates at which the Government can borrow are likely realistically only to go up rather than down over the medium term.

- this would be a good instrument to give savers, including UK domestic retail savers, a reasonable and secure rate of return on cash deposits that is not currently available in the market particularly since the recent changes to NS & I savings rates.

- attracting new (including international) money to the UK materially lowers the Government's total overall borrowing requirement freeing up capacity to invest in supporting new investment in growth sectors of the UK economy.

Other governments may well come up with similar ideas sooner rather than later. The UK post a smooth Brexit transition (one of the few benefits of Covid is that the media hysteria about future trading impediments have been largely overshadowed and allayed) has a good credit history and is in a relatively strong position to undertake successfully such a large Isuue but it needs to get on with it if it is to have prime and first mover advantage.

ID: 115-11 - Category: Environment

Local power generation

Why not make it a requirement that all new build commercial and domestic properties must include solar panels on their roofs? This would: provide more jobs; contribute towards the UK Carbon net zero targets; provide for a more robust, distributed power generation base; stimulate UK manufacturing in the “Green” sector.

ID: 1065-11 - Category: Environment

Exercising mind and body with hands-on education of countryside biodiversity.

We are all familiar with the yellow arrows indicating the general direction of a footpath across a

field. What we don't know is what we are likely to encounter as we cross that area of land. If we are not sure where the true path runs do we walk around the perimeter or walk the quickest route across the middle? Are livestock grazing? Are the grass-like fronds a crop or are they weeds on fallow land? Should we care? After all, it's not our land, but we have a right of way through it.

Yes, we should care. Our success as a species is inextricably linked with all others. The more diverse an ecosystem, the more chance we will have of adapting to climate change and all the challenges it brings.

COVID-19 is impacting us all, but especially parents who are learning, perhaps for the first time, how their children acquire knowledge through play and hands-on experience. By educating and engaging with their children, parents also seek to become better informed themselves. Let us use this opportunity of increased family activity outdoors to instil respect and wonderment of the countryside and all organisms that live within it whilst adhering to the country code to reduce negative effects on crops and livestock.

At each entrance gate/stile of a footpath a small information sign will inform the public what is being grown or grazed in the field. The route should also be named, or referenced by map references eg TQ 663 446 'River Walk'.

Placing upright wooden marker posts at strategic, visual points approximately 250 metres apart along the footpath will help direct walkers. If constructed within the path itself they shouldn't impact on the farmer's management of crops, but could be removed if/when necessary. Each post shall have its own unique reference or QR code.

On each of the post's four sides, laminated inserts can be attached containing basic facts pertaining to the area around the post. For example:

Side 1 - WILDLIFE - Look for Grey wagtail (shallows), mink (under river banks). Observe birds circling in the sky and note tail shape - buzzard/ red kite. Watch for deer on woodland edges - roe/fallow deer.

Side 2 - BIOLOGY - Observe holes in sandy soil by path - home for mining wasps. Listen for buzz of bee fly. Find flowering plants - comfrey - observe small holes at base of flower made by short-tongued bees to access nectar. Observe which trees are flowering and look for pollinating insects. Listen and identify birdsong eg chiffchaff and blackcap. Feel the bark on the trees - which is rougher, ash or oak?

Side 3 - GEOGRAPHY - State longitude/ latitude and altitude. Name the geographical features observed eg meanders and soil type found

Side 4 - ENVIRONMENTAL - State ecosystem services of the nearest tree (Treezilla has an interactive website) - eg, this oak tree removes 57kg per year of carbon dioxide from the atmosphere by photosynthesis and intercepts 7 cubic metres of water through its roots.

All factual statements will have a link to enable further studies. A website would be created that could eventually be connected to all regions of the UK. The information shown should be chosen at student level from primary through to GCSE and A-Level students.

It would be hoped that when out walking, information on the posts would be read and the posts reference number logged. Some parents would have prepared ahead to have information to hand, but the majority of families are likely to record the post number and explore what was found on their return home. For instance, a large bee fly - triangular in appearance, may have been observed by a mining bee's entrance hole. Exploring the web page later that day would explain the action of the bee fly 'kicking' its eggs into the mining bee's home. The next time the family go for a walk, their children will already be looking for more 'cool' insects!

Another example could be if a large bird was seen circling overhead. Observational skills will help identify it - a fork tail = red kite, rounded wings and tail = common buzzard, same size as buzzard but with a distinctive call in flight and black = raven. Checking on the website will indicate if any of those species have been logged at that location previously.

Using map references on the posts at each end of the field will also help with map reading skills, as the location can be verified if compass skills were used rather than just following the posts!

Schools could encourage pupils of all ages to become involved, through wildlife/environmental biodiversity clubs or utilising skills needed for exams in a number of subjects including IT, biology, geology and geography. Duke of Edinburgh and Scouts/Guides skills of compass and map -reading would also be covered!

All of these laminated information tabs can be replaced depending on the interest of those monitoring the posts. 'Eco-warriors' could decide what information to place on the posts. If other wildlife is observed, updates can be added to the website too.

Farmers will benefit as walkers will stick to the footpaths, especially if keen to see the information on the next post. The visitors will gain a greater understanding of nature and of its interconnections with farming practices eg pollination of crops and fertilization of soil. Children will learn through use of all their senses, expanding their horizons beyond their smart phones. Walking with mum and dad will be more fun and will instil confidence if they can educate their parents with the information they have gleaned about the bugs and plants they find on their walk. Greater knowledge of the countryside around them will create a desire to protect and preserve the natural environment promoting continued enjoyment of the local footpaths for years to come, knowing it is the responsibility of us all to maintain biodiversity and preserve the countryside by taking home only memories, not mementoes.

ID: 2237-11 - Category: Environment

Create a more sustainable country – build comprehensive pedestrian and bicycle infrastructure without additional expenditure

The vision

Despite the suffering, Covid-19 has been a wake-up call. Reduced motor traffic has helped us rediscover the convenience, pleasure and health benefits of walking and cycling to work, shops, and other essential activities, as well as to parks and the countryside.

We have glimpsed a different way of life, free from car-dependency with its congestion, noise, pollution, environmental damage, injuries, fatalities, inactivity-related illnesses, and its erosion of community and neighbourliness; not to mention the £4,500 yearly cost of owning a fast-wasting asset which spends 95% of its existence parked, usually in public space.

All we need is safe, attractive and convenient alternatives to the motor car, and people will use them. For 40 years we have been talking about building more pedestrian and bicycle infrastructure, but now Covid has opened our eyes. Public support is strong. Never has the need for action been clearer.

The challenge

All we lack is the political will to make this a clear spending priority. To date our disjointed scraps of permanent walking/cycling infrastructure have been financed piecemeal by bits of section 106 funding, money remaining from abandoned roundabout plans, plus the odd LEP grant. This is no way to provide the steady, long-term investment needed to change the travel habits of a nation and make our villages, towns and cities quieter, healthier and more welcoming.

Contrast the Netherlands where they've built a dense network of cycleways and footpaths, and plentiful bike storage. There, 50% of schoolchildren cycle to school and 30% of all journeys are

by bike (a mere 2% in Britain, including in flat areas). Britain has made no such national investment, even though we've seen how examples of limited cycling infrastructure in Cambridge, London, and York have hugely increased bicycling as a way of getting to lectures, work, the station and the gym.

The opportunity

In one small area of Britain, however, we are truly doing it right - the renowned 20 mph-limited Waltham Forest 'mini-Holland' with its low traffic neighbourhoods, segregated cycleways and plentiful bike storage, all planned as a whole. The cost of transforming the entire borough to Dutch standards will be about £175m, less than 6 miles of motorway and just £632/resident. Still only 25% complete, it has already resulted in a 15-20% 'modal shift' from car to walking and cycling, a 90% reduction in illegal air pollution and a renaissance of local shopping and neighbourliness.

Make the same £632 per capita investment for all 56m urban-dwelling UK citizens over the next 20 years and we will transform British towns and cities to a similar standard for less than £36bn, about 10% of our expenditure on tobacco during the same period, assuming current rates.

And here's how we can find £36bn and a whole lot more in the next two decades without a penny of extra spending.

Making a start – a down payment on change

Britain is deeply ambivalent about its transport priorities. The government's recently published £27.4bn '2020-2025 Road Investment Strategy 2' allocates £14bn for new roads and

enhancements. Yet the same government department has recently published ‘Decarbonising Transport Plan’ and ’Gear Change‘, which advocate reductions in car usage and ‘making public transport and active travel the natural first choice for daily activities’. These recommendations make sense because all over the world we see that building roads to expand capacity leads only to more cars and increased congestion. In this changing political climate now is the time boldly to re-allocate these £14bn to pedestrian/cycling infrastructure and make a wholehearted commitment to a healthier approach.

The rest of the money

Where will additional funding come from, and can we afford it? Surely we can. Consider the costs of not doing it. Let’s look at three examples of the costs to society of our current car-dependent lifestyle.

Congestion costs 6.9bn/year (INRIX, 2020) with the average motorist spending 115 hours/year in traffic jams. 42% of trips are just 1-2 miles, yet 62% of them are by car. As our build-out of walking and cycling infrastructure starts to change people’s travel choices, removing many of these car journeys would progressively reduce congestion costs over the next 20 years.

Then let’s look at the £10bn annual costs of fatalities and serious injuries from collisions (DfT). Lowering vehicle numbers and speeds (20mph in residential areas) will pay dividends not only in lives saved but in costs reduced.

We also know that healthcare costs could be greatly lowered by a more active lifestyle. One-third of children and two-thirds of adults are overweight (Public Health England Obesity Statistics February 2021). The yearly cost to the NHS of obesity alone is £7bn and to the wider society £27bn, total £34bn. Just 40 minutes a day of walking or cycling greatly reduces susceptibility to inactivity-related illnesses.

Over the next 20 years reducing these total costs of £1.018tn by just 10% – a very conservative estimate and an eminently achievable goal – would yield savings of £101.8bn.

The result – a better future

Building out the Waltham Forest-style project to the whole of Britain for £36bn will bring about dramatic improvements to our lives. And that might only be a beginning. The £101.8bn in savings – and it could be considerably more – provides a funding stream for an even more comprehensive re-imagining of our national transport priorities, including linking up the country with a network of cycle routes and footpaths as in the Netherlands, and investing in bike-carrying low-carbon buses and trains to enable integrated long-distance non-car journeys.

This vision is no pipedream but already achieved in the Netherlands. Embracing this more holistic vision will lead us fully to appreciate our uniquely beautiful countryside and historic villages and towns, hear the birds sing and breathe in fresh air as in the May 2020 lockdown, achieve our 2050 Co2 net-zero target (27% of UK emissions are transport-related, mainly cars), and bequeath our children a country where people meet their neighbours and their children play in the streets.

ID: 2229-11 - Category: Environment

A re-usable COVID-19 testing system, which is sustainable and accessible.

Re-usable COVID-19 tests need to be reliable, sterile and easily accessible to everyone. Due to the re-usable nature, they can be supplied more widely and have less of a carbon footprint. Many single-use plastic products which until recently have been used on mass, e.g. women's sanitary products have now had new, more sustainable alternatives put to market e.g. the menstrual cup. This same principal can be applied to COVID-19 testing, as similarly to the menstrual cup, the testing equipment would need to be easily sanitised at home after each use and like the menstrual cup, this could be done either in boiling water or in the microwave.

The swab used in the test could be made from a material such as silicone (due to its heat resistance characteristics), similarly to menstrual cups, and sanitised directly after use. Instructions for this home sanitation process would need to be included in the testing pack, but it could entail either submerging in boiling water or being placed in the microwave.

Similarly to the swab, the extraction tube could easily be sanitised and re-used after testing.

The buffer solution used in the testing process is divided into small plastic capsules which are then double packaged. Could this not be produced in small bottles with an airtight pipette top, and directions included for how many drops should be used per test? This alternative would substantially lower plastic usage, as the bottle wouldn't need to be plastic-wrapped.

The plastic waste bags are not necessary to use at all, unless the test comes back as positive in which case, the safe disposal of the test would be important. However these would not be needed at all, if most parts of the test were re-used.

The test strip would be the hardest part of the testing kit to make sustainable and re-usable. The most similar product available on the market would be the digital pregnancy test, however producing these for nationwide distribution would be a long, and expensive process which is unlikely to be government funded. Due to this, there would need to be a charge for this part of the testing kit. However the market for this could be bigger than we realise, as many people who strive to live as sustainably as possible are likely not content with the current weekly disposal of COVID-19 testing equipment, so would happily make a one-off payment for a test strip which could be used unlimited times.

This may not a realistic fix to the sustainability issue of disposable COVID-19 testing, however I do think this issue is something that needs to be further considered and even making one product within the testing kit re-usable could make a significant difference.

ID: 2212-11 - Category: Environment

Civil Critical Implementation Teams

This idea addresses a method to boost the recovery of the UK economy following the COVID-19 pandemic, with particular focus on key infrastructure projects, while utilising the resources that may become available from military reduction in force.

Benefits could include:

- Significant cost savings through more efficient implementation of projects.
- Boosting morale in the military by offering an onward career path.
- Retaining “reserve” access to highly trained military personnel.
- Extended use of some equipment.
- Enhanced progress towards carbon reduction targets.
- A boost to the apprenticeship scheme.

During the crisis, the re-tasking of military personnel to address urgent logistical, construction and support requirements made possible several key projects, from Nightingale hospitals to PPE distribution, and manning both testing stations and, later vaccination centres.

The levels of support were wide ranging, covering planning and management to “boots on the ground” personnel in support roles building hospital wards, moving vast quantities of equipment and supplies, wielding test swabs and hypodermics. All with the respect and gratitude of the vast majority of the public.

I propose that this type of support could be continued and formalised in future, by utilising the hard-won skills of our military planners and implementers within an organisation of “Civil Critical Implementation Teams”.

Rather than simply lay off or retire members of the armed forces, they could be transferred to a civilian CCIT organisation. There, they could apply their wide range of skills, and their discipline,

to assist with implementation of key infrastructure projects. The huge “electric car infrastructure” project in the UK could really benefit from such a well-trained and disciplined organisation at its helm.

By having the teams undertake regular refresher and training courses, in the same way as the Territorials, the teams could form a useful boost to military reservist strength. Depending upon preferred government spending plans, perhaps even make the CCITs a part of the Territorials in some way?

There is discussion within the defence review of using more hardware rather than “boots on the ground”. To just write off this valuable human resource would be a travesty given the investment already made in and by these dedicated people. Therefore, why not instead redeploy them to assist, train, and perhaps oversee, new civilian teams that could support the government’s major policy implementation plans, both home and abroad?

A bonus may come from the redeployment of obsolete or redundant military equipment as well. For instance, heavy construction, cable laying and transport equipment. The teams could include personnel already skilled in the use of such equipment.

Importantly, this idea would demonstrate how much we as a country value the skills and dedication of the military and are not prepared to simply write off their experience and commitment when we need to restructure.

The Civil Critical Implementation Teams could provide opportunities and benefits for government, including:

- Creating a core team of people who have practical expertise in:

o Leading and planning critical initiatives to achieve stated objectives in high stress or time-critical situations.

o Identifying the most efficient and effective routes to ensure successful delivery of objectives.
o Leadership skills that produce the best results from their people.

o Taking aboard people with few skills and turning them into highly skilled individuals that deliver. (Thereby perhaps a boost to the apprenticeship program as well).

• Boosting morale within the military by addressing “where do we go from here” for some personnel facing redundancy or retirement.

• A new way of looking at budgets; the cost of these teams could be applied to the budgets of the project are supporting rather than to the defence budget whilst they are engaged in that activity.

• Provide training and management support to private sector companies engaged by government to ensure that the projects are brought in on time and to budget. We have already seen how successful this can be with the Vaccine Roll Out.

• Enable the government to retain armed forces personnel such that if they were needed to support urgent defence or humanitarian events around the world they could be reassigned to that role.

I believe that this idea has many potential benefits to the government, the military, the environment, the economy, and the country as a whole.

ID: 1893-11 - Category: Environment

Driving Reassessment

I received my driving license 33 years ago. In all that time my skills have never been reassessed or updated. Yet there are other things in my life, far less dangerous than driving, that I am expected to update.

Example first aid - there is a requirement for me to have a first aid certificate to do my job. I did my 1st first aid course 40 years ago and I have never had to use that skill.

Electricians have to be assessed annually, gas fitters every 3 years. But deaths from electrical or gas installations are minimal and always have been.

On average 3,000 people a year are killed due to driving annually on UK roads.

This figure has not reduced since the introduction of speed cameras or the Speed Awareness Courses. Vehicle incidents happen and will always happen with fatalities, but most are not due to speeding but bad driving. Essentially if you are speeding then that is bad driving.

Drivers need to be taught to be sensible when driving.

Anyone who drives for a living should be assessed every 3 years. This would not be a pass or fail unless the driver is that bad. This would be a practical (ie driving with an instructor present) as well as a test paper just to remind and update skills.

People who drive for a living - postman, delivery drivers, sales people, sales representatives, farmers, trades people, construction workers, anyone who drives a van or car for a company on company business or for their own line of work.

The idea of putting a speed camera van at the bottom of a hill, Monday - Friday 9am -5pm isn't there to improve driving, it is there to fine people to raise money for the Treasury. It doesn't

catch, stop or educate boy racers driving for fun at night.

I witness some appalling driving, but they are not speeding so the chances of getting caught are minimal. I followed a van for 10 miles. The driving was driving erratically. When I drew next to him at the traffic lights he was on his phone! But that's OK as he wasn't speeding he was driving dangerously.

At the age of 68 everyone should be required to take the a driving test if they wish to keep driving and that should continue every 3 years. This would be a pass or fail course.

The benefits are obvious - less crashes, less fatalities, less police, ambulance and hospital time and expense. Maybe cheaper insurance.

It would generate a lot of employment for driving assessors and may generate more money than speed cameras for the Treasury in vat and tax revenues and save money not employing camera teams.

But it can't be introduced without giving something back. Remove all speed cameras, fixed and mobile units. Scrap the Speed Awareness Courses (driving is a practical skill not reading a book) and bring in reassessment courses for professional drivers.

ID: 1891-11 - Category: Environment

Summary of a paper outlining a scheme to prevent catastrophic climate change.

Introduction And Aim

There is impending ecological disaster from climate change due to carbon emissions; humanity is not taking the sufficient and effective policies and actions needed to reverse carbon emissions. Countries will not achieve their internationally agreed emissions targets and the absence of such policies will also result in economically damaging and politically divisive emergency action as environmental damage leads to demands for emergency precipitate responses.

This paper outlines a scheme for nations significantly to reduce carbon emissions. The scheme is practical and consists of a single set of tools that will cause rapid and substantial shifts in consumer behaviour through creating a market that seriously incentivises “green” behaviour throughout every part of the economy. The advantages of this scheme over any others are:-

• Politically popular • Minimal state regulation required • Government funding needed is essentially nil • Economically stimulating • Wealth redistribution

The Problem And The Need – Sustainable Global Consumption

Rapid and substantial reductions in carbon emissions require global industry to adopt complex, interrelated, vast, wholesale changes in sourcing, supplier management, raw material usage, fuel usage, transportation and production/manufacturing. Such changes will only happen when global consumers demand them through their buying behaviour. Buying behaviour is not changing because of a number of seemingly intractable barriers:-

• Lack of alternatives (or they are perceived as inadequate or too expensive) • Lack of incentive • Lack of precise knowledge • Perceived unfairness (to individual sacrifice when others do not do the same)

Only overcoming these barriers will lead to the required massive change in attitudes of consumers so they consciously make pro-environmental decisions every time they purchase any good or service. This needs a paradigm shift for billions of people.

Elements Of Shifting Consumer Behaviour – Changing Attitudes

Any mechanism to overcome the barriers must recognise all the following:-

• Self-interest guides behaviour; relying on altruism is insufficient • The self-interest basis is determined by each individual, not the state. • Sacrifice is insufficient as an incentive to change behaviour • People want a real choice if they are to be able to choose greener options • Information is needed so people can make considered decisions in their own interest • People may make different choices – and not be vilified or penalised for doing so

Any mechanism that acknowledges these realities will have the following 4 features:-

• "Environmental Price Tag" (EP) for every product/good/service – providing succinct yet precise knowledge about their environmental impact

• Incentives to not make the purchase OR to buy a greener alternative (ie lower EP).

• An Effective Choice of alternative(s) for every purchase.

• No Perceived Unfairness if someone else makes a different choice.

A Unified Market Mechanism To Reward Consumers For Making The Green Choice And Lowering Carbon Emissions

Concept:- Based on national CO2 emissions targets, every citizen has the right to cause a certain amount (and no more) of CO2 emissions (their "allowance"). If they wish, they could cause fewer emissions and trade/sell part of their allowance to someone who wanted to emit

more. Every year, an individual's allowance decreases in line with the national target; even allowing for trading, overall emissions must decrease. If markets responded to this concept, then businesses would strive to produce low emissions goods and services in order to gain/retain market share and consumers would find ways to reduce emissions in order to trade their allowance for something they find more valuable.

The Market Mechanism is based on making entire economies totally responsive to this concept of allowing individuals to only buy that which their emissions allowance permits unless they buy more emissions allowance from those who choose to pollute significantly less.

• Governments create a unique "crypto-currency" denominated in grams CO2 ("CCreds"). Use current blockchain and payments technology to establish "banking", accounts and related transactions.

• Governments calculate a "Personal Environmental Allowance" (PEA) for every eligible citizen based on the total annual target for national carbon emissions divided by the number of eligible citizens.

o PEA denominated in CCreds or g CO2

o Government will credit individual CCred accounts with their PEA once per year

o Every individual's PEA will reduce year on year.

• Governments collect CCreds from all primary producers and importers of fossil fuels; the value collected to equal the carbon emissions (in g CO2) of the fuel/oils.

o In order for them to collect the CCreds they must surrender to the state, the businesses will be forced to dual price all their sales with both Environmental Price (CCreds) and cash price.

• All subsequent sales by all businesses in the onward supply chain will be dual priced as each business in the chain collects the CCreds it needs to pay its own suppliers. This "pull" effect will drag the new currency through the economy

o Government feeds the crypto-currency into the economy at one end (consumers) and requires primary producers to surrender them back at the other end.

• Consumers may trade unused CCreds for cash money in an open market place, increasing the incentive to “go green” whilst allowing those, who need/wish to emit more, to do so

• The Mechanism will bear down on carbon emissions by:-

o enabling consumers to make informed choices (the dual price – the Environmental Price Tag)
o providing more low carbon choice as business seek to minimise the EP of their products in order to remain attractive

o reducing the available PEA every year

o incentives – making it very attractive to forgo some carbon intensive activities and selling the saved PEA; thus reducing perceived unfairness

• Requires minimal state expenditure or regulation and control because the EP behaves like “real-world currency”, making it almost impossible for business to evade the system. Allows natural human/consumer behaviour to flourish whilst pervading every economic interaction between organisations and individuals.

o If implemented in full and without caveat will possibly incentivise consumer behavioural change, with minimal resistance, quickly enough to prevent catastrophic climate change.

ID: 1851-11 - Category: Environment

The wheels of change: building better bicycles for a better Britain

A revolution in bicycle design could be kick-started by a government-run competition. Entrants would be instructed to submit designs for a radically new model of bicycle, which would have to meet a strict set of requirements, including (but not necessarily limited to): truly puncture-proof wheels (perhaps moving away from the inner-tube and tyre combo), non-slippable chains (or an alternative to the chain altogether), a much more durable braking system, and a simpler alternative to the gearing system. The bike should also be lightweight, and extra credit would be given to designs which made use of sustainable or recycled material.

The prize money would have to be of sufficient value to incentivise professional engineering outfits to enter; however, in the spirit of the Heywood Prize itself, students and garden-shed

inventors would of course be encouraged to participate as well. The government should also emphasise the significant kudos that society would accord to the winning designer – this would not just result in their short-term financial gain, but it would also offer them the chance to be immortalised as someone who contributed to society in a truly meaningful and long-lasting way. Think the Wright brothers on two wheels.

We have recently seen the incredible success of the teams of scientists who created the COVID vaccines at top speed, something that many had predicted would not be possible and certainly not in such a short time frame. This example should act as a great motivator and also as a check on the naysayers – negativity and pessimism should fall by the wayside in the face of the past year's scientific achievements. Two centuries' inertia in bicycle design could be swept aside by the spirit of the vaccines.

A shortlist of promising entries – selected by a pre-appointed panel of experts – would be drawn up, with prototypes made and tested. Once the winning design was chosen, the bike would then be manufactured in Britain, forming part of the government's 'levelling up' agenda: the production of these new bikes could create hundreds of jobs in parts of the country particularly badly hit by the economic consequences of the pandemic, and would become a symbol of the rebirth of the country's long-neglected manufacturing base. The finished bike would be sold through existing bike retailers, with the cost subsidised for those in receipt of welfare payments in order to ensure that it was affordable to all sections of society.

Mentioning cost raises the elephant in the room. Yes, this would be an expensive venture, however the expense should not fall on the government alone. There are increasing numbers of enormous companies looking to improve their image – BP (oil spills, fossil fuels) and Amazon (tiny tax contributions, poor working conditions) both spring to mind, to take just two examples. If the government played its cards correctly, it could strike a deal with a company of this sort to defray the cost of the project. This would be a win-win partnership: the company would get to burnish its image through close association with a non-polluting, obesity-busting, affordable mode of transport, while the cost to the government (and therefore taxpayers) would be significantly reduced. What's not to like? Private companies regularly make significant financial contributions to government-run projects like the Olympics, for instance, and if the government

were to emphasise the historic importance of this scheme, I don't see why it should be any different here.

Finally, I am aware that the success of this whole project would rest on breakthroughs in engineering which of course can't be guaranteed – no one has managed to come up with a less error-prone gearing system in 200 years, for instance, so why should now be the moment? There are two reasons why I think the time has come. First, because of the example of the scientific breakthroughs of the last year: as mentioned above, the spirit of the COVID vaccine will animate many different endeavours in the coming years, and this could be one of them – if ever a reminder were needed of human ingenuity, the vaccinators have provided it. Second, because we have got too used to accepting mediocrity in bicycles and have never demanded better. It suits bicycle companies to continue manufacturing bikes as they currently are, because broken bikes require new parts, and new parts equal big profits. It's time to break that cycle, and if 200 years of the market haven't done it, decisive government intervention could.

We've shrugged our shoulders for too long about bad bikes, such that they have just become accepted as one of the irritations of life. It need not be like this, and society's growing concerns about climate change and poor public health will mean that it's imperative that it isn't like this for much longer. We need better bikes, and this could be the way to do it.

ID: 1748-11 - Category: Environment

Local-for-Local Production and Distribution

The problems brought about by the lockdown or quarantine policies in the different locations include unemployment due to the closing down of some businesses in the service sector, increase in crop wastage due to uncertain and lower demand for fresh produce, rising cost of fresh produce in cities and increase in the delivery cost of products due to increase in demand.

To address these problems with one solution, a local-for-local for production and distribution can be set-up. How does this work?

Let us first look at the supply or production side. The pandemic has caused many service industry businesses to close down and citizens losing their jobs. But this doesn't stop individual households and these people whose employment were affected by the pandemic to generate extra income. A good way to generate a local-for-local marketplace provides intelligent recommendations to sellers on what the buyers wants within his or her area. So that the suppliers don't overproduce and the buyers are not overcharged for fulfilment services and delivery cost.

You might argue at this point that there are large e-commerce businesses who have scale and has been in the business for long. But in my opinion, because they are so large, they present a lot of inefficiencies that render the consumers to pay more for the product because of the high delivery cost. As an actual example, there was an instance when the seller and the buyer are just located near each other but it is not immediately visible in the platform so what happens is that instead of an on-the-day, even few hours delivery of the product, it took 3 days for the package to arrive since it has to go through the fulfillment centers of these e-commerce giants first before going to the customers. So not only did the arrival of the product took long, the price for delivery also increased.

In this case, a local-for-local marketplace would the good for both the sellers and the buyers of the products.

For the case of fresh produce, I've mentioned earlier that because of the uncertainty and reduction of demand, a significant amount of fresh produce has been wasted from farms. A good alternative that is still aligned to this local-for-local concept is that production of this fresh produce should be taken within your neighborhood as well. If you say you live in the cities, there are a lot of models that can utilize rooftops as a place to grow produce using hydroponics. Not only will you have a source of fresh produce on your own, you can also put the extra fresh produce that you have grown in your homes in the local-for-local marketplace. In this way, you earn an additional income from the sales, you help the environment, you can easily deliver to the buyers at a much lower cost and in a much faster delivery lead time as your customer is just within close proximity to your location. Hence, it is a win-win situation for both the urban fresh

produce grower and the buyer.

ID: 1728-11 - Category: Environment

How to help eliminate crossover virus transmission at the Channel Tunnel?

It seems to me to be bizarre in these days when transmission of virus and mutations are something that we have to be vigilant about, to have free passage of drivers from different countries travelling through the tunnel and onwards throughout our lands. Equally it is perplexing to maintain a system whereby UK drivers also travel across the Channel and drive throughout Europe. If Uk shipments could be taken to the channel tunnel in containers ready for loading and European drivers collect at European ports, the viral transfer is mainly reduced. There could also be a new raft of workers at the tunnel whose jobs were to manage container transfer, checks and all of the necessary paperwork. Once completed electronic transfer could occur of papers to operations in France to be forwarded on to the nominated drive (reference numbered). The time of transfer could be calculated as a norm for all systems to work too. This would have the effect of reducing waiting times at the tunnel for drivers and would make the whole process more efficient. Without the aid of computers and algorithms I understand this would be difficult - but we do have these technologies. Ships and Trains and Aircraft have always over time managed supply lines in such a way that there are no empty returns. This would need cooperation across the waters but that in its self may appear to be a win win solution. In practical terms consortiums of uk teams would need to be managed to do the driving and collection of goods in the UK and similarly consortiums of drivers operated from European countries. These changes would build on systems already in operation in logistics. Driver time would be better utilised and managed in ports at both ends. Transfer and paperwork tasks become managed through one system by other employed government teams. Ecologically - there must be savings. However in the short term there is a much reduced chance of transmittance of viral load and mutations from one trading partner to another.

ID: 1580-11 - Category: Environment

Create a rubrik such as the alcohol consumption comparative chart to monetise personal carbon footprints.

The key opportunity that has come to light through the pandemic, is the love that the British people have for accurate facts and figures that are easily assimilated. For example charts, pyramids, rolling totals. The other key feature is the desire by the many to be part of the societal collective to help. Many people are now becoming inclined to reduce the carbon footprint they create to “help save the planet” Many like myself know that we should reduce beef consumption and increase plant based food. I know that my led lightbulbs are better for

the planet but a lot of knowledge is sketchy and does not allow for comparative judgements and decisions. It is difficult currently to know if reducing single use plastics is as helpful as not taking a 50 mile journey in a car. Or is a holiday in an aircraft to Italy for example a larger carbon footprint than shopping in a supermarket every weekend buying prepackaged goods. The high street versus an amazon delivery? What is the carbon footprint of buying an artichoke from a greengrocer in February? If I pave my front garden for a car park how many trees should I plant to offset this? The list goes on and it is all unclear. I think it would be good public policy to develop a unit of measurement of a carbon footprint. Better still if this could be global. This would then make things much easier to compare. To exemplify: One 50 mile car journey in a 1000cc car has a 10 unit footprint, this could be offset by substituting buying beef for a meal at 4 units twice a week and turning heating off for a hour saving 2 units. etc etc. Building from this principle a chart could be developed, a rubrik, a system of awareness, where people could make informed choices to aid in reducing their own footprint. In the alcohol consumption comparison chart we have all learnt the nominal number of units we should not exceed for good health. Could there also be a nominal limit for carbon footprints - it would all help increase the awareness. And remember we have learnt through the pandemic how our citizens love to help and love to be part of the solution. This would also, then lead to an opportunity to create more detailed apps that allocate everything a carbon footprint score, for those who were more keen to manage accurately their total footprint. Further still, on the back of this increased knowledge within our society, public policy could reward people for making low carbon choices to incentivise this action. An example of this that comes to mind is a lower energy cost for households that use the lowest level of energy. all helping to bring down the Uk figure.

ID: 1164-11 - Category: Environment

How do we break from the 9-5 and 3 school terms a year and why?

How then do we capitalise on this opportunity of society's obvious ability to rapidly shift away from its traditional operating norms, such as the 9-5-day, 5 day week, fixed bank holidays, 3 school terms a year, regulation of opening hours for retail and hospitality - and why would we want to?

There are several reasons why - levelling out the peaks and troughs of demand will:

- Reduce the massive strain on our infrastructure and work force.

- Reduce the amount of investment needed in our infrastructure.

• Increase the capacity of our infrastructure and work force.

• Make it easier to manage our lives and achieve a happy work life balance.

• Improve our efficiency and effectiveness.

As an example, it is worth looking at the impact that rigid operating hours, times, and holidays of the Education and the Office workplace sectors alone have on our infrastructure, economy, and lives. The education sector's three-term year and the peaks and troughs that it creates along with the 9am to 3pm class times and long summer breaks impacts us, our lives and economy in the following ways:

• School run time rush hours, increased pollution around schools, and congested roads.

• The capacity of schools, class sizes and availability of positions for teachers during term time.

• Lack of and high cost of childcare for working parents during holidays. • Crowded airports and stretched airline fleets during peak holiday times.

• Overpriced holidays during peak times, pushing parents to remove children from school in term time.

• Businesses forced to follow the peaks and troughs imposed on them by the education timetable.

• Negative impact on children's learning. Some studies have shown that the long summer break is too long an interruption and different age groups are suited to different school start times.

• Long waiting lists for schools, whilst their facilities, and staff, lie unused for 13 weeks a year.

• The need for airlines, airports hotels and holiday accommodation to have capacity in their fleets, airports, and hotel rooms to meet peak holiday requirements.

If the education sector were able to shift away from its current timetable to a more fluid model, and the office and workplace was able to mirror and support this change with its evident ability and willingness of employees to adapt to a more flexible way of working and commuting, then these two sectors alone would have a significant and positive impact on our lives our economy, infrastructures, and transport systems.

The Education sector has embraced home schooling during the pandemic and it should do so more even after COVID with a central DOE website and improved infrastructure. A local Government Association review was set up in 2002 to look at the benefits of a 5-term year. It looked at the impact and benefits that it would have on children but opposition from teaching unions felt that it would rob its members of their holidays (which it would not- it would just spread them out and remove the long summer break). The review though failed to consider the huge trickle-down effect that a move to 5 terms a year could have on the overall economy and way of life.

So how could the education sector/schools change their model in order to “spread the load”.

• Schools should consider moving away from a 3 term year to a 4, 5 or 6 term year, maintaining existing holiday days and children’s vacation time, retaining existing staffing levels and simply spreading the curriculum across the year, with more, but shorter holiday periods spread across the year.

• A hybrid of the above options incorporating a radically improved home learning offer so as to further increase the flexibility of the schools, parents, and children.

The office The Office/workplace sector has indicated that it can shift away from the historic norms of 9-5 working. After moving slowly over the last 40 years towards "flexible working" , last year the entire sector embraced home working overnight. Working hand in hand with the education sector to ensure that each support each other will enable huge opportunities.

This should be incentivised further by the government and the following should be considered:

• Availability of flexible season tickets for public transport to support new commuting patterns.

• An increase in annual holiday allowances linked to a reduction in fixed bank holidays bank holidays which cause their own peaks.

• Tax incentives to encourage the mass take up of local small work drop in spaces (for those who cannot work from home)

• Tax incentives for business that adopt flexible work practices. • Investment in the broadband backbone on the UK

If the Education and Office workplace sector could adopt changes as suggested, then we will see the following benefits:

• Reduction in overall levels of commuting, and peak time commuting, putting less stress on our transport infrastructure and on ourselves.

• Growth in local neighbourhood economies through supporting home workers.

• Holiday and hospitality industry would see growth through all year demand and lowered prices.

• Aviation industry would experience less congestion and more efficient airports, increased all year passenger numbers, reduction in fleet sizes and cost savings.

• Increased capacity of our schools.

The end goal could be that of a 24-hour society, where we choose when we go to work and where we work, when we can shop, how where and when we educate our children and when we go on holiday.

A levelling out of our working and non-working times will allow us to operate with fewer resources and with smaller more efficiently used schools, offices, transport systems, retail and hospitality sectors.

ID: 977-11 - Category: Environment

Enforcement could reduce unemployment, generate revenue AND improve our shared green spaces

We need a long term shift in behaviour, but this does not necessarily need long term investment. At the moment, unemployment is on the rise. In London Litter and Waste Enforcement Officers can earn in excess of £27k, and have the authority to issue Fixed Penalty Notices for littering. Enforcement Officers can generate revenue by issuing FPNs, or better still their presence may be a deterrent to littering and flytipping, thus vastly reducing the cost of cleaning up and restoring damaged spaces.

These Enforcement Officers could also play a role in educating our children not to litter, and to care for their environment and community, The Keep Britain Tidy Campaign of my childhood in the 80s had a big impact on me, and we have an army of citizens who've put their hand up to help during Covid who could be minded to volunteer to go into schools (when that's possible) to educate our children, who can in turn educate their parents and family members to take better care.

At the moment the system seems geared to be reactive (responding to reports of flytipping) rather than proactive (i.e. preventing the crime through positive 'nudges' including more and better warning signage, and FPN deterrents).

Faced with many more months of disruption due to Covid, and many more unemployed, what a marvellous opportunity to kill two birds with one stone. Create jobs which are carried out in the safe outdoors, and which have the capacity improve our environment in the short and long term.

ID: 958-11 - Category: Environment

Roadside air pollution displays

We create real-time roadside displays illustrating pollution levels at busy junctions and crossroads. I own a wine shop in south east London, where the pollution levels are regularly 55mg. The legal level is 40. I think if there was an electronic board which showed what that day's pollution was, and what that meant, people would take notice. Similar to the smiley face traffic speed signs, the display could give Nitrogen Dioxide levels, blue when safe, red when over the legal limit, and a sad/indifferent/smiley face could reflect PM levels, and give some common sense context for what the numbers mean. Initially people might not understand, but once they've seen them a few times they may research them or hear about them. Once they realise what they mean, I think sitting in a traffic jam (maybe with your children) knowing that you are sitting in illegal/high levels of pollution, and contributing to them, it will start to connect people's abstract understanding of air pollution and the reality. They could be implemented all over the country, particularly in places with high levels of air pollution, and start a conversation which is harder to ignore than invisible air pollution.

ID: 268-11 - Category: Environment

Roadside litter - time to govern.

It is clear that the current system of cleaning the nation’s trunk roads does not work leading to the UK’s roads being amongst the dirtiest in Europe.

Cleaning of the trunk roads should be a normal part of overall maintenance and for this to happen effectively the duty should be transferred from local authorities to Highways England. This would enable a streamlined service to be provided tied in to vegetation cutting schedules and other road maintenance programmes. Experienced teams and specialist equipment can then be employed moving seamlessly along the routes with one overall body co-ordinating all aspects including road closures.

Such a system would have the added advantage that members of the public will have one point of access to lodge complaints or observations rather than the current situation where different authorities can blame each other for failings.

This proposition has been raised in detail with the Secretary of State and with Baroness Vere at the Department for Transport (DfT) by the A27 Clean Up Campaign and is supported by key MPs and all local authorities along the route. It has also been recommended by others in the past including by consultants Atkins in their 2009 Roadside Litter Research Strategy and in 2015 by the Communities and Local Government Select Committee in their report on "Litter and fly-tipping in England".

In response to the A27 Group, the DfT on 17 July 2020 said, amongst other things, that a transfer of responsibility to Highways England can only be made if Highways England makes such a request. This is a surprising response as, surely, it should be for the Government to decide who undertakes the cleaning of our national roads and not a government company. As far as is known Highways England has not volunteered to take responsibility for cleaning and there is therefore no apparent progress in achieving the optimal outcome.

Local authorities receive no extra funding for cleansing the trunk roads so additional costs would probably be encountered in any transfer of responsibility to Highways England. However, should this prove problematic, there is always the prospect of sponsorship for such important work although this would require a change of approach by Highways England who currently do not permit sponsorship.

A further issue that needs to be addressed is to ensure that the new Office for Environmental Protection has powers to investigate and, if necessary, penalise where authorities (whether local authorities or Highways England) have failed in their duties regarding roadside litter. As currently drafted, the Environment Bill may exclude roadside litter despite this being a major source of environmental damage.

With good will and a more committed approach than heretofore it should be possible to achieve a speedy transfer of responsibility to Highways England, at least in relation to a pilot

project such as the A27 could provide. (One interesting point here is that the Havant section of the A27 is cleaned by Highways England at no cost to the local authority – so why doesn't this apply to the other 6 local authorities along the route?)

It is imperative that we have, at the top of Government, someone who is committed to cleaning up this country. This is particularly appropriate in the year when the UN Climate Change Conference will be held in the UK and when the whole world will be watching.

ID: 131-11 - Category: Environment

Flexible VAT rates.

VAT has traditionally been charged at one rate with notable exceptions such as children's clothing. This approach is inflexible and inappropriate for our retails sectors that cover such a wide range of products and price points. We need to approach VAT in a different way.

All products are associated with elasticity. They can be very inelastic and therefore demand is not influenced by price changes either way OR they can be very elastic where even a small reduction in price can drive up demand significantly.

If we use a lower rate of VAT on elastic products - the price reduction will drive up demand. To counter this a higher rate could be applied to inelastic products. If applied correctly there could be a overall positive combination of increased demand in the elastic products, driving up volume enough to increase the levels of VAT than previously being obtained PLUS a higher level of VAT being obtained from the inelastic item with no reduction in demand.

Elasticity variables can be applied across product types as well as price points. A good example would be a £15k car versus a £60k car. A lower rate on the £15k car would likely drive up demand more than a lower rate on the £60k car. This is due to the spending power of the targeted customer being very different. In fact a higher rate on the £60k car is unlikely to drive down demand for the same reason.

Many retailers already hold this information by product type. The information could be pooled to create a matrix that helps develop a successful strategy. This science drives most pricing decisions / hierarchies. There is no reason VAT should not follow the same science i.e using a variable scale to drive the largest gain.

Combining pricing science with a flexible VAT rate will only help the economy grow in healthy way. Tax income will grow through consumer demand growth as opposed to blanket rate increases.

Politically if we are happy to apply a variable income tax rate why would we not apply it to VAT especially as these changes would directly impact demand where it is most needed with a proved, tangible, scientific, positive response.

ID: 19.Nov - Category: Environment

Finance a once in a 100 year event with 100 year bond

Bank of England quantitative easing is sitting at around £900 billion. Total UK public debt is around £2.1 trillion and growing. The govt pays no interest on the £900 billion of QE money printed by the Bank of England. My suggestion is that the government should bundle up all of the various bonds owned by the BoE and convert them into a single bond with a zero interest rate and a term for 100 years. This term would match the frequency of the 2 extraordinary events that cause the govt debt to explode (once in 100 years events). This is a simple concept that could be communicated to the British public as a sensible policy. The QE does not seem to have generated any retail price inflation and any asset price inflation that it has caused is going to be difficult to unwind without catastrophic consequences. Ring fencing the QE debt to be repaid in 100 years would 1) remove the need for austerity caused by paying down the debt on a shorter timescale, 2) remove the need to increase taxes which would slow economic growth 3) reduce non ring-fenced govt debt to about 65% of GDP giving the govt headroom to borrow more to invest in infrastructure projects to grow the economy 4) reduce the burden of debt caused by 2 exceptional events (GFC & pandemic) - over 100 years at 2% inflation per year and no interest on the debt, the £900b would only cost the equivalent of £130b in now money to

repay in 100 years.

ID: 3061-11 - Category: Environment

Rebuilding the economy post COVID

The coronavirus pandemic has hit our economy hard, shrinking gross domestic product (GDP) by 9.9% in 2020, something of which we have not seen since the period of the Great Frost in 1709. Therefore, it is crucial we get this right and see a swift economic recovery in order to reduce the deficit without affecting our future economic growth.

Firstly, we must try to avoid austerity until our economy is at a period of growth in order not to hit the recovery and long term economic growth. As a result, we must continue with the fiscal stimulus (Furlough) the Chancellor has outlined in the Budget so that the public sector temporarily takes the slack of the economy where the private sector would otherwise be shrinking due to the lack of spending after the periods of lockdown. This recovery must however be a business lead recovery so businesses, especially small and medium sized enterprises (SMEs), which are the backbone of the economy, must be kept afloat in order to lead this recovery. This is why we must continue with the furlough business grants so that we don't incur large amounts of debt on the private sector as we need business to invest in the economy as we gradually come out of lockdown. That is why the Super-Deduction is a great example of ways to incentivise investment in plant and machinery assets which will raise productivity. It is also important that in a social market economy (with a welfare state) we aim to retain or retrain people into the workforce as otherwise we will be taking consumers out of the economy and putting them on benefits which would mean more people having to be looked after by the government and therefore a smaller workforce which would damage long term productivity, as George Osborne said in his 2015 Budget speech that he wanted to move Britain 'from a low wage, high tax, high welfare economy, to a higher wage, lower tax, lower welfare society'.

Secondly, we must have an export lead recovery where both goods and services are exporting at surpluses. In the wake of the Brexit vote, exports skyrocketed due to the pound falling in value. We currently have an overvalued exchange rate so if we reduce the value of the Pound Sterling to a value close to the US Dollar (e.g. £1 = US$1.05), we will have a much more competitive exchange rate with an increase in exports as the UK becomes a more attractive place to invest increasingly in goods such as research and development, innovation and machinery, as well as an increase services exports. This would reduce the UK's deficit in goods (which is mainly what we export) and would reduce the current account deficit and move the economy to trade and investment so we can afford to pay for our standards of living, rather

than trying to pay our way just through the selling of state assets. This will allow the UK to save more relative to what we are spending rather than through borrowing more. An export lead recovery is exactly what China and Germany did post 2008 financial crisis and their rebound to growth was swift. An advantage of Brexit is that we are now trading at a global market base and are not reliant on exports to the eurozone (no more protectionism from Customs Union) which meant we couldn't grow as fast due to the euro crisis which reduced consumer spending in those countries therefore reducing UK exports.

Thirdly, we should be more open to economic migrants of all skill sets. Lower skilled migrants complement the workforce and don't compete directly with local workers but instead work with the local workforce as it is proven that local workers then move in to higher skilled, higher paying jobs. This is known as complementarity jobs as jobs are not independent from one another but are instead connected and reliant on one another. Higher skilled migrants are even more valuable for the economy as they improve and accelerate innovation (e.g. patents, tech, science etc) which drives productivity. A business lead immigration system (based on businesses sponsoring migrants), which could be implemented under the points based system, will ensure businesses' workforce demands are met as migrants will be complementing the flexible labour market, which makes production more efficient and therefore raises productivity, rather than the government choosing what migrants they think the private sector needs. This would also allow for the public sector to get the workforce it needs (e.g. doctors, nurses, teachers etc) in order to aid the pressures on public services which are currently under a lot of strain due to the pandemic.

Finally, we should make it a priority to spread economic growth across the whole of the UK. The government has referred to this as the so called 'levelling up' agenda. This would mean the government continuing to invest in digital and physical infrastructure, such as rail and broadband, to increase connectivity across the island of Great Britain and should try to increase cooperation between Northern Ireland and the Republic of Ireland in order to increase connectivity across the island of Ireland as the will boost Northern Ireland's economy therefore boosting the UK economy. We should focus on connecting cities to one another as a priority. The government should also invest in research and development, which is being accelerated by the vaccine program, and also in skills for young people, which is being aided by the Kickstart Scheme. The government could also look to devolving political power to local government as well, such as VAT, in order to spread growth an innovation on a local and regional level. This would allow for the equality of opportunity, as opposed to the equality of income (done through mass redistribution of wealth), which would increase innovation across the UK, making us less reliant on London and the South East and instead mobilising to whole UK economy to produce growth.

ID: 1966-11 - Category: Environment

A new relationship with nature: why it matters and what we can do

The challenge – a failing relationship with nature.

There's no wellbeing without nature's wellbeing. Everyone is at risk from the loss of habitats and a warming planet. The climate crisis and wildlife emergency show that the existing relationship between people and the rest of nature is failing. Too often we see nature as something to use, control or as a threat to us. To fix this we need a new relationship with nature and doing so can also help tackle the crisis in our mental health and wellbeing.

The Government's 25-year Environment Plan (25YEP) aims to improve the natural environment within a generation and to reconnect people with nature. To achieve that, people everywhere need to feel that nature matters to them. Since publication of the 25YEP ground-breaking evidence has emerged that challenges traditional thinking and provides a greater understanding of what a connection with nature means and how to achieve it.

The ambition – a new relationship with nature.

The ambition is happier and more fulfilled people and a thriving environment created by forging a new relationship with nature. To build that new relationship, and hence the wellbeing of people and the rest of the natural world, we need to reboot our policies and practices so that they enable people to connect with nature. We must go beyond access and visits to nature. Beyond engaging people with nature through facts and figures. The research evidence tells us we can build a new relationship by noticing nature and celebrating the role of nature in healthy, sustainable and meaningful lives.

The evidence – why our relationship with nature matters.

Recent evidence from the scientific study of 'nature connectedness' shows that we need to go beyond simply enabling people's access to nature, and enable people to build a meaningful connection with nature.

Here are some highlights of the research:

People's nature connectedness, rather than their time in, or visits to nature, predicts mental welling – nearly 4 times larger than the increase associated with higher socio-economic status; Nature connectedness and noticing nature predicts both pro-environmental and pro-nature conservation behaviours, while the frequency of nature visits does not; A close relationship with nature and its benefits do not come from the traditional approach of learning facts and figures; People with common mental health problems who simply notice good things about urban nature show clinically significant improvements in their quality of life.

Solutions – improving our relationship with nature.

Nature connectedness offers simple solutions to help deal with complex societal problems. People will be more supportive of the big changes needed if they feel that nature matters to them. A nature connected population will also be more likely to take action for nature. Through a new, more connected relationship with nature people can live a happier, more worthwhile and sustainable life.

Public policy goes beyond funding and regulation to the creation of symbolic capital, showing what is valued or not valued within the public arena. Policy can contribute to the deeper

paradigm shift required for a healthier relationship between humans and the natural world. Below we outline a series of policies that could inform and reinforce such a paradigm shift.

Education policy should consider how education can build the foundations of a new relationship with nature for a sustainable future. A ‘green thread’ of human-nature relationships can run through the curriculum to provide the context and vision for a new relationship with nature. The priorities of the UK Department for Education should move beyond standards, character and resilience to goals that reference the importance of the human-nature relationship for a sustainable future.

Transport policy should be geared to green commuting, not just in terms of carbon footprint, but emphasising the importance of views of natural spaces, using meaningful natural waypoints and creating natural habitats and gardens at transport hubs. ‘Slow commuting’ should be developed, providing places to pause and take a moment with nature. Transport policy should celebrate the beauty of the natural world visible from trains and roads to maximise enjoyment of the natural world.

Urban planning and design should move beyond access to ‘access for connection’. Turning the public realm, streetscapes and public spaces, into places where people can engage with and care for nature in the course of their everyday activities. Urban design should create spaces to offer the prompts and opportunities to pause and notice nature, creating ‘habitats for connection’ - providing an abundance and variety of wildlife to notice through bringing nature recovery networks into urban areas.

Housing policy should stipulate that all new developments should include spaces for an active relationship with nature. Landscape design should prompt sensory engagement with nature, resident management of wildlife-friendly gardens, and new wildlife habitats to surround people with the good things in nature. Government should work with housing and planning professions to incorporate principles of nature connectedness into design standards.

Arts policy should recognise the close links between art, cultural expression and nature connectedness. It should support a wide diversity of artistic expression, celebrate nature and our relationship with it and support installations to prompt engagement with nature. It should especially support minority and marginalised groups in expressing their own appreciation and connections with nature.

Health policy should be based on models of 'One Health' that revises the concept of wellbeing through an interdisciplinary approach that stresses the connections between human, animal and environmental health. Healthcare premises should be designed and managed to bring nature into the lives of users and staff. Social prescribing and social care standards should stipulate engagement with natural environments as a core element of person-centred care. National health indices and wellbeing assessments should include levels of nature connectedness. The 5 Ways to Wellbeing guidance should be revised to include nature.

In sum, a new relationship with nature is an essential target to foster a worthwhile and sustainable life. These evidence-based policies are often simple and low cost while helping address the challenges of a warming climate, wildlife loss and mental health in a post-pandemic world.

ID: 645-11 - Category: Environment

Plastic waste recycling

A problem is our oceans are filling up with about 8 million tons of plastic waste each year leading to a prediction of more plastic than sea water in the oceans by around 2050 - 30 years hence - which waste is getting into the seafood chain. So I propose to get items like plastic bottles discarded on our pavements, streets and parks etc picked up and deposited in special containers which in return deliver a token for a tea or coffee in a local outlet. The solution is to incentivise people out shopping, walking, socialising etc to pick up and deposit plastic into specialised containers and in return receive a non-plastic token to use for a tea/coffee/etc in a local coffee shop. I've seen this in operation in Berlin and the majority of folk who do this are the city's rough or outdoor sleepers. The container could be funded by local authorities and local retail businesses especially as all stakeholders 'win' in this scheme - less street cleaning by

local authorities, more footfall trade in cafes, a perceived freebie by citizens, a warm drink and sense of local involvement by rough sleepers, a reduction in ocean plastic pollution.

The scheme could be extended to bottles for a token to use in local bars, pubs, retail drink outlets.

ID: 199-11 - Category: Environment

Reducing CO2 emissions

Short term reduction achievable within 5 years

Most domestic and industrial heating systems burn methane, obtained from the North Sea gas fields. The CO2 produced is vented into the air, from millions of homes & factories, contributing 50% to our current total emissions. Pilot schemes are currently being evaluated, using blended gas: a mixture of methane and 20% hydrogen. This requires no alteration to the existing heating or distribution systems and no new technology. If introduced nationally, this would significantly reduce our CO2 emissions. Hydrogen is made by industrially by the steam reforming of methane and other hydrocarbons. The final products being hydrogen and carbon dioxide. The CO2 is easily removed from the gas stream. It would be possible but completely uneconomic, to remove CO2 from individual domestic or industrial boilers. Siting the hydrogen production process close to the point where the methane comes ashore and taking advantage of the economy of scale, the CO2 removed could be piped back into the depleted gas fields, effectively removing 20% of all existing emissions.

Long term reduction achievable within 15 years

Blended gas still contains hydrocarbon, the aim should be to replace this with 100% hydrogen and so achieve zero CO2 emissions. The existing National Grid distribution network, has 7,660 km of modern large diameter pipework, together with 618 above ground installations. In addition there are hundreds of thousands of km of smaller diameter, urban pipework, feeding into our homes, factories and hospitals. This will all need modification to carry pure hydrogen but is entirely achievable. This is almost the reverse of what was done 50 years ago, when town

gas was replaced with methane. Town gas being made from coal, contained 50% hydrogen.

Generating the hydrogen.

This will be done by electrolysing alkaline sea water, using a recently developed nickel electrode, the products being hydrogen and oxygen. The electrical energy coming from wind turbines. The coast being the ideal setting. The new electrolysis plants being built alongside the steam reforming plants which they will eventually replace. The existing pipe work and electrical plant all being reused.

Advantage of using seawater

Relatively pure water is needed for electrolysis, which makes the process expensive. Acid or alkali being added to make the water conduct. Sea water containing salt (sodium chloride), would normally produce chlorine on electrolysis, as well as hydrogen, in equal amounts. It would be impossible to use the chlorine produced on this scale and it would be uneconomic to dispose of it. The newly developed nickel electrode, prevents discharge of the chloride ions, oxygen gas forming instead. This can easily be used industrially or vented harmlessly into the air. Excess hydrogen can be converted to ammonia and exported as a liquid, as already happens, in tanker ships. The ammonia being converted back into hydrogen as required.

ID: 2052-11 - Category: Environment

Improving the environment to promote active travel and reduce car-dependency

The increase in active travel during lockdown shows there is suppressed demand. Transport and spatial planning that promotes diversity of destinations within shorter distances, to facilitate active travel; a presumption against private car use as the default; and better information about travel options would all help. The traditional transport mode hierarchy is being inverted by many local and regional transport authorities, with pedestrians at the top and single occupancy car use at the bottom. What is needed now is for funding to match this. At the moment, huge budgets go on road widening and building, despite the good evidence that all this does in a saturated system is release suppressed demand and move the 'pinchpoints' to before and after the new/wider roads. Meanwhile, the level of funding nationally and locally to support active travel is miniscule. Around £20 per head per year is needed - easily funded by diverting the road

budget to environmentally sustainable travel modes, greening streets, and making life better for everyone. This would also reduce inequalities in access and in health. Those who truly need individual motor vehicles would benefit from less congestion.

ID: 1769-11 - Category: Environment

If it Pays it Stays - Solving the Illegal Wildlife Trade

Summary:

Effectively addressing the Illegal Wildlife trade (IWT) involves two key activities: increasing the economic gain from conservation by generating more funding and more jobs for people living around wildlife so they no longer poach, and; developing well-trained and intelligence-led counter-poaching operations to counteract organised criminal poaching groups.

Policy:

At the moment the IWT is worth up to $23 billion a year, a massive market financing the murder and destruction of wildlife and our natural world.

While hundreds of millions of dollars are spent on conservation each year, wildlife and habitats continue to disappear.

We need to create a market for conservation at least as large, if not larger, than IWT, which would directly fund the protection of the natural world by providing jobs to people living around wildlife and funding highly effective counter-poaching operations against organised criminal poachers.

IWT is fundamentally an economic issue.

Poaching and deforestation are cheap and quick to carry out, and an ivory tusk, rhino horn or pangolin can readily be converted into cash.

In contrast, conservation generates little revenue or jobs, and counter-poaching operations are very expensive to conduct.

There is therefore a pool of people living in poverty who poach because they have no other way to feed their families, as well as organised crime groups poaching high-value products. At the same time, teams of rangers need salaries and supplies and must be everywhere, all the time to stop poaching, whereas the poacher need only be in the right place at the right time once.

The economics are therefore tilted in favour of IWT.

It is that economic equation that we need to change, generating jobs to stop poaching driven by poverty, and generating revenue to fund more effective counter-poaching operations to stop organised crime poaching.

To change the economics of the trade, the government should carry out the following three key activities:

1) Engage with businesses to develop products and services that will directly help wildlife by generating revenue and jobs from conservation. In its simplest terms, this is about creating sustainable commercial buffer-zones around national parks, employing thousands of local people and creating a barrier between people and wildlife. The intent is that, for example, a tea plantation around a national park could help save elephants by employing former poachers, so every time someone drank a cup of tea they would be protecting elephants. Examples of this already exist around the world on a small-scale, but a blueprint to deliver this more widely needs to be developed.

2) Engage with marketing teams to develop new sponsorship models. Every sports stadium in the UK is sponsored by a large company, so why not do the same for national parks? We need to work with marketing teams to develop sponsorship packages that appeal to those businesses like sports sponsorships do, then work with developing countries to implement those sponsorships to fund conservation. This will help generate the increased funding needed for conservation, and marketing budgets are far larger than charity budgets, so there is more finance available.

3) Work with investors and entrepreneurs to develop products and services that include donations to conservation organisations. Individual donations alone do not provide enough funding for conservation, so we need to find other ways to enable people to support the cause. By way of example, if WWF owned the rights to The Lion King franchise, they need never fundraise again. We need to setup a UK challenge to develop and publicise a range of products that will help raise funds to save wildlife.

Those three activities would have a major impact on changing the economics of the IWT to make conservation pay.

A simple rule in life is ‘if it pays it stays’. If we can find ways that national parks generate significant revenues and jobs, they are likely to be well-protected.

Even as revenue increases, however, there will still be come criminal elements seeking to poach high-value wildlife, so highly effective counter-poaching operations are required to stop them.

The British Army's Op CORDED shows the way forward in this area.

By training rangers to be much more effective, they are better able to deal with the poaching threat. However, the British Army's current work could be improved; short term training teams delivering basic infantry skills training misses much of the value that the Army could offer.

Op CORDED should be expanded, with small teams working with rangers in national parks to not only enhance the field-skills of rangers, but also to develop intelligence-led counter-poaching capabilities.

Highly trained rangers, directed by effective intelligence, have been shown to rapidly reduce poaching to near zero.

The Army has the capability and experience to provide that training, all at a relatively low cost to government as the wages of soldiers (the largest expense) are sunk costs. It will also help recruitment and retention and be a great way to utilise infantry and intelligence corps soldiers on small operations.

Generating more jobs and revenue from parks will make conservation pay, and will solve 80-90% of the poaching problem, if not more; most poaching is carried out by people with no other choice. Give them a job and they stop poaching. The remainder can be controlled by

effective counter-poaching forces, which are intelligence-led.

To put this into context, if each household in the UK could spend just £10 per week on products that saved wildlife, we would create a £14 billion annual market to save wildlife, creating jobs to stop poaching and funding highly effective counter-poaching operations.

That's almost as much as the entire current IWT market, just from UK households spending £10 per week.

It's simple; if we can enable people to pay, then we will ensure wildlife will stay.

ID: 2155-11 - Category: Environment

Our system of waste management is failing us

All producers of goods, including foodstuffs, will be required to produce a plan which shows their usage and subsequent disposal with an approved audit trail. These could be part of an adapted ISO9000 scheme, revised ISO14000 or a new standard altogether. For foodstuffs and other consumables, this will concentrate on packaging but for manufactured goods and durables, it will include the goods themselves. In particular, vehicles and white goods will be subject to these new arrangements. Small producers will be encouraged to take advantage of collective schemes.

It is proposed that a variable VAT rate will be used to penalize the production of waste which is not actually biodegradable or recycled. For consumables such as foodstuffs, it is the packaging which is measured but the VAT is applied to the whole of the produce. This is a departure from current practice whereby foodstuffs are zero rated.

The VAT rates for goods and foodstuffs packaging could be based on:

- 100% bio, reused or recycled - 0% VAT
- better than 90% RoR - 10% VAT
- better than 80% RoR - 20% VAT
- better than 70% RoR - 30% VAT
- better than 50% RoR = 50% VAT
- less than 50% RoR - 100% VAT

A new definition for biodegradable will be required and the percentages should be based on that actually 'recycled' rather than just 'recyclable'.

ID: 2033-11 - Category: Environment

Amen to decades of motoring damage

For decades the number of cars and commercial vehicles on the roads has increased rapidly. There are far too many. The virus has had a positive effect on miles driven but unless firm action is taken now, chaos and pollution will return.

Banning cars or lorries is ridiculous, greatly reducing their numbers is very sensible. Democratic governments are pusillanimous and afraid of the 'motoring lobby'. However, the tobacco lobby was once, like the motoring lobby now, extremely powerful. Eventually government determination was triumphant and without prohibiting smoking, drastically reduced it. Repeat that for cars and lorries!

Too many vehicles, whether powered by petrol, diesel, electricity, hydrogen or steam cause traffic jams and will always force huge sums of money to be spent on road upkeep. Driving everywhere in cars does nothing for the obesity which shames Britain. So . . . . .

1) Transport ministers should hang a large notice on their walls which asks a question they could never answer - 'Just why should railways make a profit?'

Railways should be a service for all, not a source of funding. We gave railways to the world and should cherish them. Beeching was madness. Rail, whether passenger or freight, should be the first choice for medium and long distance transport. Subsidising them where necessary makes sense.

2) One car per household should be enforced within 5 years. Britain and Taiwan (USA too?) should receive government orders for 20 / 30 million or more conventional and electric bikes to be made available to the public at 50% or less of current prices. People could then ride to work or to a railway station and every train would have a dedicated coach / wagon for the free carriage of bicycles at all times and secure sheds at stations for their storage (some progress already on this latter point).

3) Despite some lovely rural areas and attractive towns, Britain has to be one of the worst places in western Europe to ride a bike. Cycle lanes, if they exist at all, may often be nothing more than a faded white line somewhere near the kerb with a surface of drain covers, pot holes, litter and broken glass.

4) Every bike should have a licence and its owner insured. Irresponsible riding should be punished and all bikes kept roadworthy. Until proved otherwise motorists should be deemed at fault if they hit cyclists or pedestrians and cyclists if they hit pedestrians.

5) Ambulances, fire engines and taxis do not threaten us, vast excesses of cars and lorries do.

6) The NHS would gain hugely from the above proposition and so would mental health and overall quality of life in Britain. Is there a single cogent argument against it?

ID: 1855-11 - Category: Environment

Carbon Footprint Visibility tools

Carbon Footprint Visibility tools

Inclusion of fossil fuel ratings on everyday products, possibly using a traffic light system similar the one used on some food stuffs. In effect, a red/amber/green schema to be developed to show the individual fossil fuel cost of production, transport and disposal respectively. The fossil fuel impact of purchases to be printed out on receipts so consumers can see the combined impact of buying activity. Factors that could be taken into account may include - Production • Cost of extraction and refinement of raw materials • What it took to produce/construct/package the item • Energy used in manufacture/ to sow, grow and harvest

crops or feed and raise animals. Transport • Transport of raw materials to the manufacturer, and end destination • Hidden transport - was more than one manufacturer involved in creation of the end product? • Transport to abattoir / market for farmed commodities. Disposal • What it will take to dispose of the item – does it need to go to landfill, how long will it take to decompose, long-term effects of disposal, etc. • In the case of consumer items, what happens if the product fails? Is it fixable, or is obsolescence built in? Can it be recycled?

In the longer term, use of this data may find other applications, including a more meaningful linkage between executive remuneration and the reduced dependence on fossil fuels by businesses, and increased taxation for potentially excessive / unnecessary fossil fuel usage.

ID: 1410-11 - Category: Environment

Free the Land. Save our Guts.

After WW2 Bomb factories produced petroleum chemicals for fertiliser and pesticides. Fertiliser use exploded. With petrol chemicals comes the increased risk of diabetes, obesity, heart disease, depression, autism, cancer, Alzheimer and autoimmune diseases amongst others. Also the chemical processes of mining phosphate rock for example, are far from 'tackling net zero'.

• Industrial agriculture has significantly lower nutritional content than the same foods produced a century ago.

If the guts biosphere is the natural enemy of the virus, our over reliance on penicillin along with our diet has weakened its effectiveness. Especially when soil health has no quick turnaround from the decades of petrol chemicals and pesticides that have leached into the substrate and water courses. On my own farm I reduced the reliance on fertilisers by experimenting with a rich supply of glover to oxygenate the pasture naturally. It was a big hit with the Bees.

Buy organic you ask? Well, the static wage coupled with inflation, keeps most of us tethered to the supermarket. Yet another battle of price/profit versus best practice is quickly being settled - and not in our favour. Organic farming is labour intestive. Less than 3 per cent of UK farmland is organic.

Let me begin by stepping back for a moment in history and see how we got here - its a cautionary tale... Starting in 1604, the Enclosure Acts, petitioned by landowners to enclose their entitlements, brought subsistence farming for the masses to an end. Fenced-out from vast tracts of commonage, along with vital foraging rights, the fabric of society had truly become undone.

Given the unknown future and the proximity to one another, is there really any hope of a return to the countryside with our youth continuing to see their futures out-sourced and automated? Nearly half of the country is owned 0.06 per cent of the population and we the people live on less than ten percent of this green Isle.

But there is a solution! A new green exodus, if you will.

For the purpose of simplification, lets call it a Land Reform Act. An Act comprised of a mixture of MOD land, Crown estate, NATIONAL TRUST also land compulsory- purchased from the big landowners (with a one off- acreage tax to find fair value, and thus finding the most accessible land with pre-existing infrastructure). Perhaps an offer from our would-be King would be the perfect spearhead? To assess viability and get the ball rolling, let me briefly lay out a possible model, point by point:

• The able-bodied would-be applicant would receive a short organic farming course followed by a hands-on experience with perhaps an Agri-college and the outline of their responsibilities in order to maintain their placement.

• The resulting Green Cert would give them an option to farm a parcel of land (that they are not permitted to sell off or rent out).

• The suitability of crops and animals would be matched to the terrain, as well as to the applicants own preferences. This would then be coupled with the required targeted training.

• Along with an eco-cottage, the land would have an out-building offering renewable off-grid sustainability.

• The land would be allocated seasonal planting, and targeted date-lines of the harvesting to be accomplished.

• The monopoly of the supermarket might slowly be joined by a network of farm co-operatives, and an ecosystem of satellite distribution centers supplying a national chain of farm shops, offering low-cost organic food for all.

Think of it as a job opportunity that come with a house and access to co-operative machinery and seed banks. A helping hand proffered to the younger generation, those from minority groups and inner cities, who have no hope of getting on the property ladder. This mass cottage

industry would not only heal 'soil health' and 'dietary change to restore biodiversity', but also to a certain extent heal some ailments of society, lower our carbon footprint, stem the toxification of our watercourses and provide a great push against the housing shortage.

Now being outside the EU trading block it would also guard against global supply-chain impacts and punitive trade tariffs. I would also suggest a new green courses to be introduced into the school curriculum. But moreover a long term approach will improve the nations health, injecting a much-needed vitality to other fringe service providers, along side manufacturing and National supply links, that would have a ripple effect in multiple directions, ultimately releasing the pressure on the NHS.

By Dominic St Clair

ID: 1103-11 - Category: Environment

Redistributing population to alleviate inequalities and overcrowding residential clusters utilising unused land made affordable.

My proposal is to create smaller and more distributed new eco housing communities.

This will need to be supported by Central Government, by reassigning unused and under-used land resource nationally and commissioning large scale house builders to take on these projects.

If we also incorporate the current advancements some European countries already have by shifting to vertical farming from current horizontal farming. First and foremost this will automatically free up vast areas of current farmed land allowing for more trees to be planted increasing sustainability), whilst also contributing to both current climate change efforts as well as more efficient use of our existing land resource. This will lead to much higher productivity in produce and variety of produce given it is then in a controlled environment (unaffected by weather – floods etc) and creates jobs, helping the economy in its recovery and serving the National need for home grown fresh produce.

Secondly, the reassigned land can be reclassified and apportioned accordingly through “change

of use” to serving the current National housing need and thereby getting a wider distribution of population habitation especially with the current working format where there is larger remote working options available, tackling the density of high population clusters.

To put this proposal into perspective, assume that there are 500 new houses built equating to a new “village”. If there are a 100 “villages” newly created, each consisting of “500 houses” with the assumption that there is a family of 4 living in each house; this will mean possible redistribution of upto 200,000 people. Then if you further assume that single adult studio type structures are also made available, this redistribution count further increases. This will inturn create more jobs as people will naturally set up more commerce to meet the needs of these newly created regions also boosting localised economies. To put this in perspective, currently the UK needs to build 340,000 new homes a year until 2031, simply put, the demand for housing will only be met if some development takes place via the above proposal. This proposal will play an instrumental role towards this National need of new affordable, ecological, residential homes along with more controlled efforts for farming with technological advancements creating more home grown produce, as well as a Global need, inline with the Paris Climate Accord.

This proposal gives a chance to solve not just the national housing shortages, affordability issues, wealth inequalities but also combats far greater efforts from Climate Change to Sustainable Living and Green Efforts as well as solving the issues that arise from dense population clusters including those experienced in the covid-19 pandemic of high infection rates and unfortunate deaths.

ID: 1053-11 - Category: Environment

Hydro Electric Power

The UK's Utility companies should not be in private hands. They should be owned by the UK citizens and run by Government not for profit. This is a subject for another email but it high lights the conflict of interest that exists in business. Business is all about profit, making money for share holders and paying big wages and bonuses to directors while the workers make do with minimal wages and more to the point bugger the cost to the environment.

Hydro Electric is big in Scotland why is it not big in England and Wales? Why isn't every town and village, next to water, powered by hydro electric power? Why does the river Thames not have turbines in it that can produce electricity. We have Technology from the 1950's that has operated in Scotland for 70 years without issue so why isn't business or the UK government investing in hydro schemes?

Coal and gas should not be used because of the gases. Nuclear, too expensive to build, too expensive to run, too expensive to decommission therefore electricity is too expensive for the consumer, let alone damage to environment with waste and if there is an accident.

There are 2,000 Dams in England and Wales and 800 in Scotland. All these dams should have electric turbines installed to generate electricity.

This is job creation to build, this is a chance to use UK companies (now we have left the EU) to supply creating jobs, this is job creation once complete to monitor and maintain. Above all its environmentally sensible and reduces the UK's carbon foot print.

This should be government funded, government owned, supplying cheap electricity to UK citizens.

ID: 1010-11 - Category: Environment

Bioreceptivity

Problem:

Regular connection to nature is not accessible enough for the vast majority of people who live in towns and cities.

Solution:

Rather than trying to take the people to nature, bring nature to the people.

Policy:

Incorporate bioreceptivity measures into the NPPF.

Justification:

Biodiversity is mentioned 18 times in the NPPF, which is encouraging, though even more emphasis could be put on it as a planning requirement. There is no mention of another term that has far more relevance to the quality of the built-environment, which is 'bioreceptivity'. Bioreceptivity means the ability of an object or structure to be colonised by living organisms. In architectural and planning terms this may be as simple as building bat-boxes into the roofs of houses, or as advanced as using specific chemical compositions of masonry to encourage moss and plant growth on built surfaces. When constructing a typical building on a flat site, you increase the potential surface area of habitat on that site by a factor of more than three. Where before there was just ground there is now four walls and a roof. As much of this surface area as possible should be utilised for nature and biodiversity. Hence, if a building is designed to be bioreceptive, it becomes a part of the ecosystem itself, and can enhance the biodiversity of a site massively if done properly. In addition to this, guidance should be introduced to encourage maximisation of buildings' external surface areas. More surface area, if done correctly, can mean more habitat. This further increases bioreceptivity and would also lead to an increase in use of architectural ornament both as an aesthetic device and a bioreceptive device, even further enhancing beauty.

ID: 842-11 - Category: Environment

Making Time

Freefalling through successive lockdowns, there is a growing sense of the need to stop and ground ourselves to a moment, a collective telling of the time. Synchronising watches to 'post-COVID', recalibrating our relationship with time presents both a problem to be solved and

an opportunity.

The problem. ‘Time is money’, so the saying goes. We measure time in money and it has become so tethered that it is difficult to extricate it from its grasp. We make time, spend time, save time and invest time. Debt is measured in years. We commit to ‘5-year’ loans and '25-year’ mortgages. Paper money is not valuable because of the paper from which it is made. Its value comes from the time we invest in exchange for its reward. We ‘earn a living’ – essentially earning a right to more time. Somewhere, decisions are made as to the value of each person’s time, set out in stark per hour or, worse, zero-hour terms. There is not only a minimum wage – a minimum value of a person’s labour, expressed in time - but its successor the living wage, and its successor the real living wage, and to come – in lieu of a really, really, real living wage – a ‘Universal Basic Income’. As we have seen with ‘affordable homes’, since superseded by ‘genuinely affordable homes’, the addition of subjective modifiers to already subjective terms like affordable, liveable and basic, only adds further levels of subjectivity, and room for manoeuvre.

In its most grotesque form, the success of our economies is measured in productivity, an input/output calculation ascribing a value to human life in terms of what that life can produce. The phrase ‘human capital stock’ which has been happily used in policy parlance for years (including in the UK’s Industrial Strategy) attracted outrage earlier this year (including from Senator Ocasio Cortez) when a Trump advisor blurted it out on Fox News. The jig is up. In a world where productivity is king, we are simply ‘human capital stock’.

Things become particular jarring when productivity meets health. The inherent value of care has been foregrounded during the pandemic, but care takes time. Ascribing efficiency targets, limiting GP appointment and home visit times and prioritising hospital beds over the patients inside of them combines to a final, and grim, conclusion – the value of keeping someone alive as compared with the associated cost. In UK policy, ‘the productivity gap’ is a readily accepted term most often used to describe the extent to which the GDP of the North of England lags behind the South (and the London epicentre). Strategy after strategy has been developed to figure out how this gap might be filled; the dominant theory relating to the relatively poor health outcomes of the Northern workbots. Improving health by x%, we are told, will close the

productivity gap by x%. This seemingly innocuous, but dangerous thinking has the same root as 'human capital stock', prioritising productivity, but presented in the guise of the betterment of health. The core idea is that the healthier we are, the more we can produce. A little like dairy cows.

But like those dairy cows, over-productivity turns out to be not so good for our health. Lockdowns have given us the opportunity to experience what a work/life balance might look like without long nights at the office and the grinding daily commute. Prefaced by a long overdue destigmatising of mental health issues over the last decade, and alongside an increased awareness of the threat and realities of mental burnout, the individual and collective mental strain that has come with a global pandemic has prompted a glut of meditation podcasts and exercises in 'mindfulness' building on now well-absorbed concepts such as 'self-care'. Even the economy has been stealth-yogied into a down-dog with 'wellbeing economies' emerging as the current economic buzz. Iceland, Scotland, Germany and New Zealand are among the countries taking the (all-female) lead in exploring 'wellbeing economies' at national and global scale.

Yet, despite widespread recognition and swathes of work around its limitations as an effective measure of economic success (not least its inclusion of 'product' from prostitution, gambling and illegal drugs), GDP clings on. Wellbeing remains a nebulous and highly subjective field of measure. One of the difficulties in finding a replacement for GDP is the extent of work going on to find a replacement for GDP. A steady flow of new wellbeing metrics, measurements and indexes makes the 'alternative economy' landscape ever-more clouded.

As we stumble our way through - and hopefully emerge from - the pandemic, we are immediately faced with the time-critical challenges presented by climate collapse. There is a growing urgency and imperative for the big questions. 'The Great Pause' has given us time to swallow a dose of reflective existentialism, revealing our opportunity. If the economy's – and our collective – purpose is not this endless accumulation of money, of things, of wealth and debt, then what is the end game? If our end game is not our survival as individuals, our future as a species and the survival of our planet – then what are we in this for? What is the point?

What if, instead of GDP and the numerous efforts to measure wellbeing through subjective methods, we instead commit to measuring – and investing in - the universally understood, quantifiable and accessible metric of time?

Investments of our time, from this point forward, can be investments in our time. In a post-COVID age of contribution, civic investment and a generative (as opposed to extractive) economy, the purpose of our collective, and instinctive, mission – and the measure of our economic success – could, and arguably should, focus not on the generation of money or product, but on the generation of time. How much time does x or y project, programme or intervention add to individual lives, human survival or additional years for the planet?

Self-care gurus advise us to make time for ourselves. Maybe it's time we did just that.

ID: 738-11 - Category: Environment

Provide incentives to encourage us to fly less

We need a combination of stick and carrot to keep us weaned off flying:

The sticks:

Substantially increase the tax on all flights (commercial, freight and private) coming into or going out of the UK;

Compulsory health warning on all advertising and online booking platforms for commercial flights. Keep it simple eg "Flying contributes substantially to global warming" then ramp up the message over time

The carrots:

use 75% of the revenue raised from the flight tax to invest in sustainable public transport eg cycle lanes, subsidies to buses, coaches, trains; and providing funds for airlines who have contributed to the tax raised, to research and develop less polluting forms of flight.

£100 grant payment to anyone over 18 who can prove that they have not flown in any calendar year. Applicants for the grant would self certify online with a declaration, and provide their NI and where available their passport numbers. This incentive will generally favour the less well off. A virtue bonus. For companies, compare their 2019 level of air travel as a percentage of profit with the same ratio in 2022 (assuming normal life has resumed by then). Self declaration via tax return. Where there is a reduction there will be a cash payment back to the company which must be used by the Company for the benefit of all employees, ideally linked to a green initiative.

ID: 326-11 - Category: Environment

Switch subsidies from meat and dairy to plant-based produce to tackle health and climate emergencies

Despite knowing that eating more fruit and vegetables, and less meat and dairy would have a positive impact on the health of our nation, we continue to believe that it is culturally too hard to get people to change their diets, and this needs to change if we are to tackle the growing health and environmental emergencies caused by meat and dairy consumption.

The COVID-19 pandemic represents a tipping point in our collective consciousness, which we can capitalise on to improve the health of ourselves and our planet. We need a change in policy to remove subsidies for the meat and dairy industries. In addition, meat and dairy should be taxed as luxury products with VAT added. These industries should reflect the damage they do to the environment, to animals and to our health in the same way that tobacco is taxed to reflect the additional costs to society. People should pay a proper price for the meat they choose to consume, which more accurately reflects the damage caused to the environment and to health. This would encourage a reduction in meat and dairy consumption and a change in attitude so people see it as a luxury item and not something to be consumed multiple times per day.

We should switch subsidies to whole-foods, such as vegetables, fruit, pulses, grains, seeds and nuts to drive consumer behaviour towards these more desirable forms of nutrition. In addition, through education policies we should encourage the consumption of a whole food, plant-based diet. We should actively discourage food manufacturers from stepping in with ultra-processed 'plant-based' products and educate the public to the benefits of whole foods, as opposed to just switching from a processed meat and dairy diet to a processed 'plant-based' diet which would

be unlikely to have much impact on our overall health.

By addressing this issue, we would be seizing the opportunity for change that has been thrown up by the COVID-19 pandemic, capitalising on our growing collective consciousness of the role of animals and humans on this planet, and dealing with the most pressing emergencies of our time.

ID: 1549-11 - Category: Environment

Seaside regeneration areas

Summary

A series of seaside regeneration areas could be designated for interventions to improve their competitiveness – particularly with overseas destinations. These areas could benefit from interventions such as:

• reduced VAT and business rates on tourism related businesses; • improved transport links, such as direct trains and lower fares;

• upgraded accommodation; and

• improvements to the local environment, including bringing empty buildings back into use.

Seaside regeneration areas

A series of priority seaside resort locations could be identified and designated for Government assistance in improving their competitiveness. These seaside regeneration areas could include any of the following resorts: Ayr, Blackpool/Lytham St Annes, Rhyl, Colwyn Bay, Porthcawl, Barry Island, Morecambe, Whitley Bay/Tynemouth, Redcar, Scarborough, Bridlington, Cleethorpes, Skegness, Great Yarmouth, Clacton-on-Sea, Margate/Ramsgate, Folkestone, Hastings,

Sandown/Shanklin, Dawlish/Teignmouth, Torquay/Paignton, Newquay and Weston-super-Mare.

Measures to raise resorts' competitiveness

To improve the resorts' competitiveness with overseas destinations the critical issues of price and customer experience will need to be addressed.

Price.

Many choices of family holiday destinations are made on price. This includes the cost of travel, accommodation and food.

Travel costs.

Family railcards currently offer a 33% discount on standard class fares. This could be increased to 50% for travel to the priority destinations. Inclusive deals involving local bus travel and possibly discounted admission to visitor attractions in the priority areas could be developed. Free, convenient parking for coaches could also be provided in the priority areas.

Accommodation and food costs.

Overseas resorts are competitive on price partly due to lower taxes. To change this, within the seaside regeneration areas, the rates of VAT on hotels/bed & breakfast accommodation and eating out could be reduced to 5%. Business rates on tourist industries could also be reduced. This will enable businesses to reduce prices to levels that are competitive with overseas resorts, where tax rates are often lower.

Customer experience.

This covers travel, accommodation and location experience.

Travel experience.

To improve visitors' journeys, the need to change trains en-route, which is awkward when encumbered with luggage, should be minimised. Direct trains could be run to the priority resorts from the main population centres of London, the Midlands, Northern England, South Wales and Glasgow/Central Belt, where warranted by travel demand. These could be run seasonally, in the summer and Bank Holidays. Passenger facilities could include seat reservations, extra space for luggage, refreshment trolleys and Wi-fi. These services could replicate the convenience of air travel. Other rail services to the areas could be enhanced as required by increasing service frequencies and reducing journey times.

Accommodation experience.

In the possible priority areas listed above, some of the older hotels do not provide accommodation that meets present visitor expectations. Regeneration grants could be provided to upgrade and modernise hotels to current standards.

Location experience.

Some of the priority areas have a neglected appearance, which affects the visitors' experience. Regeneration grants could be provided to purchase and repurpose or remove, unused buildings. Disused hotels, which are common in depressed resorts, could be restored and reopened. Seafront attractions such as piers and iconic historic buildings could also be improved by grants for restoration, repairs and maintenance. These local environment improvements could make places attractive to visitors.

Duration of the measures

The designations should remain in place for as long as the areas remain economically depressed relative to inland areas with non-tourist-based economies.

The subsidies and tax breaks could be maintained as long as is necessary to restore the economic performance of the areas. Thereafter, any withdrawal should be gradual. Incorporation into wider tax changes covering other areas could be needed to maintain competitiveness while avoiding tax anomalies. The transport improvements should become financially self-supporting as visitor numbers increase and can therefore be continued.

ID: 1104-11 - Category: Environment

Redistributing population to alleviate inequalities and overcrowding residential clusters utilising unused land made affordable.

My proposal is to create smaller and more distributed new eco housing communities. This will need to be supported by Central Government, by reassigning unused and under-used land resource nationally and commissioning large scale house builders to take on these projects. If we also incorporate the current advancements some European countries already have by shifting to vertical farming from current horizontal farming. First and foremost this will automatically free up vast areas of current farmed land allowing for more trees to be planted increasing sustainability), whilst also contributing to both current climate change efforts as well as more efficient use of our existing land resource. This will lead to much higher productivity in produce and variety of produce given it is then in a controlled environment (unaffected by weather – floods etc) and creates jobs, helping the economy in its recovery and serving the National need for home grown fresh produce. Secondly, the reassigned land can be reclassified and apportioned accordingly through “change of use” to serving the current National housing need and thereby getting a wider distribution of population habitation especially with the current working format where there is larger remote working options available, tackling the density of high population clusters. To put this proposal into perspective, assume that there are 500 new houses built equating to a new “village”. If there are a 100 “villages” newly created, each consisting of “500 houses” with the assumption that there is a family of 4 living in each house; this will mean possible redistribution of upto 200,000 people. Then if you further assume that single adult studio type structures are also made available, this redistribution count further increases. This will inturn create more jobs as people will naturally set up more commerce to meet the needs of these newly created regions also boosting localised economies. To put this in perspective, currently the UK needs to build 340,000 new homes a year until 2031,

simply put, the demand for housing will only be met if some development takes place via the above proposal. This proposal will play an instrumental role towards this National need of new affordable, ecological, residential homes along with more controlled efforts for farming with technological advancements creating more home grown produce, as well as a Global need, inline with the Paris Climate Accord. This proposal gives a chance to solve not just the national housing shortages, affordability issues, wealth inequalities but also combats far greater efforts from Climate Change to Sustainable Living and Green Efforts as well as solving the issues that arise from dense population clusters including those experienced in the covid-19 pandemic of high infection rates and unfortunate deaths.

ID: 1783-11 - Category: Environment

A New Type of Navy - Using Battery Boats to Solve Climate Change

Summary:

Lack of sunshine or wind close to energy demand locations is a key limitation on the viability of renewable energy at scale. However, with enhancing battery technology, electricity could be moved by ship and train, like oil and gas is currently, enabling deserts to power the world with solar energy and averting the threat of climate change.

Policy:

The global threat of climate change requires a rapid decarbonisation of the worldwide economy. While electric cars promise a major reduction in emissions, they also require massive increases in the size of electricity grids to provide power.

Many countries will struggle to deliver such massive grids with renewable energy due to their lack of sunlight or wind and space for renewable energy power plants.

There are large swathes of the world where reliable solar could be generated, but at the moment there is deemed to be no way of moving that power to demand countries efficiently and cost-effectively, since power lines involve too many losses over long distances.

With the enhancement of battery technology, however, we should no longer need to rely on power lines to move electricity but instead move it as we do oil and gas; in long trains of petrol tankers and in massive ships.

I therefore propose a two-fold policy to enable a massive increase in renewable electricity.

The first stage is to create massive solar power plants in the deserts of the world. Due to the shortage of rare earth minerals needed for photovoltaic cells, these plants should use concentrated solar heat to power steam turbines.

These solar power plants could be hundreds of square kilometres in size with very little environmental impact, as they would be in arid desert areas (a worldwide geographic analysis would need to be conducted to identify suitable locations, including analysis of water availability for cooling and proximity to train lines or oceans/seas to enable power distribution).

To move the electricity around the world to high-demand countries such as the UK, the second stage wood involve laying power cables onto off-shore terminals where oil tankers that had been converted to massive battery ships would charge up.

Those ships would then sail to their destinations, anchor offshore (by staying offshore, the boats can be much larger and therefore carry more power than if they have to dock at port) and

feed their stored power onto the grid. Once they were almost empty, they would set sail back to the desert solar plant to refuel.

As they would be carrying so much battery power, they would all be converted to running on electricity, massively reducing the cost of shipping fuel and also reducing emissions.

In countries such as Australia with large electricity demand and deserts, battery trains would operate to take power to cities and then sit in large goods yards storing power until it was needed, then releasing it to the grid and returning to the desert to recharge. Those countries would also have offshore terminals to export excess power abroad.

Given that battery storage will be a key component of future clean energy grids anyway, these battery boats and trains would provide a dual role; both moving energy as is currently done with oil, meaning a country with no sun or wind could be powered by the sun and wind somewhere else in the globe, and also providing storage to allow for flexibility in domestic energy production.

The ability to move coal, oil and gas from its source location anywhere in the world to be used as fuel was key to driving the economic growth of the past two centuries, but it also caused climate change.

We now have the opportunity to use the same approach of moving energy from one location to another that proved so successful, but to do so in a way that averts the threat of climate change, cleans our air, and provides cheap and reliable power to spur clean economic growth for the next two hundred years and beyond.

ID: 1766-11 - Category: Environment

Improving disabled access to public footpaths

Lots of people with some physical impairment would love to access public footpaths. A person who is able to walk, may not be able to clamber over a stile, plus, Covid has made us mindful of the fact that disease can be easily transmitted by people touching objects. I suggest that where possible (and I think this would be in tens of thousands of instances) stiles should be replaced with foot operated gates, or by mini chicanes that would prevent livestock escaping but allow humans access without having to climb or touch surfaces with their hands.

In a linked initiative, I suggest all public bins (including dogs bins) should have lids on them, and be operated by foot. And that each finger post indicating a footpath should have a coded description of future "hazards" on the path eg S (stile) F (ford) etc.

ID: 1036-11 - Category: Environment

Where to next? Slow building is the future

When it comes to reconstruction, it is time to put a stopper on the idea that the best thing we can do is Build Build Build.

The construction industry, although given a fairly free hand during this year, is actually one of the least of our worries. It can be slowed down and restarted without losing much in the long run. It can always be redirected into saving the infrastructure we've already got. And let's face it, we are going to end up with a smaller population.

Housing and highways are two big impactors on our lives, our environment and our futures, which are beyond democratic control. Nobody ever questions the need for more housing: the politics is all about who can build most. Nobody ever gets a vote on the latest expansion of the network of tarmac and lights. There is room here for a pause for thought.

Big questions are arising about the homing of the frail. Housing policy plays a big part in the push and pull of migration. And it is a huge driver of energy consumption.

One thing which might help is planning permissions conditional on local sourcing of raw materials in some counties. Instead of cement and tiles produced by burning fuel from start to finish, we should be using local stone and slate, cut and hauled by manual labour, and bricks made with local clay and coal. Perhaps, here and there, we should be encouraging log cabin communities hewn from local timber and paid a little to live off grid.

Supply would be a kind of natural, you might say a healthy, brake on consumption. And the houses you built would be worth more as national investments.

Maybe railway construction could be devolved in a similar way. Devonshire, for example, wants a railway across Dartmoor. Used to have one, built with granite and Irish muscle, and it lasted 100 years. Now it would cost impossible numbers of billions in reinforced concrete. How much cheaper could Devon do it with its own resources - including a lot of unemployed Cornishmen?

Quarrying is a sensible way to make employment. You can measure the output and the carbon savings you are getting for your bucks. And you end up with a resource you can store - and eventually use more than once over the lifetimes before it is rubbish. But it doesn't have to be stone. Here is an equation I like, from an argument for using thatch. It takes 40 hours of hard labour to crop three acres of reed, which is enough roofing material for a house. Nobody has dug anything up or used any electricity. And it's hard to fiddle it.

There are other practicable options for tipping the balance a little between people and Earth's resources - in, for example, manual crop control in farming, highway maintenance, hedging, litter clearance, canal dredging and fishing - all areas where we can see what we are getting for our money, rather than furloughing jobs which will never come back.

Post-Covid, possibly, we are all more in a mood to wind back a bit on what used to look like progress. Given pause before we nip out for a new dishwasher, do we really need one? One of the lessons of lockdown in my house is that you don't, but you do need a full-time galley hand. There is already growing demand for local kitchens, as opposed to fast food joints. Do we really need a washing machine and a tumble drier in every house, eating up half a room, to do what the local laundry used to do? Has anyone worked out how much metal and energy and international transportation it would save if we employed somebody local to wash our sheets?

My argument is that we should be making small but directionally definite shifts like these rather than setting targets for electric cars in the hope of a miracle. Out here in the real world, we see Boris's plan to suddenly dump 200 years of engineering as a giant version of the law against old lightbulbs - a footling diversion which has achieved bugger all at great expense, just like smart meters, building regulations, loft insulation, and all the other mistakes which will never be put right.

Outside the city, we also all know that tree planting is another nonsense. Either you are putting them back where your ancestors spent a thousand years digging them out, or you are putting them where they don't really want to be and most of them die.

We have to drive less. Start from there. Maybe we could try making it electric vehicles only on some roads.

Maybe we should all deal with our own dog shit in our own neighbourhoods rather than solemnly ferrying it across the county to be incinerated. Maybe we don't actually need all the flying to come back. Almost certainly we don't want the cruise industry any more. And if all those visitor centres have a future, it is as unit spaces for repair shops.

The labour market is already making massive shifts and there are more to come and we need to help. Politics tends to be about protection of the vulnerable - which is sometimes as it should be but sometimes looks like a competition for the teddy bear vote. Equally important is encouragement of the strong and able - those we will need for reconstruction.

A minimum wage for doing any job at all does not make sense and is a barrier to having a healthy grey economy, which we need now more than ever. But there should always be a minimum reward for honest hard work. How would we pay for it? The flip answer is, the same way as Rishi is paying at the moment, only with more popular support. But there would be savings and gains to set against a subsidy for labour.

ID: 1688-11 - Category: Environment

Sustainable solutions to the challenges created by coronavirus for the harvesting of UK seasonal crops.

The Covid-19 pandemic has afforded the opportunity to find new solutions to fruit and vegetable harvesting problems posed by immigrant labour supply shortages and the restrictions on labour movement around the U.K. Sustainable solutions to these problems need to address the issues of reliance on migrant labour from abroad, difficulties of the movement of harvest workers around the country and the need for a reliable and readily available sources of workers from year to year. Two possible sources of such labour could form the basis of a solution to these problems:-

Low risk prisoners and young offenders

One potential source of labour for the harvesting of fruit and vegetables could be low risk prisoners and young offenders (LRPAYO). This source of labour could form the basis of a solution which not only help solve the issue of a consistent and available labour supply, but also help and promote the rehabilitation of offenders by offering work opportunities which facilitate re-engage with a working environment and society.

The first main objective of the Prison Reform Trust is reducing unnecessary imprisonment and promoting community solutions to crime. Giving LRPAYO the opportunity of harvesting work neatly fits with this aim and would more broadly help in the rehabilitation of offenders. From a locational and supply perspective, prisons and young offender institutions potentially have a consistent, year on year, supply of labour in the same location. Given these institutions are geographically spread across the country; it would be feasible to deploy the labour force from these institutions to coincide with local harvesting requirements. Harvesting work pays significantly more than offenders could otherwise earn while in prison or an institution which would act as a motivator for those on the scheme. Given the nature of harvesting work, i.e. outside, in the open air and involving physical work, this might well be beneficial for offenders recovering from addiction or mental health issues. Research has shown that exercise is an effective treatment for mental health issues and can serve as a fundamental component to recovery from addiction. Harvesting work would also serve as a platform for the development of transferable employability skills such as timekeeping, communication and teamwork as well as building self-confidence and resilience.

Effectively this work could form the basis of proven work experience which demonstrated to a potential employer that the ex-prisoner or young offender is capable of engaging within a work environment, particularly if accompanied by an employer /scheme reference. Potential criticisms of this scheme might be the charge that prisoners are being used as a source of cheap / forced labour. This criticism is rebutted by the argument that engagement in the scheme from prisoners would be entirely voluntary, with the prison social work/ probation service engaged in identifying potential recruits to the scheme from the prison / young offender's institutions, but those identified and having the opportunity to engage having the option whether to take part. There is a long tradition of community service sentences being given to offenders as an alternative to prison, and in some sense this would be an extension of that policy.

There is also the risk that those LRPAYO engaged in the scheme might abscond or otherwise cause difficulty whilst engaged in the work. While this risk can never be eliminated, it would be mitigated to a large degree by the close involvement of the prison, probation and prison social work service in such a scheme. In the longer term it might be possible to more fully integrate this scheme into the wider parole system, with perhaps prisoners being released on parole having completed a successful period of engagement with this scheme?

Schoolchildren

Older schoolchildren could form the basis of a workforce to assist with harvesting of fruit and vegetables. The first reaction to this suggestion might be one of concern of child labour and exploitation. In fact children have a long tradition of helping with the harvest. In large parts of Scotland one of the annual school holidays is still referred to as the “tattie” (potato) holiday. For many decades the 2 week “tattie” holiday was a period when children between the ages of 12 and 17 had an annual holiday to help with the harvesting of potatoes. This tradition largely died out as a result of developments in mechanisation which allowed farmers to gather potatoes by machinery. The tradition however still thrives in parts of Scotland.

Recent societal changes in relation to children’s wellbeing would point to the potential benefits of a revival and renewal of children helping with harvesting. Childhood obesity, lack of opportunity to exercise, levels of child poverty, children’s increased “screen time” at the expense of social interaction and physical activity are all factors which would be potentially alleviated by this scheme. In terms of harvesting this proposal have similar advantages to the deployment of prisoners in that a ready source of labour is available in the required location at the required time, although some adjustment to the timing of holidays might be required in different parts of the country.

Recent media coverage of the work of Marcus Radford in relation to school meals during holiday periods points to the need to support families during school holidays. It would be potentially hugely rewarding to give elderly children the opportunity to engage in this work and give them a sense of pride in helping their families as well as themselves. It would help resolve the problem of a midday meals if food was provided on the farm during the working day. Criticism of this being child exploitation is refuted by the scheme being entirely voluntary for children. Much harvesting work is of minimal risk and can be done by older children. The history of this tradition has shown consistently large take up of the scheme amongst older children. In terms of the practicalities of its operation there is a living memory of how it traditionally

operates amongst very large number of people still living in the Scottish countryside.

ID: 1552-11 - Category: Environment

the global uses of drone to fill glaring gaps in resources.

The use of drones are classified into two categories and each of the fields can be exploited to capitalize fully on its potential i.e.

1)Drone use in combating COVID 19 pandemic;

2)Drone use Supportive activities. The use and their details are provided in the following sections: 1.Drone use cases in combating COVID 19:

a.Spraying disinfectants

i.Drones designed to spray disinfectants have been remodeled with pesticides on agricultural lands. While the verdict is still out on the effectiveness of using drones to spray pesticides, nevertheless, it is an important use case of drones that are widely being deployed by countries.

ii. Drone companies in countries such as China have teamed with Agricultural research institutes to make effective use of drones for spraying disinfectants. China, South Korea, UAE, Israel, and India have deployed drones to spray these disinfectants in their respective urban and rural spaces. The primary recipients of drone based disinfectant operations have largely been Government offices, hospitals, public places.

b.Monitoring body temperature:

i.Drones mounted with thermal cameras have been deployed by state authorities across the world to detect body temperatures of people in public places. Some drones are fitted with AI-enabled cameras which enable to the identification of any abnormalities in body temperature.

ii.A team of researchers from the University of South Western Australia has reportedly made a breakthrough wherein the drones fitted with specialized cameras can detect coughing, sneezing, detect heart and respiratory rates of people and monitor their body temperatures. Countries such as China, Saudi Arabia, Jordan, Israel and Bulgaria have deployed drones to monitor people's body temperature.

c.Medical and food supplies delivery :

i. there are some essential human activities which necessitates people to venture out. For instance, for their daily needs, people move out of their homes to purchase food and medical supplies (for COVID and non-COVID patients).

ii.Advantage of deploying drones for food and medical supplies transport during COVID 19 becomes particularly important given the fact that there is a significant drop in air traffic congestion. Transportation of medical supplies, medical equipment and even blood samples could be pursued through drones.

iii.A company named Antwork has flown medical samples and quarantine supplies from People's Hospital, Xinchang county to Disease control center in Xinchang county. The company is also considering expanding its operations in Hangzhou and Wuhan provinces of China. Chinese e-commerce company JD has used drones to supply medical equipment to hospitals located in remote areas of Wuhan.

iv. In case of China, reports suggests that robotics have been extensively used inside hospitals to cater to these needs of COVID infected patients. Robotics have been deployed to deliver food to patients in COVID infected wards.

v.Zipline, a drone company has already proven and validated drone based medical supplies deliveries in Rwanda, Africa. The company is currently engaging in talks with US Government to seek permission to begin operations in Untied States. Similarly, a Canadian company Drone Delivery Canada has also begun negotiating with the Government of Canada for transportation of pharmaceutical products in suburban and rural areas of Canada.

2.Drones use Supportive activities:

a.Surveillance and ensuring lockdown:

i. police forces have deployed drones to expand the coverage of their surveillance with faster speed. Drones are uniquely positioned to not only pick up signs of lockdown violations on the streets but also to ensure that people are adhering to social distancing rules on rooftops.

ii.One of the unique advantages of deploying drones to ensure surveillance and lockdown is that it precludes police officers performing such duties from getting infected by COVID 19, particularly those operating in declared containment zones. iii.Countries such as Israel, China, USA, Malaysia, Kazakhstan, Italy, France, Jordan, Belgium, Greece, etc. have deployed drones to ensure lockdown in public places. In case of Israel, drones are regularly sent in places wherein people have been quarantined. Such quarantined people are required to come near their windows to provide visual confirmation that they are inside their houses. Drones have also been used to disperse crowd and ensure that people are practicing the social distancing norms. a sudden drop in crime statistics in Israel could be attributed to extensive deployment of drones by the state of Israel. China too has deployed its drones extensively to monitor congested areas and disperse crowd in its cities and other areas.

b.Public Broadcast :

i.While drones continue to be effectively deployed to surveillance and ensure lockdown, its effectiveness substantially increases when it is fitted with speakers. Drones with mounted speakers have frequently been used in countries such as China, Israel, France, Spain, India etc. to disperse crowd in public places.

ii. Drones deployed for public broadcast can be effectively used for not only dispersing crowd but to also relay area specific messages pertaining to COVID 19 to educate and raise awareness among inhabitants. In scenarios wherein some people are found to be not wearing masks, drones with mounted speakers are able to relay messages encouraging people to wear masks. In case of countries such as Malaysia, Qatar, Kuwait, drones with fitted speakers have been used to relay messages in multiple languages.

c. Survey mapping :

i. Drones have also been found to play a critical role in activities like survey mapping. For instance, while planning construction of hospitals and critical care facilities drones could be used to play an important role in surveying areas. In case of China, the country has made use of satellite technology to survey areas.

ii.According to reports, several empty fields in countries such as China, US and Germany have been converted into makeshift hospitals. Drones have played a critical role in survey mapping of such areas to construct hospital efficiently and with minimal human involvement.

iii. Further drones fitted with lightings have been used to illuminate areas which have been designated for construction activities. Drones were used for one such hospital construction in Wuhan, wherein 6 drones hovering 50 meters above ground could illuminate an area of 6000 sq meters and remain illuminated for 10 hours with a single charge.

ID: 741-11 - Category: Environment

Recognise pandemic readiness as a national defence requirement

Give responsibility for pandemic readiness to the national defence forces.

This approach would have these benefits:

- Readiness for national threats is part of the established culture

- Threat monitoring, workforce training, drills and equipment readiness and renewal

- National assets such as testing may be useable by NHS operations, but this capacity must always be held in reserve, not absorbed into the NHS general capacity

- Real estate that is currently surplus can be re-purposed as required

- Staffing availability for response

ID: 198-11 - Category: Environment

Sort out the UK's exercise and commuting habits - COP 26 Legacy powered by Beeching

Open up the railway lines closed by Beeching and make them into cycle, walking / jogging and inline skating routes. They don't need to be over complicated - just simple, wide paths linking villages, towns and stations. Safe spaces for families to exercise and for commuting. People in general want to be healthy and they want to use their cars less but safe spaces don't exist. If they did, people would develop better habits and we would have a great legacy initiative to link to COP 26 (Cycle lanes alongside roads aren't the answer - they're often noisy, busy and are perceived to make things more difficult for drivers. They also only work if you live close to a city centre)

ID: 1780-11 - Category: Environment

Improving the employment prospects of young people while addressing Environmental Damage and Climate Change

A 1-2 year period of service giving 16/18 – 25-year-olds the opportunity to tackle some of the problems being caused by Climate Change, Biodiversity loss, and Pollution, giving them first-hand awareness and understanding of the problems, offering further elements of education, and acquiring and developing practical skills in solving them.

For some, the experience may take them outside their comfort zone, mixing with people from different backgrounds, introducing them to different geographical areas, and generally broadening their horizons, following a period when their lives have been physically and mentally restricted.

Pollution of land, sea, waterways, and air poses big problems affecting ecosystems worldwide, on which our lives depend as well as the non-human inhabitants.

Remedies to some of these problems are often beyond the scope of the small voluntary environmental groups currently existing who are doing their best to prevent environmental collapse.

Projects addressing some of these issues could be submitted by Environmental Organisations: Eg: RSPB, The National Trust, National Parks, World Wide Fund for Nature, Wildlife Trusts, The Princes Trust, The Woodland Trust, The Marine Conservation Society, and many others, as well as local government. Collaboration with local government, educational institutions, and some of the best environmental companies, including those involved in developing Hi-Tech solutions could galvanise the UK's efforts to combat Climate Change and enhance biodiversity in ways yet to be discovered.

The Armed Services could provide organisational ability, and the infrastructure needed to carry out the projects, with assistance from the relevant environmental organisations to lead, advise and ensure completion of the projects.

Participants would experience at first hand the problems and develop skills:

Examples:

Surveying and Monitoring Removal of polluting materials

Finding ways to improve compliance with Bye-Laws and enforcement of environmental standards. Creation of Cycleways, Walkways, Cleaning of Urban and Suburban areas

Cleaning Rural amenity areas, path maintenance.

Assisting in the creation of more efficient Recycling management schemes, not just for domestic recycling.

Beach cleaning, removal of marine litter, assisting projects restoring natural flora and fauna in coastal waters.

Assisting agricultural projects especially helpful to farmers now looking to payments for

environmental benefit.

Woodland and forestry projects, tree planting, hedge laying, and sustainable forestry projects.

Projects in National Parks.

Projects promoting, encouraging, and assisting tree and hedge planting in domestic, institutional, and industrial settings.

Projects in Urban areas where green spaces are needed more than ever for health and well-being.

Participants could experience several projects in their period of service

What Participants would gain:

Participants would be encouraged to come up with solutions to problems.

They would be able to develop their own interests by exploring the links with companies and educational institutions involved in the projects with the aim of obtaining future apprenticeships and employment in those areas, or further studies.

They should be paid at least job seekers allowance or equivalent, and living/subsistence accommodation should be provided by the Armed Services where necessary and depending on the nature and location of the project.

They would gain certification, and/or a qualification in recognition and completion of their 1 or 2 years of service.

They would also gain a level of self-discipline and experience which would stand them in good

stead in their future lives.

Environmental Service could be jointly funded by Government, large companies, wealthy philanthropists and individuals, all hopefully looking to make a contribution to the Climate and Environmental Crisis.

ID: 1765-11 - Category: Environment

Give everyone a carbon credits that they can sell for hard cash

There are many people who, like me, could never afford to take driving lessons, buy a car or keep a car. Or go on holiday, domestically or abroad. We are among the materially poorest people in the nation. I am disabled: I suffer from severe arthritis, Crohn's disease and I am on the autistic spectrum (Asperger's). Yet I go everywhere on a bicycle, it is like a wheelchair for me, I can't really get far without it, but even though I hold a Blue Badge, I do not have a car and I can live well without one. I go out on the bicycle in all weather conditions at all times of the year when I am not too ill. What I am trying to say is that if someone like me can manage without a car for leisure purposes then most other people can too. I could easily cycle 20 miles per day on my electric pedelec, and not think anything of it. I can also carry around 50kg of shopping.

On the visible horizon the era of the autonomous vehicle is driving towards us, so I cannot see what excuse people will have for leaving their rusting hulks of complicated metal outside their houses when they should be a able to summon a communally shared "room on wheels" to take them unquestioningly to their desired destination.

I think the government should consider offering to buy back people's driving licences, for life. So if you are willing to give up driving, you will be paid an appropriate sum and you will consent to washing your hands of driving for the rest if your life except in very exceptional circumstances (when you could buy the right to apply for a new driving licence and be retested, such as if you experience severe disablement).

But the main point I would like to make is that every citizen should be given an annual carbon budget made of credits which they can sell, for a good price to other citizens who may wish to carry on owning a car and driving around or flying. The budget should apply to everyone over the age 16, although disabled people should have a higher budget. It should not apply when people who have to drive vehicles for their work, or to pilots and air-cabin staff. This way, people who have no choice but to get around on foot, by bicycle or on public transport, who can rarely, if ever afford a holiday, who are usually the most financially poor in the UK, the most carbon virtuous among us, can sell most of their credits to the highest bidder, and they will profit from their virtue. Theymay even be able to afford a holiday, or to get a better bicycle.

I will not pretend that it is always easy cycling to hospital appointments in the pouring rain in the middle of winter with strong winds in your face, but I do not experience that as a hardship, more as a challenge that makes me glad to be alive, and it enables me to deeply appreciate the sunny days when there are charming zephyrs wafting the scent of meadow flowers as birds sing with joy.

Not being locked into a metal box, blasting out harmful particulates and other toxins which harm children, animals and everyone else, puts you in touch with the beauty of being alive. If you could also get paid for it, why wouldn't everyone want to live like that?

ID: 1112-11 - Category: Environment

Buses repurposed as mobile vaccination centres for remote communities

The problem is that remote communities are unable to reach vaccination centres safely as these tend to be located in large towns and cities often a number of hours drive away. To tackle this problem, I suggest using buses that are not required due to lockdown and repurposing these to become mobile vaccination centres. They can then drive around remote communities and reach vulnerable members of the public without them having to travel to a large vaccination centre in towns and cities which might put them at risk.

ID: 921-11 - Category: Environment

Carbon portal for delivery optimisation

The shift towards online consumerism has led to the reorganisation of individual behaviour, delivery services, logistics and product packaging. Responding to the number of deliveries now received by individual households, I believe there is an opportunity to reactively shape the patterns of consumption and delivery to increase efficiency and minimise environmental impact.

This would take a twofold approach; (1) initially focusing on reducing consumption of unwanted or unneeded goods, perhaps through informational campaigns, and (2) formulating a centralised algorithmic system to streamline deliveries. I think that a centralised database of orders (or perhaps a platform that users can sign up to and go through when shopping online, like a 'green portal') could allow for existing delivery optimisation technologies and algorithms to be put to best use. In much the same way as Uber offers shared ride services to users along the same route, collaboration across couriers (Hermes, Royal Mail, DPD), supermarket delivery services (Sainsbury's, Tesco, Morrisons, Waitrose) and normal postal services could dramatically reduce the number of individual trips made and (ideally) the excess of packaging materials used. Such a streamlining is perhaps ambitious, but a centralised approach focusing on environmental impact (perhaps run through a government site) could empower consumers to demand this of companies. Potential to add a carbon tracking or plastic tracking element to this 'portal' or platform could allow users to see how much CO2 prospective purchases and their deliveries might incur (contributing to aim 1; building on product lifecycle footprint analyses) and to see how much they might save through a streamlined delivery (aim 2; focus on both the reduction in emissions from shared journeys and the reduction in packaging materials required). The idea of a carbon portal could hopefully deliver on both of these aims, alongside mainstreaming the importance of climate conscious consumerism and reducing carbon emissions in the UK to net zero by 2050.

If successful, such an approach could be expanded to include other services, such as prescription and medication delivery for older and more vulnerable people. Similarly, the potential to pick up someone else's streamlined order on your journey could add another element of CO2 saving. Whether this is something that could be adopted by existing service providers, such as Royal Mail, or an entirely new private entity remains to be determined. Capitalising on the new patterns of consumer behaviour in the wake of COVID-19 is vitally important in understanding how to truly 'build back better', and seizing opportunities that allow for environmental efficiencies to be maximised is one way in which the UK can respond to the

challenges of the pandemic and create something with positive impact.

ID: 907-11 - Category: Environment

The Earth resources need to be regenerated & its inhabitants protected

The pandemic is pointing to the increasing threat of extinction for not just animals, but humans if we do not wake up to the fact that the Earth is a living system where all life forms exist in an interconnected balance.

Humans have arrogantly plundered the Earth & tried to dominate for too many years rather than understanding this interconnection. Species naturally create an interconnected web and balance when not wiped out or artificially increased . (The re-wilding project is interesting for regeneration).

A long term plan of centuries needs to be put in place - the first decade to incorporate a radical reappraising of how we live and what we value. To urgently make changes - to be a way shower for other economies.

This goal of regeneration of the Earth can be approached in numerous ways and indeed needs to be all encompassing. Some of my ideas include:

Money needs to be a truly reflective token -

The cost of pollution, resources and living pay must be incorporated in pricing if the monetary system is to continue to be central to society. Possibly the collapse of money could be the quickest way to value what is inherently fulfilling and sustainable in lifestyle.

What people need (not want) is truly possible with a different use of resources. Repair, reuse

and sharing to become the norm. Sharing resources in communal ways : Pool cars, lending and sharing by more than one household of washing machines, garden machinery, etc

Air travel - a set number of miles issued to each person (ration - sustainable quota) . People can sell or swap for other resources their quota to other people if they wish, but air flight & pollution is reduced & controlled.

Banning of chemicals that destroy the biodiversity of the living world . More small scale, permaculture, organic growing of food. Soil quality improvement. No more loss of land, trees. Better treatment of animals. More re-wilding projects (see Isabella Tree's results).

Buildings being updated for sustainability. No one having more than one home. Furniture, furnishings made to last and possibility of repair & reuse being incorporated into designs.

Using the media to inspire collaboration, educate and give hope of a better future - happier & healthier does not necessarily mean as much consumerism. Most well being information suggests the components do not include consumerism . Well being comes from learning, belonging, exercise, diet and managing stress.

Health education being implemented in schools. Ecological theory & the true meaning of economy to be taught in schools.

Able unemployed people to help in community projects - cleaning rivers, community growing projects, training others , etc - give them a sense of belonging, self esteem and opportunity for contribution.

Beauty and artistry inspires and fulfils the spirit and less then is more.

Encouragement of changing towns and cities to be inherently more inspiring and beautiful will engage inhabitants in its care, reduce desire to consume, give pride and collaborative focus . Increase community, localised support and collaboration.

(examples ideas : changing shops into reuse, repair, craft spaces, walled gardens, increasing food production areas - indoor & outdoor; in cities increasing community edible gardens; parks and green spaces being increased; bee keeping; community redecoration projects; pairing student and elderly - reduced rent for help). Valuing of ways of living over what money can buy will also reduce crime as money will be less important.

Large scale production and organisation needs to over time be changed to smaller scale . The personal reward of seeing the result and knowing the people involved is a motivation and intrinsic value of smaller scale industry. Local means less travel, pollution and use of resource.

In the shorter term, first decade , a long term stage plan needs to immediately prioritise the most urgent issues and set up self organising groups of people to set these changes in action.

Covid has shown the capacity of the mass public to respond and care . Simply explain what needs to be done and see how people will respond with enthusiasm, focus and energy to be the change we need.

The time is now.

Nothing has ever been clearer - another few more decades in denial and we have no chance at all of making changes in time to address the long term ongoing survival of the inhabitants of the Earth.

ID: 569-11 - Category: Environment

Change our attitude to manufacture, starting with the next generation

Summary of the solution: Covid-19 has revealed the precarious condition of UK manufacturing. We can improve this by long-term investment in our young people, changing their attitude about making goods for the world.

The remedy is not quick (it may take a generation or two), but a start must be made. It has to begin with a realignment of the attitude of the British people to the manufacturing skills.

It can only gather momentum by giving youngsters an excitement about manufacturing. Then we must give them the opportunity to understand how they can play their part.

The excitement

… will come through schools and social media. The schools curriculum must offer to all children an

extended course and qualifications in industrial manufacture. This is entirely different from craft

skills.

Teachers must be retrained to see this as an exciting imperative. (I expect that most teachers have yet

to catch the excitement and challenge of a career in manufacture.)

Specialist teachers may have to be employed.

The courses in manufacture can draw on and interface with most other current school courses in the

sciences, arts and humanities.

There must be class visits to factories and product design offices; talks from industrialists will be a

key part, to win the hearts of dynamic young people. The students can be enthused by hearing:

‘What challenges did we overcome in developing and making this product?’

‘Why do I enjoy this work?’

‘How far ahead are we designing new products?’

‘Quite why did we succeed?’

‘How did we finance it?’

‘How do we manage our workforce?’

The government must put onto the internet – especially social media – material for students with immediate relevance to their courses, but also to link them further and deeper into the world of manufacture.

The government and/or major charities and private companies can sponsor awards and significant publicity for firms who excel in creating attractive and effective material to support teaching these courses.

There can be awards, too, for TV programmes and series that show the challenges and attractions of solving problems in manufacturing.

The Queen’s Awards for Enterprise must be trumpeted in every school, with age-appropriate material to enable the students (and teachers) to appreciate and to celebrate the great

achievements of the winners. The students can then appreciate what has been required to solve complex problems. They can also see the rewards: employment and the satisfaction of a job well done.

A themed emphasis for schools based on manufacture will also draw the attention and commitment of many young people who currently don't see the relevance of what is presented to them in school. But this isn't just for the disenchanted: this is also for the brightest and best. Some youngsters might be drawn into operating machines, some into sales or purchasing, some into design: there's a niche for everyone. But throughout the approach to our young people – the courses, the media, the teaching – there has to be an insistent demand for quality and a high call to perform well, with imagination, creativity, enthusiasm and care, never assuming that today will be like yesterday. This is no easy option for slackers; this is important fulfilling work for all.

Imagine:

… if you want to be good at sales or purchasing, you had better work hard at your foreign languages.

… If you want to design a product for us, you had better get the relevant sciences and maths under your belt.

… If you want to drive that vehicle, we have to know that you're a very careful and responsible person. … if you want to work here, you will have to be flexible, because the markets and the technology are changing all the time.

If you've learnt those lessons, there will be good, challenging alternative manufacturing work for your skills nearby when your employer has to down-size for a while, as has happened to Rolls Royce Aerospace.

The opportunity to take part will come when our most able and ambitious young leaders find that there's real money and fulfilment to be had this way, with a skilled work force available and a favourable wind from government and social attitudes.

Major industrial and social charities should be encouraged to sponsor schools, media channels including TV programmes, and apprenticeships that build, in the minds of young people, the honour and excitement of taking your place in a manufacturing enterprise.

Sixth Form and Technical colleges can be sited in industrial estates, with some classrooms within factory premises, so that their courses can be based on the real and current issues of that factory.

Major tracts of land – much of it from blighted historic industrial activity where we lost our way – must be made available with encouragement from the government. That will be a signal that the UK is going into this seriously, and that you can step forward with confidence. There is plenty of this land: I've seen it in Essex, Middlesbrough. Port Talbot and Belfast. There are, no doubt, comparable sites in all regions, but especially in the North. It will be particularly gratifying to see the North rising again in manufacture for export.

Some say the UK can't compete with low-cost countries. Not true! James Dyson said that he relocated to the Far East not because wages were lower, but because that's where he could find the skills base he needed. Germany, Austria, Switzerland, Italy are not low-cost economies, but we regularly buy their quality goods. There is no cost-reason UK cannot compete well. We just need to change our attitude to manufacturing.

ID: 528-11 - Category: Environment

Master the economic restructure, restructure retraining through the apprenticeship system

In the 1940s, and the 1980s, the UK's economy underwent significant restructuring – the first induced by the war and resulted with an unprecedented level of state intervention in the economy, the second induced by globalisation, digitalisation and political ideology. Pre-Covid the 2020s was already set to experience change similar threefold forces of economic change (the intangible economy), technological change (AI & automation), and political forces (Brexit), now add to that the "war-like" Covid economy and a restructure is inevitable.

We did not manage the 1940s and 1980s restructures well: experiencing rationing deep into the 1950s and comparatively sluggish economy compared to even more war-torn Germany and Japan; while high levels of unemployment lingered through the 1980s until the early 1990s and many parts of the country still live with that scarring. We must manage a restructure better this time.

Pessimistic but realistic scenarios suggest high and persistent unemployment through 2021 and deep into 2022 and possibly beyond. We know that high employment, low skill, sectors are the hardest hit (hospitality and retail), and that high skill, low employment, sectors likely growth areas as we recover (tech, life sciences, professional services). Lower skill people that have lost work unlikely to benefit from growth of such sectors. This is made worse because economic recovery is likely to be geographically uneven given where growth areas are (London with ⅙ of the UK population created ⅓ of the jobs during the 2010-17 recovery).

Meanwhile the pandemic is likely to have accelerated technological change and automation, disrupting low skill high employment sectors (retail and low end services such as call centres). We are at an acute risk of experiencing simultaneous high employment and skills shortage due to the mismatch between the skills and location of job growth and job loss.

There is an opportunity however. With 80-90% of our estimated 2030 workforce already in the

labour market today, with automation anticipated to displace 10-25% of jobs, covid 19 causing unprecedented disruption to the economy, and migration set to decrease significantly, meeting our skills needs will rely on retraining and upskilling people already in the labour market. If we retrain and upskill adults we can create a more efficient, fairer and prosperous economy.

The big barrier to this is that UK employers invest little in training. Employer investment in training fell steeply after the global financial crisis and been stagnant since (and likely to fall sharply as a result of this crisis). And what training employers do invest in is increasingly on-the-job uncertified training that employers can't 'take with them' to prove to their next employer they have relevant skills.

An even deeper concern is that those identified as most vulnerable to the impacts of economic and technological change – low to mid skilled lower paid workers outside the south east – are the least likely beneficiaries of employer investment in training, with degree educated professionals in the south east are disproportionate beneficiaries of it. Yet even the higher skilled in the UK receive less certified training than counterparts elsewhere in Europe. UK employers are also more likely than any other in Europe to recruit over train. This is likely because of a wide pool of English speaking (second language) labour across Western Europe, who have disproportionately taken up professional jobs in the past two decades – particularly in London, whilst lower skilled jobs have disproportionately been taken up by migrants from Eastern Europe. When labour is in high supply, there is less incentive for employers to invest in training. Although evidence from Australia, suggests even a tighter migration system will not address this behaviour unless employers are made to.

If we want employers to invest in training and take part in the skills system that we want them to benefit from, they must be made to – as they are in central Europe and Scandinavia. The apprenticeship system is part of the solution. Apprenticeships are a learn as you earn programme, designed to one of over 400 different 'standards' aligned to occupations, that last at least a year, with one day of classroom training a week ("20% off-the-job" training), to enable the person to transition into work.

The apprenticeship levy forces large employers to engage and invest in training, whilst the system encourages employers to thoroughly engage and design skills standards. Most employers say they are using the levy to recruit and train new staff, with a third saying they use it to upskill existing staff. However, employers also complain that apprenticeships are not suitable for upskilling as those already in work don't need a year of in-work experience, and shorter more modular training would be more suitable for such groups. Employers and government alike are also criticised for the levy causing training to being rebadged as apprenticeships. There should be more flex in the system to allow it to be better used for training – especially for older workers who are less likely to consider themselves 'apprentices'. The levy is a lever, but it is also a much resented one – we should make it a little less so.

We should rebrand over 25 apprenticeships as 'retrainingships' to adapt for in-work retraining using same system and expand traineeships (lower level pre apprenticeships for under 25s) to all ages to support people without prior qualifications, allowing levy funding to support training costs. We should review the 20% off-the-job requirement and 12 month minimum for over 25s, to make it shorter and more flexible to suit older worker's needs. We should allow more flexibility for levy spend for upskilling and retraining – with an approved list of non-apprenticeship courses that levy funds can be spent on. We should keep funding training costs of SMEs and remove all national insurance from apprenticeships for employers. Finally we should make employers train again by calling out those who don't in a national campaign.

We don't need to create anything new, we need to take one that works for hundreds of thousands of people already and make it better.

ID: 454-11 - Category: Environment

Plastic lockdown

I appreciate this is hardly a new topic but it is one that appals me every time I shop at a supermarket. For years now I have been forced unwillingly to be one of the planet's polluters. There has been enough coverage of the problem for us all to know the devastating environmental impact of plastic.

Over the years I have tried to "do my bit" by writing to those at the top of my particular supermarket; packaging up my single use plastic to illustrate just how much waste two pensioners create in one month. The response has always been lame.

We are a wonderful country whose scientists have produced a life saving vaccine in nine months. Surely, with a dedicated will, the supermarkets should be able to get on top of this problem. They have all benefitted financially from lockdown. Now is the time for them to put something back - and if not spontaneously and willingly, with a helpful push from Government who should not be satisfied to think that increasing the charge on carrier bags by 5p is the answer to all the ills created by plastic.

ID: 389-11 - Category: Environment

Transportation of products to and from Europe.

The sight of thousands of lorries at Manston airport and on the M20, snaking it's way through Kent, with their drivers having to wait for a clear Covid test before being allowed on to the cross channel ferries just before Christmas and Brexit was reminiscent of the escape of the British expeditionary force at Dunkirk.

My response would be to develop infrastructure to accommodate the movement of all goods being imported or exported to and from the UK be containerised and moved by rail through the channel tunnel, preferably at night, to and from hubs at various locations around the UK. This would relieve the traffic on Britain's roads and the damage to the surface caused by the heavy lorries, saving cost of repair. It would avoid the movement of thousands of drivers who could be harbouring the virus. It would save the cost of policing the build top of traffic, the cost of the removal of litter left behind and the cost of the Covid test itself (only a handful of Covid tests to those driving the trains). All paperwork could be handled at the hubs making the movement of goods far speedier. I am sure, in this world of "just in time delivery", that transportation times and costs could be cut significantly.

British firms would benefit from infrastructure projects to construct the hubs bringing about

new construction job opportunities too. The fields used to construct lorry parks could be returned to farmland. Gone would be the danger of getting tangled up with overseas lorries in accidents on our roads as the railways have proved far more safer. If we are to embrace self driving electric cars of the future surely it would be safer and more popular if we were to remove as many HGVs as possible from the roads.

We would also benefit greatly by avoiding the emissions caused by the current fleet of vehicles as it would be electricity driving the trains instead. This would surely contribute greatly to our reduction in emissions target. Smaller and less invasive, possibly even electric, delivery vehicles could then distribute from these hubs.

We already live in a containerised world with massive container ships moving the worlds goods so why not use our electrified rail system to do the same?

Kent plays host to most of the "roll on roll off" freight for the United Kingdom and it seems only right and proper to share this with hubs throughout the country.

ID: 266-11 - Category: Environment

The UK's Industrial Estates Solar Power Grid!

It's SHOCKING that driving on the A14 aound Cambridge you see vast acres of PRIME Grade 1 land covered in...solar panels instead of growing crops!

The answer is not to use prime land or any fields for that matter, to set up solar panel farms but to use a huge existing availble resource...the roofs of all the warehouses and industrial buildings in the UK!

The goverment provides 100% right down of the costs in Year 1 to all companies adding solar panels to their roofs. All companies must comply within 5 years. The companies benefit from the free electricty and the excess production goes into the grid. Imagine if EVERY warehouse roof in the UK had solar panels! Imagine the quantity of FREE electricty that it would produce! And because they are fitted on these roof they are not unsightly!

Even in winter, cumulatively the amount of free energy would still have a significant production impact and positive environmental impact. It's staggaring to see the oppotunity is staring us all in the face. It's a win, win - a win for businesses, a win for consumers and win for the environment!

ID: 56-11 - Category: Environment

Deal with the problem at its source.

Most of us can name the few main sources of this problem. We can probably also describe the colours and logos they use in their packaging - we see it often enough on the ground when we walk in the countryside for it to be very familiar. They must take some responsibility for how their packaging is disposed of by their customers.

My proposal is two-pronged. Print the address of the food outlet on each item of packaging. This could be taken a step further by including the car registration number for drive through takeaways. Next, empower councils collecting the litter to fine the outlet and/or the customer each time litter is found. Councils' revenues will be boosted, litter will quickly reduce once fast-food outlets' bottom line is hit and our beautiful natural environment will be protected.

ID: 50-11 - Category: Environment

With the right approach, Britain's railways can come out of the pandemic stronger

This potential for increased efficiency on the railway will not be realised without action from policymakers and railway managers to capitalise on it and adapt to the new situation.

As the shape of the new daily demand curve emerges in the years following the pandemic, the timetable should be rebuilt around it. As this happens, managers should be on the lookout for efficiencies related to an expected reduction in demand at peak time.

These may take some time to emerge and are likely to be related to asset renewal, such as purchasing a new fleet of trains or designing a piece of infrastructure.

Expected gains in efficiency from the reduced peak should be used to reduce fares, which will help drive demand and fill trains at other times. Passengers would of course directly benefit from a lower cost of travel.

Existing proposals for ticketing reform, offering flexible season tickets for employees who may not commute every day with new temporary home-working, should also be taken forward. This will require coordination between the industry and government, which regulates many fares.

A permanent change in the shape of the daily demand curve does not necessarily mean permanently lower passenger numbers overall.

Passenger numbers have continuously increased sharply since the 1990s despite the concurrent growth of home working, mostly off the back of leisure passengers in the off-peak offsetting lower growth in commuting.

For context, a cut in passenger numbers to, for example, 84% of pre-pandemic levels (from 426 million passenger journeys in a quarter to 385 journeys) would actually only represent a cut to the level of journeys found 2013, according to statistics from the Office for Rail Regulation. While this would present a challenge, it is not the apocalypse.

Rail passenger levels will probably be somewhat lower immediately post-pandemic thanks to reduced peak time commuter travel, but the potential for steady passenger growth at other times of day will still be there and with the above approach, passenger levels can soon exceed pre-pandemic levels.

ID: 786-11 - Category: Environment

A new model for taxation of the private motor car

To build on the opportunity outlined in 1b above the government should consider a variable system of taxation for private motor cars.

Rather than taxation based on a vehicle tax, taxation should be based on the miles traveled and the nature of the journey. For example variable tax rates per mile could be applied with a disproportionately higher tax rate for the initial miles travelled to encourage reduced use of private motor cars for short journeys, which can easily be replaced with walking or cycling. Similarly variable tax rates could be used in different locations with higher rates applying in congested urban areas or areas of outstanding natural beauty.

Government should provide seed capital to develop this idea within the uk tech sector. Combinations of digital payment systems, GPS and other existing technologies can provide a tech solution to be adopted by car manufacturers. Retro fitting would also be possible.

Penalty notices should be incorporated into the system to encourage greater adherence to speed limits (i.e. the payment rate increases further if travelling over the speed limit). In addition to improved road safety the use of more 20mph speed restrictions would enable certain lanes and streets to become areas for primarily leisure and recreation activities by reducing the dominance of the private motor car.

It is noticeable how changes of behaviour can be encouraged through making the user aware of the cost of the activity through ‘real time’ charging. This has been shown through smart meters and the plastic bag tax.

Taxation of fuel reduces the use of private motor cars to some extent but it doesn’t specifically target usage for short journeys which should be replaced by walking/cycling.

Whilst uptake of electric vehicles will reduce emissions, congestion and the dominance of the private motor car in our residential streets and lanes still needs to be addressed.

There is a tremendous opportunity to explore this concept further building on some of the positive changes in behaviours brought about by the pandemic.

ID: 783-11 - Category: Environment

Revitalising agriculture

Introduction - The pandemic has focused minds on health including healthy eating, and the parallel challenges of the new trading arrangements with the EU and beyond means that UK agriculture now more than ever needs to be flexible and dynamic.

The government's figures put the median average of farm holders in the UK in 2016 at 60 years old. That's one year older than in 2013.

Whilst is isn't the only factor, the inheritance taxation of farms is contributing to this with Agricultural Property Relief giving farmers an incentive to "die in harness".

Problem - too many farms are stagnating in the hands of older semi-retired farmers.

Fix - This can be taken away by looking at the New Zealand model where the relief for agriculture is on capital gains taxation rather than inheritance tax. This relief would be targeted to encourage handing over to younger generations earlier, revitalising the industry. It would not be available for development sales.

There are hold over reliefs for capital gains tax already, but the advisors assisting farmers tend to steer them away from them.

This should not cost the Treasury money, but if it does, I believe that would be offset by allowing more farms to be in the hands of younger, innovative and most importantly active farmers.

There have been many initiatives looking at this issue, but capital grants can not hope to give younger farmers the clout needed in the land market whilst older farmers “bed block”.

Subsidies are often blamed and the “slipper farmer” regulations show that the problem is acknowledged. The scope for reform through that system is limited, especially given the list of other policy goals it is intended to deal with already.

However I believe the simplest and most far reaching solution, and the most effective, is to look at the tax system. Everything else can follow, the incremental and marginal efforts already in place will have a far bigger impact if allied with tackling the central issue in this manner.

ID: 225-11 - Category: Environment

Reducing CO2 emissions with sustainable, home grown biofuel

Reducing CO2 emissions with sustainable, home grown biofuel

Drax Power Station in Yorkshire, currently generates 6% of the all U.K. electricity from biomass in the form of wood pellets. More than 5 million tonnes, is imported annually, from the USA and Canada. Shipping this quantity of wood pellets across the Atlantic, in a continuous stream in

bulk carriers, is simply not sustainable. We could and should be, producing our own biomass here in the U.K. and ensuring that it is truly carbon neutral.

I propose the planting the equivalent of a New 21st Century Forest, to produce this biomass. This new forest would not be a conventional one in a specific place, rather spread out across the country. The trees planted, would not replace the conventional conifers planted in upland areas, but be native species including willow, which is fast growing and can be planted in poor quality flood plain areas, alongside rivers and streams. Willow grows 60cm a year and could be harvested as a biofuel crop, every five or six years. The willow being pollarded, the stumps remaining to regenerate themselves. Done in rotation, there would always be sufficient cover for wildlife to flourish.

Government subsidies would encourage farmers, with methane emitting beef cattle, to reduce their herds and replant some of their less productive land with biofuel crops. This new bio crop industry would generate new jobs here in the UK and help ensure we meet our our target to reduce CO2 emissions.

ID: 1550-11 - Category: Environment

A different perspective on solving climate change, learning from global vaccine development

Climate change will challenge this country and exert global pressures, which too will impact. A key challenge and opportunity would be to initiate the leadership, development and part financing of a multi sector international team. This team would be challenged to find novel ways of capturing and redesigning CO2 into an environmentally safe product. Opportunity Covid has brought together many disparate yet visionary people to solve problems for the collective good. For example quick solutions to ventilator shortage and the finding of “old”drugs to mitigate covid effects. We have learnt and become world leaders in vaccine development and roll out. When the call went out to help, our country turned its flexible hand and switched gear into problem solving, building upon the bedrock of talents already within our people.

Climate change will challenge this country, flooding and drought for example, and it will exert

global pressures that too will impact: famine, flooding and translocation of peoples. It presents an opportunity to be a global leader in a global problem that can be signed up easily by all countries (not all financially). It would have no call on less developed countries being exhorted to move away from the energy production it chooses currently. This could be a collective of world countries all taking part to resolve this global issue.

This is the idea of how to make it happen.

It would require leadership and a technologically supportive base, funding, people and a starting point.

Leadership and Base - let it be the UK. Building on from visionary investment in vaccine development and production and other technologies.

Funding. In an agreement brokered by the UK, funding to be sourced through international G8 or the Paris Agreement collective.

People. Pull together an elite multi disciplinary global wide team to work together based within the UK. The mission; to develop three approaches to the problem of excess CO2 in the earths atmosphere and the consequential heating up of the planet. These approaches would be the capture, collection and redesigning of CO2.

To give an example of CO2 capture I suggest the team look firstly an idea of “novel brushes / nets / feathers” attached to aeroplane wings that can sweep and collect CO2 in the air. It may sound crazy but aircraft travel is a global resource and any plane could be fitted to theoretically clean the air, if workable technology were developed. I believe industrial chimneys due have a scrubber system to capture excess CO2. There may well be other current CO2 capture systems that could be built upon.

To give an example of CO2 collection, the aim would be to develop a novel brush /net /feather to capture CO2. These technologies would be designed to fit onto aircraft. These "brushes/nets/feathers could be part and parcel of every plane and "turned around" in the same way as soiled materials are removed, and in the same way as fresh food is placed on board the replacement clean novel brushes/net/feathers would be re-sited.

To give an example of CO2 redesigning. The brushes etc would need to go through some small system again in airports or services ancillary to airfreight to convert into a secondary product for use on site or within each country. Perhaps condensing in a corrugated way to form another product.

This would build upon the science and innovation ability shown already in this country and in other nations. It would undoubtably further our aspiration to be world leaders in problem solving and technology. It could if successful solve emerging problems of extreme weather events, flooding of land and bring the nations of the world together.

It is positive, resilient and innovative.

ID: 1385-11 - Category: Environment

Reducing hard surfaces such as tarmac and block paving in our urban and suburban areas

The UK is currently blighted by a burgeoning of hard and intractable surfaces, tarmac and block paving in particular. Not only is this sterile and dispiriting to look at, but it is increasing the likelihood of flooding by allowing rain nowhere to run off to. There is also no doubt that the sight of trees, plants, grass and hedges and the animal life they attract is good for our mental and spiritual health. It is especially important that children grow up seeing as much of the natural world as possible.

In order to replenish our urban environment I suggest we look at our front gardens. There are many medium-sized houses, for example the millions of semi-detached homes built in the mid twentieth century, which in recent years have lost their front gardens to hard surfaces for parking. More and more often front gardens are completely done away with so that not a single blade of grass, not a weed or ant can thrive. Landlords of shared rented housing are particularly guilty of this kind of ruthless devastation.

I would like the preservation of the British front garden to be incentivised. Local councils should reduce council tax by 5% for a period of ten years for houses where at least 60% of the front garden has been returned to a natural state. Conversely, council tax should be increased by 5%

for ten years for houses where more than 40% of the front garden has been paved over. In each case the ten year rule would apply even if the house is sold within that time.

To incentivise this innovation further, there should be a government allocation of funds so that householders can apply for financial assistance of up to £1000 for the purpose of restoring their front gardens. Evidence would of course need to be provided.

I'm not thinking here about promoting front gardens that are excessively manicured, prim or municipal in appearance, but simply green spaces in any style that have trees, hedges, grass, flowers – all of them drinking in carbon dioxide and pouring forth oxygen.

These innovations should apply only to front spaces that are above a certain specified size, big enough to park a car.

ID: 1638-11 - Category: Environment

An Overseas Online Delivery Charge (OODC)

By the immediate, unilateral, application of an OODC of 35% of the costs of goods (not shipping or packaging charges) for every order that is invoiced from a non-UK location (in the majority of cases, Luxemburg or the Channel Islands).

This must be declared by the selling organization and remitted to the UK or devolved Government depending on the delivery address. This delivery of this remittance would be cross-checked and confirmed separately by the delivery company

The money should be automatically be hypothecated in full into a Business Rates Recovery Fund. If the BRRF is 100% of the collected business rates for the year, then rates paid will be refunded in full to every business. If it is less, then the correct proportion will be refunded. If the BRRF exceeds the business rates income then the excess is deposited into a High Street Regeneration Fund and allocated to each Local Authority in proportion to the business rates generated by it.

This will no doubt be unpopular with the mass of online buyers and their 'overseas' suppliers, but will go some way to evening up the uneven fight faced by bricks and mortar retailers. It will protect and/or generate jobs, reduce excess packaging and pollution, and allow consumers to understand the value of what they are buying.

It should be illegal to pass the OODC on to the buyer, or load the shipping charges in an attempt

to recover the cost.

It may encourage 'foreign' sellers to move their accounting to the UK to avoid this tax, and thus increase the legitimate tax take for the Government(s).

So it is a win-win for the High Street, for jobs, for the post-pandemic recovery, and for the UK economy overall. It may also encourage other countries, who have been dithering with this for years, to make a positive move, and begin taming the online retail giants.

ID: 1524-11 - Category: Environment

Vat on Food

Example: Go to a pet shop and buy loose bird seed and no vat added. If that bird seed comes in a sealed bag that has been bagged else where then vat is added to that bird seed purchase.

This is a ludicrous concept as its still bird seed. Food, for human consumption, in the UK is classed as an essential item and not a luxury so it doesn't have vat added to it, yet bird food is classed as a luxury.

Its not about bird seed but the same concept. All fresh food that has not been processed should be vat free and remain vat free to ensure the essentials for human life is as cheap as sensible.

Any food that is processed should have vat on it. To save the confusion this could be a flat rate of vat or a sliding rate depending on the level of processing.

Examples: apples that are sold loose no vat, apples in a sealed poly bag 1% vat added, apples in a sealed bag on a paper tray 2% vat. Fresh loose swede no vat, swede wrapped in plastic 1% vat added, frozen swede 2% vat added. Potatoes loose no vat, poly bagged 1%, frozen 2%, in a ready meal 3%

The greater the level of processing the greater the vat added making fresh food the better option, for us, our resources, the planet, pollution, farming, packaging & landfill.

This should also cover the amount of salt, refined sugar and fats that our in processed foods. The higher the level of these ingredients the higher level of the vat added to that product. This is for better health of our population.

This should also include all takeaway food and restaurant food unless its made fresh. Salt, refined sugar and fats should have vat added when sold at wholesale. Salt is the difficult as its not heavily processed and is used as a preservative.

I have no idea how much adding 1 or 2 or 3% onto these highly processed goods would cost on the weekly shop or how much money it would generate for the treasury. Individually it would not be a big increase. Average food shop per week per person is £25, £100 for a family 4 so an extra £3 a week on the food bill £156 per year, but this depends on what you class as food. There would be a choice buy fresh and unpackaged, no vat buy processed and packaged vat added higher shopping bill - consumers choice.

Like anything you can't take without giving back. No vat on food as its essential but we pay vat on our utility bills. Is it not essential that we keep warm, wash ourselves in hot water, use lighting, watch tv and use computers? There is 5% vat on these utility bills!

Bring in vat on processed and prepackaged foods for obvious reasons that should easily be accepted by the public but at the same time reduce the vat added to utility bills but these shouldn't have vat on them anyway.

I have written before about the way the mortgage interest rate is used to kerb spending when inflation is rising but this has the potential to make people homeless but only picks on people who have mortgages while the rest of the population keep spending with no care. Having vat on processed and packaged foods can be increased at a time for inflation control as its a non essential choice. You don't have to buy a ready meal you can just buy all the fresh items and make a meal, we won't go hungry.

Vat on business. For small businesses this is a real bind, its like having a member of staff that doesn't contribute to the running of the business but has to be paid a wage even before any of the business overheads have been paid. Small business can have a large turnover but doesn't mean it can make money. The answer is that what ever you charge as a price than that should include a portion of vat which is paid. A business has fixed over heads which have to be paid. If it footfall drops these over heads still have to be paid along with the vat but the price to the customer is fixed. The next month footfall increases, overheads remain the same, the business sees extra money to cover the previous months shortfall but then as vat is charged as a percentage the business gets a higher vat bill removing that months benefit of increased footfall. HMRC is the beneficiary of the increased turnover and not the business.

Present vat registration turnover level is £85,000. You need this amount to employ just 4 members of staff. This could be the boss, secretary and 2 staff. £85,000 take 20% vat off it of £17,000 then the real turnover required is £102,000 to ensure costs of £85,000 are still covered or it drops to £68,000 and the loss of someone's job yet the business is busy and requires 4 people but can only afford to pay 3!

I can't give a solution to this, except technology maybe the solution. Things have to change as the world is changing and so is business. Vat on small business is an out dated concept.

Leisure/SPORT businesses should not pay vat even more so if they supply facilities that children can access. As the nation gets fatter and has no level of fitness, as we come out of lock down and have to restart, deal with metal health issues and get the nation moving, then sport and fitness should be a priority. This should be a long term change as good physical & metal health is essential for a healthy society.

ID: 1246-11 - Category: Environment

Electric cars and education help reduce the test backlog and promote the green agenda.

Summary: Take measures to reduce the backlog of young people awaiting driving tests. Capitalise on opportunities to increase the proportion of electric vehicles on UK roads, thereby reducing emissions. I have learned much from my experience as an approved driving instructor (ADI) with the following points of particular relevance here: 1. It is somewhat quicker, with fewer lessons, to achieve a good standard of driving in an electric car as opposed to a geared car but… 2. …young people seek a full driving licence, whereas tuition on an electric car leads to an automatic licence. 3. Some schools are reluctant to allow students to do driving lessons during school time, even in 'study periods'. 4. Young learners tend to develop a loyalty to the car, both brand and model, they learned to drive in. 5. Very few ADIs instruct in an electric car. 6. The government ban, as part of its green agenda, on the sales of petrol, diesel and hybrid cars by 2030 is slowly gathering pace but may result in a rush to buy many of the worst vehicles just before the ban occurs! Some actions that could help reduce the back log are: A: Encourage learners to choose electric cars, reducing by perhaps 10% the numbers of lessons needed. This could be achieved by: Removing the barrier to a full driving licence to those who train on an electric car – if not removed altogether, then have a 'staged licence' that allows straightforward qualification to a full licence at a later date. Giving priority for electric cars in the queue to book Driving Tests. Heavily promoting electric car benefits to younger people – greener, cheaper to run, easier to drive; they are the future! Encouraging manufacturers of appropriate (small, city car) electric vehicles to target young people with advertising, and pricing structures. B. Encourage schools to allow pupils to do driving tuition in study periods – enabling more driving lessons to take place. This could be achieved by: Convincing schools that learning to drive is a life-skill and that allowing students to take a proper driving lesson in study periods is part of their learning. Encouraging more schools to invite appropriate driving experts (ADIs?) into school to 'set the scene' for economical, green, safe driving. Place driving safely more firmly on the life-skills curriculum. C. Increasing the availability of electric cars for driving instruction. This could be achieved by: Incentivising ADIs to use electric cars by, for instance, increasing the subsidy on such vehicles when purchased for instructional use. Some actions to assist the proper implementation of banning 'polluting' vehicles: The increased use of electric cars for

driving instruction will increase their appeal among young drivers who go on to influence parental choices of a first car. The greater number of electric cars on UK roads will help with, hopefully, a reduction in prices, and gradually build a second-hand stock for the future 'new drivers'. Education of a new generation of road users will help promote the green agenda.

ID: 1052-11 - Category: Environment

A Structure for the Rail Industry to provide an integrated service of excellence.

Proposal for The Restructure of the Rail Network

1. Reasons for Failure of the current arrangements.

There are 24 companies providing Rail and associated business services.

Railtrack, the organisation with responsibility for managing the network of rail and track facilities has been taken back into public management to prevent further deterioration.

The catalogue of "Franchise" failures and changes since Privatisation proves Government's and the Private Sector's inability to establish a Rail Network fit for purpose.

Privatisation caused fragmentation and dysfunction. Private sector opportunism disregarded the need to create services for travellers and business communities, and minimised investment while increasing fares for Passengers and Freight.

Each Franchise or Contract performed as a separate entity. There was minimal attention to planning or promoting integrated growth and no recognition of the multiplicity of separate

needs facing the incredibly complex organism that is the Rail Industry.

2. Capitalising on Recognising a Problem.

The change to commuting as a result of COVID-19 and the suspension and projected review of contracting methods, provides a unique opportunity to revolutionise Rail services. “The Government initially suspended rail franchising in order to maintain service, as passenger demand fell due to the COVID-19 pandemic. On 21 September 2020 the rail franchising policy was permanently abolished. Emergency arrangements remain until Government legislates for a replacement to the system”.

(Comment from the Department of Transport).

Now is the time to restructure the framework to provide an outstanding Rail Network fit for the present and future needs of this country.

3. What is needed?

A) A New Overarching Managing Company to ensure the integrity of a de-nationalised organisation, with the implicit and sole intention of managing the Rail Industry on behalf of Parliament and the country. This company will ensure that the Rail Industry, however it is contracted, has a conduit between the Secretary of State, (sic Govt Policy) and the companies contracted to run the systems.

B) A Redefined Railtrack is the heart of the rail industry. To honour de-nationalisation, responsibility for the Network should be managed through a Company linked with the Federation of Companies proposed.

C) A Federation of Rail Industry Boards would ensure that every contracted section of the Industry would be coordinated. Each Company would retain and operate under the integrity of its own Terms of Reference whilst ensuring that it remained part of a bigger operation

"Federation is the coexistence of independent companies with a shared vision and at the end of the day, to a large extent a common Profit & Loss" (Definition).

Organisation

A) The Management Company

1. The Secretary of State would have political responsibility for this company and appoint a Chairman answerable to his or her department.

2. The directors of the company would to be appointed from members of the contracted Companies including Railtrack and include a representative from the Department of Transport.

3. This company would exist to

a. ensure dialogue between all those responsible for providing an effective Rail Network within the Government's declared policy for the Rail Industry.

b. identify of the needs of the users (paramount).

c. integrate the services dependent on crossing and using multiple miles of Railtrack which requires understanding multiple commercial plans.

4. The role of the Main Company Board must be accepted by the leaders of the companies contracted for their operation. Terms of Reference/Articles of Association should reflect this.

5. The Secretary of State and the Chairman of the Board will be responsible for establishing and agreeing the requirements determined by Government and their delivery.

6. Board Membership

Chairman Director of Finance Director of Public Affairs Representatives from Dept of Secretary of State Director of Health and Safety Director of HR The Chairs of Boards of every Federated Company, and/or their Chief Executives and Finance Directors. (Minimum 1 Representative for each company)

B) A Redefined Railtrack.

The Terms of Reference and the relationship with the Department of Transport will need careful planning and drafting. Its relationship with all “Federated Companies” is critical.

C) Federation of Rail Industry Boards.

A Federation would ensure that every contracted section of the industry would work for the whole structure. Each company would retain and operate under the integrity of its own Terms of Reference but remain part of a bigger operation.

Representatives on the “main board” from the franchised companies will ensure that government determined requirements are achievable within their own company. Each company will be required to resolve differences of opinion and objectives, mindful of the needs of other Companies in the Federation. Federated Companies should be autonomous and answerable to their shareholders, clients and business partners. Their Terms of Reference should acknowledge that their operation is answerable to Parliament and the Community. In addition, they should bring any problems to the main board for resolution so that disruptions, such as those arising in the last few years, are reduced to the minimum.

The Trade Unions.

Establishing a new relationship with the Unions is vital. Substantial disruption to travellers’ services over a number of years has cost millions of pounds.

Discussions with Unions should introduce an invitation for each Federated Company to have a non-executive Union Board member appointed bi-annually. There should also be a Recognition Agreement with agreed terms of reference as part of the HR operation of each Company.

2. Occupational Health and Safety.

About 250,000 staff are employed by the Rail Industry. A Director of OH&S and a support department should be available to advise all companies. This would reduce inconsistencies. The costs should be offset by the reduction of “incidents”.

3. Diversity. The Rail industry has an ethnically diverse workforce. Diversity Targets and supportive procedures should be set and agreed with the Unions.

Anthony Austin CFIPD (Retd)

ID: 749-11 - Category: Environment

Meeting Emissions Targets by Capitalising on Work from home innovations

Britain has stated it wants to reduce CO2 emissions by 68% by 2030, we can't achieve that without really thinking outside the box. Rush hour traffic contributes significantly to our emissions, but no matter how many taxes or new parking charges we apply, people continue to absorb costs and still use their car to get to work. This is where I think the pandemic has forced our hand, it has shown companies how productive they can be with a large chunk of their workforce working from home. Many companies have sank a considerable amount of money into facilitating home workers so why let that go to waste. Globally countries have seen decreases as large as 26% because of reduced traffic on the roads.

The pandemic has created an infrastructure that we can now capitalise on. I propose the chance to offer companies incentives in some way to maintain this infrastructure, let more flexible and homeworking become the new norm and force a lot of traffic off the roads and create a healthier environment for everyone.

ID: 440-11 - Category: Environment

Bicycle transport on buses

Local rural buses tend to have low passenger numbers (at least in Dorset) and usually a designated space for wheelchairs and buggies. By removing one or two more seats - or replacing them with folding seats as on some trains - bicycle spaces could be provided. A company might test the potential demand by experimenting with one or two designated and well-advertised routes - for example to the nearest cycleway at a weekend, ie. a non-school day. Of course, the idea applies in other contexts, not only rural: cyclists might want to use public transport between towns, taking their bikes to local journeys at each end. Some companies on the Scottish borders (Border Buses, I think) have this facility as do those on some routes in

Switzerland, although these carry bikes externally on hooks at the rear.

ID: 2279-11 - Category: Environment

Scrap Factory Farming

Covid-19 has simultaneously identified the dangers of factory farming whilst providing the opportunity to eradicate it. With the consequences of a pandemic fresh in our mind, perhaps for the first time ever, we may have the political will to scrap factory farming for good.

I say the political will, as opposed to the public pressure, as I do not believe the British public willingly support factory farms. As a nation of renowned animal lovers, we are generally opposed to the unnecessary suffering and cruelty rife in factory farm facilities. Unfortunately, this suffering is kept behind closed doors and the public are sold lies of 'happy' hens, cows, and pigs living fulfilling lives in green pastures. We pay for these lies, whilst supermarkets push the prices of animal products down to maximise their profit margins - starving farmers of their livelihoods and forcing an increase in intensive farming.

This cannot continue and, considering the risks associated with factory farming identified by experts, the Government has an obligation to listen to the science and scrap factory farming in the interest of public health. This, alongside the changes following Brexit enabling reform in our agricultural system, provides the perfect opportunity to transition away from factory farming and towards a system that is safer for not just people, but also animals and the planet.

Environmentally, there are many concerns associated with factory farms including carbon emissions and pollution spoiling the natural environment. Waste from these facilities leaks into soil and rivers, destroying the ecosystems necessary for our survival. The animal feed required to maintain such an intensive system is contributing to deforestation abroad and David Attenborough has confirmed that 'the planet cannot support billions of meat-eaters'. Furthermore, transitioning away from these intensive facilities would go a long way to helping us meet our 2050 net zero goal. Freed up land could be 'rewilded' to further capture carbon from the atmosphere and reduce global warming.

Not only would scrapping factory farming reduce the risk of a further deadly pandemic and preserve the planet we live on, but it would help to reduce antibiotic resistance that the World Health Organisation warns will kill 10 million people a year by 2050. The crammed and unhygienic conditions in factory farms are a petri dish for bacterial infections. Consequently, antibiotics are routinely used to prevent outbreaks of illness in these facilities. This kind of overuse and misuse of antibiotics is a leading cause of antibiotic resistance which has seen the emergence of 'superbugs' that are increasingly untreatable, resulting in the unnecessary loss of life. Lives could be saved by eradicating the factory farm facilities that necessitate blanket antibiotic overuse.

Finally, England prides themselves on their animal welfare but the harsh reality is that we are failing the animals in our care. The Animal Welfare Act highlights the freedoms that every animal should be entitled to, including the freedom from pain, injury or disease; and freedom to express normal behaviours. These are routinely denied to animals in factory farms where animals are crammed into small, unhygienic spaces, for example, hens with just over an A4 piece of paper worth of space each. Pigs are neutered and mutilated (tails docked) without anaesthetic and mother sows will spend on average 12 weeks a year in farrowing crates – unable to even turn around. Many animals sustain injuries that go unnoticed and suffer stress from the cramped, artificial conditions. These factors additionally inhibit the animals' immune systems, making them more susceptible to the spread of diseases.

England has the opportunity to take the initiative and demonstrate leadership with progressive 21st Century policy that will inevitably inspire change elsewhere. Scrapping factory farming will save lives, protect the planet, and reduce suffering to animals. We have everything to gain, and nothing to lose.

ID: 1946-11 - Category: Environment

Bringing the VAT system up to date.

Every month, VAT collected from consumers is distributed down the value chain of the economy. The wheels of the VAT accounting system grind into motion. Consumer facing businesses collect VAT on their sales, then pay VAT on their expenditure to the businesses that

supply them, and so on down the chain. The VAT on the purchases is offset against the VAT collected on the sales, and the net amount is paid to Her Majesty's Government – it is hoped - by company upon company, business upon business.

But why? Why should this be? Why isn't the VAT collected from consumers simply remitted to Government by the businesses doing the collection? This is a question Minsters should put to their officials. Is it to distribute the VAT as a safeguard against a loss from the bankruptcy of one major company, or is it simply a reflection of an intellectually coherent system based on the concept of value addition? The reason why the system was designed to distribute VAT receipts from the businesses collecting the VAT to their suppliers in the value chain is lost in the mists of time.

Whatever the reasons for adopting this approach when VAT was introduced in 1973, the world has moved on. Digital banking is now a fundamental aspect of the monetary system. If a busker in a Tube station can arrange to be paid electronically, a UK business can arrange to have its VAT transferred automatically to the Treasury at the point of sale.

To make this work within the existing system, it would be necessary to zero rate VAT supplies between VAT registered entities. This would have the significant advantage of eliminating many of the current opportunities for fraud inherent in the system. To a crooked trader, a VAT invoice is like a cheque from Government for the recoverable input VAT, a fact that has been exploited over the years in a variety of VAT "Missing Trader" fraud schemes that have involved either a cash refund for VAT paid, or a failure to account for VAT paid between companies. If VAT was accounted for directly at source, and supplies between VAT registered businesses zero rated, these schemes would not work. Missing Trader fraud may not be the concern it once was, but the so-called annual tax gap between VAT collected and VAT due is estimated at $10 billion on the latest available figures. Eliminating a major source of fraud would be an important step towards reducing that gap.

While these changes would be a positive and significant improvement to the existing VAT

system, care would be required to ensure no unintended consequences from such changes. Some of the effects from these changes would be positive, for example in reducing the complexities surrounding bad debt relief, where VAT has been charged to a company that defaults. Other effects in areas such as VAT exemption may need to be addressed. What has been considered here is one aspect of a system that successfully provided a framework for trade within Europe for almost 50 years. As Britain leaves Europe, it should make a comprehensive review of its VAT system, and develop a modern regime that will serve its needs in today's digital economy.

ID: 1919-11 - Category: Environment

Tackling both climate change and hardship resulting from the extremes in airfares

The Covid-19 pandemic has delivered benefits to climate change through a reduction in greenhouse gases from reduced air travel. At the other extreme, for those taking trips, many for compassionate and compelling reasons, returning home has created distress through exorbitantly priced flights. During the pandemic inflated fares have been experienced, up to 20 times the original cost. Passengers have had their seats on flights cancelled and refunded with alternatives offered at prices up to £10,500 for a one-way long-haul fare.

A policy of imposing price controls on airline tickets could both address this opportunity to combat climate change and tackle inflated fares, at times of adversity and along with other challenging situations.

This policy proposal emerged pre-Covid but has become more urgent in the light of the impact of the pandemic.

What are the other challenges to be addressed?

Airlines have been cross subsidising routes, causing hardship to those on the overpriced routes and promoting air travel on the below cost routes when UK tourism would otherwise flourish. Offering air travel below cost is inconsistent with the need to address climate change.

As an example, in December 2019 one airline was promoting £60 return flights to Europe (e.g. to Spain) in October 2020 half-term whilst charging £560 return (excluding luggage) to mainland Greece, where there appeared to be a price cartel.

Conversely, for passengers needing to book flights last minute due to their own medical emergencies or to travel to help others in crisis, flights can be unaffordable such as up to 10 times the base cost. This often places undue hardship on families who are already facing distressing situations.

How can we fix the problems and grasp the opportunity to address climate change through a mutually beneficial pricing policy for airlines?

Imposing a minimum and maximum pricing policy on airlines operating in the UK could address the issues. A minimum one-way, short-haul airfare of for example £50, could be imposed, with a maximum price set at 3 to 5 times the minimum price offered for that flight. The same rationale to be applied to longer haul flights.

The benefits delivered should include:

- Reduction in unnecessary air travel, currently driven by below-cost cross-subsidised fares

- Stimulation to the UK domestic travel industry

- A reduction in greenhouse gases emitted by aircraft

- Increase in much needed income for airlines on competitive routes

- A reduction in airfares for urgent last-minute travel, often at times of hardship. This to be balanced by an increase in minimum fares.

- No need for some routes to unfairly subsidise other ones nor for pricing cartels.

The pricing policy could be applied by the UK Government on flights leaving the UK or sold in the UK. The aim would be for the UK to lead the way for this to become an international standard by gaining the support of the EU, G7 and the countries signed up to the Paris Climate Change Agreement.

ID: 1634-11 - Category: Environment

Let the market, not governments, work out how "build back better"

Most attempts at affecting climate change by governments have and will continue to fail because most market regulation to date has been framed in terms of "solutions" dreamt up by well-meaning committees and functionaries but crippled by industry lobbyists and vested interests (like for example carbon trading) rather than giving the *problem* to the market and letting the market devise the best solutions.

There is however an alternative approach, which - paradoxically - is already employed in the nuclear sector of the electricity generation market (which is one of the biggest carbon emitting sectors). The nuclear power model is very simply that you are not allowed to even start to make money from selling electricity produced by nuclear power until you have demonstrated to the regulator exactly how you will clear up your mess.

I.e. It is quite simply to say to the "polluter" (be that radioactive waste or carbon dioxide) you aren't allowed to make money from burning coal or selling petrol (or nuclear fission) until you demonstrate to me (the regulator) how you are going to ensure that your activities result in net zero pollutants being released into the environment.

So if we applied the nuclear model to the oil industry we'd say to say BP you are not allowed to sell petrol until you can demonstrate exactly how it will remove a tonne of carbon dioxide from the atmosphere for every tonne of carbon dioxide it's products produce. So BP stops selling petrol until it solves the problem .

Given this scenario I suspect I'm not alone in thinking that rather than spending millions on dis-information, lobbyists, false science etc... to cripple or delay the implementation of imposed solutions as they normally would, BP will come up with a workable solution in VERY short order! Not only that but the solutions they come up with will be those that put the minimum burden on the company whilst achieving the net zero bar.

Exactly the same will apply to gas companies, coal mines and any industry that emits carbon (or methane in the case of agriculture).

So in a nutshell give the problem of solving the net zero carbon issue to the people that will have the biggest incentive to solve the problem - and don't let them trade until their solution is acceptable - i.e. give them the problem and let them and the market find the best solutions rather than trying to impose half baked solutions and challenge the market to find ways of circumventing them.

All markets are regulated - it's just that some are well regulated to achieve the public good desired and some are not. Giving the problem to the people with the biggest incentive to solve it and the regulator the power to ensure the desired outcomes will ensure the best solutions for all concerned.

ID: 1351-11 - Category: Environment

Conserve precious earth resources

Fix it by removing taxation of employee labour & replace it with a taxation on natural resources

used in the manufacturing process. This will encourage recycling, reuse, repurposing, reinvigorate craft & apprentice skills training, & ultimately conserve finite earth resources

---

ID: 1148-11 - Category: Environment

Children's mental and physical wellbeing is declining through lack of access to nature during lockdown.

A Nature Premium providing a government funded, statutory requirement for schools to take children regularly into nature (nature defined as wild school grounds, woodlands, gardening, conservation, Forest School, farming, permaculture etc.). The Nature Premium would support children's mental health and wellbeing. It would engage them with learning and transform their lives.

Time in nature is crucial for children's mental and physical wellbeing: the benefits are far-reaching and well-documented. Nature provides a way to feel refreshed, revitalised, calm and relaxed. People who visit nature have greater life satisfaction, more self-worth, more happiness and less anxiety. Other benefits include better resilience, improvements in social functioning and social inclusion. Its benefits for physical wellbeing are critical too, research published in 2018 showed that children used more energy on a school day with Forest School (playing in woods), than on a school day with P.E.

Why it's an idea whose time has come? • In the light of the COVID-19 pandemic and the impending climate crisis there is an urgency that demands supporting the Nature Premium for the benefit of all children. • 71% of people agreed that time spent in/surrounded by nature has been more important to them since the onset of the Coronavirus crisis in the UK. • 'We recognise that playing and learning outside is a fundamental part of childhood and supports children's mental health and wellbeing. We also know that some children have good access to natural spaces whilst others do not, such as those living in areas of high disadvantage'. (Department for Education response 2020-0040431 CRM:0461050). • It will give children agency to face three of the biggest challenges we face: biodiversity loss, climate change and wellbeing. • 83% of children said that being in nature made them very happy.

The Nature Premium will tackle inequality AND be fair to all children: • 71% of children from black and ethnic minority backgrounds reported spending less time outside since coronavirus, compared with 57% of white children. • Three-quarters (73%) of children from households with annual income below £17,000 spent less time outdoors, compared with 57% from households with an annual income above £17,000. • It will help equip children with the skills and knowledge to flourish in the new green industries in the 21st century.

Key quotes • "Connecting children with nature is one of the most important things we can do for them. It can boost their health, wellbeing and learning and give them a life-long love of the natural world", Lord Blencathra, Deputy Chairman, Natural England. • "a plea for a transformation of our education systems towards one where children from an early age are encouraged to try and understand the infinitely beautiful tapestry of processes and forms that is Nature" Professor Sir Partha Dasgupta in his interim report of the Treasury commissioned report The Economics of Biodiversity: The Dasgupta Review (April 2020). • "No one will protect what they don't care about; and no one will care about what they have never experienced" David Attenborough. • "The Nature Premium campaign seeks first and foremost to improve children's' mental and physical health, and to nurture the innate love of nature that all young people have within them. I think it's a marvellous initiative, with the potential to both transform children's lives and to lay the foundations for a society that will care for our environment in the future". Professor Sir John Lawton CBE FRS President of the Institution of Environmental Sciences, Chair of Making Space for Nature government commissioned report.

What outcomes will it deliver for children? The Nature Premium will increase: • A range of outdoor education and nature experiences offered to all pupils to benefit their mental health, wellbeing, and education. • The engagement of all pupils with the natural world and human dependence on it. • The profile of nature, sustainability, and the UN Sustainability Development Goals as a tool for whole-school improvement and community engagement. • Confidence, knowledge, and skills of staff in teaching in the outdoors - in nature. • Participation in local and global community environment issues addressing climate change, biodiversity loss, sustainability in school and the local community and volunteering with 'nature' charities.

How can we fund it? • The Sports Premium provides a model. It was funded using the sugar tax

on soft drinks. • The Sports Premium only funds primary school children. The Nature Premium will support all children because: ü In early years there is a better return on investment. £1 spent on early years works harder than £1 spent for post year 11 children. ü In secondary schools all children need support for their mental wellbeing. The UK ranked lowest of 24 European countries for the proportion of children with high life satisfaction – as stated in the Children's Commissioner's Childhood in the time of COVID report. ü Additional funding for young people, to empower them to respond to the climate emergency, to solve real life problems in ways that explicitly link to their education. ü Young people in the UK worry more about the environment than the economy, Brexit, digital security or homelessness. Two in five young people in the UK worry about the environment and these children will have lower life satisfaction. ü Article 12 of the UN CRC Committee on the Rights of a Child states they have the right to have opinions and for these opinions to be heard and taken seriously. The Children's Act 2004 follows up through the Children's Commissioner. ü 94% of young people would like or would have liked the option to study a GCSE in Natural History. ü It will encourage good citizenship.

Wouldn't this demand a massive amount of public money? No. Investment in the Nature Premium would probably cost less each year than the Treasury Scheme 'Eat Out to Help Out' and benefit all children.

The Nature Premium would be an investment to transform the next generation to be stewards for the planet and contribute to the new green economy and achieving Net Zero.

ID: 1119-11 - Category: Environment

Unused energy resource

Large car parks at supermarkets and railway stations could be roofed with solar panels instead of wasting valuable food-productive areas of land for 'solar farms'. The areas for car parks have already been concreted over so there would be no loss of land. It would also greatly benefit shoppers and commuters by keeping them dry whilst loading their shopping and walking to and from their vehicles. Some of the resultant profits could be shared between the supermarkets or railway companies as an incentive and the electricity produced could be used to power houses in towns within the immediate vicinity.

ID: 898-11 - Category: Environment

Encourage Marine Permaculture to Rejuvenate Fishing Communities and Improve Marine Ecology

Several important challenges which seem to be in competition with each other may be addressed at once. UK coastal towns which have historically relied on fishing have suffered greatly in recent decades, both due to decreasing fish stocks making fishing less profitable, and to the offshoring of the processing of fish.

At the same time over fishing has significantly reduced fish stocks, having a knock on impact on marine ecology. The loss of marine ecology, particularly fish spawning grounds such kelp forests, further reduces the fish stocks.

At the same time we are facing a potentially catastrophic climate change crisis, and despite our best efforts it seems unlikely we will fully decarbonize our economy in time to prevent the world going past the tipping point.

A further, smaller challenge is that due to the current low oil prices and the near depletion of North Sea oil reserves there is an unprecedented increase in the decommissioning of offshore oil and gas rigs. This is an immense financial burden on the asset owners, and the requirement to remove the foundation removes the artificial reefs that these foundations have become over many years in the sea.

My proposal is that government policy is put in place to fast track licensing and encourage the development of large scale offshore marine permaculture. Marine Permaculture is the growing of large scale seaweed forests, with a wide variety of benefits. In deep sea areas the kelp can be grown from seeded nets anchored to at a depth of 10m-15m, supported by the pumping of cold, nutrient rich water from deep sea areas.

Kelp/seaweed forests grow extremely quickly and can be harvested for use for human consumption and animal feed. When used as animal feed it will have a significantly lower carbon footprint than soy (the most used animal feed which the leading cause deforestation of the Amazon). The seaweed/kelp will need to be harvested using ships (similar to fishing vessels) and will need onshore processing to be suitable for its end use. Kelp forests create sheltered,

nutrient rich spaces which are exceptional fish spawning and developing areas.

This combination of kelp for consumption and as a fish spawning ground has the potential to introduce a huge new industry to historic fishing communities, whilst also making fishing more profitable by increasing fish stocks.

The secondary benefit of growing kelp is that it draws down large quantities of carbon whilst growing, with each dry ton of kelp sequestering a ton of carbon. Although the carbon in the kelp used for consumption will remain in the system, excess kelp which falls from the kelp forest will drop to the sea bed, with the carbon being stored in deep sea areas (and therefore being removed from the carbon cycle for the mid to near future).

The extension of this, is that large scale offshore kelp farming would require power supply and pipelines to draw cold, nutrient rich water from deep sea areas, and would benefit for offshore bases for operations. This is where the use of offshore oil and gas platforms could become useful. If the existing top sides are decommissioned and replaced with lighter, smaller platforms, supporting accommodation and small renewable energy set-ups, the life time of the subsea structures can be extended (due to lower loading) and the required power supply for pumping can be created.

The use of kelp for feed, the growing of kelp from midwater platforms, the reuse of oil and gas structures and the use of marine protected areas (especially kelp forests) for rejuvenating fish stocks is all accepted science or in practice elsewhere in the world.

In terms of policy, it would require the joined up legislation to support licensing of the reuse of large areas of the north sea (and associated interface with other north sea users), the licensing for pumping cold nutrient rich water to the surface (which is a natural process being reduced by warming seas), the licensing to permit Oil and Gas companies to leave assets in the water even

if no longer pumping fossil fuels (not currently legal) and the seed money to spearhead commercial trials to minimise the delay in the starting of a new industry.

Despite the challenges, if the funding and support is considered by for a range of benefits - including mitigating climate change and bio diversity, improving UK food security, rejuvenating fishing communities and reducing the financial burden UK north sea Oil and Gas companies - then this could be an excellent opportunity for the UK.

ID: 644-11 - Category: Environment

Personal Carbon Budgets

Covid has exposed the huge disparities in physical and mental health outcomes between the rich and poor particularly in urban areas. As the Climate Crisis unfolds this administrative disfunction will be replicated unless we seize the opportunity to change how we do things. Meeting 2050 Carbon reduction goals will be a personal as well as a legislative and government issue. The climate challenge is directly linked to personal consumption and this in turn is directly linked to wealth. The UK wealthiest 5% are responsible for 5 times the emissions of the bottom 50%. (Oxfam Confronting Carbon Inequality) The figures are even more extreme if compared to the bottom world 50%. Policy makers, financiers and corporate leaders almost entirely belong closer to the 1% bracket and thus several multiples more adrift from the average. Reducing carbon emissions will require the greatest sacrifices by the rich but these are the very people who operate the levers of power and will be most resistant to change. A strategy that is simple to grasp and seen as fair is urgently needed Government has so far adopted a top down policy strategy for dealing with Climate Change and with a fractured drip down structure enlisting NGO’s and Quangos as front line troops with little or no central coordination and oversight. This is business as usual and for the disaster of Covid the government has shown a woeful lack of administrative expertise and adroitness of response. In a crisis new thinking is required. We are in a war and we need an overriding implementation mechanism, behavioural change and novel administration. Solutions to Climate change cannot be left to policy and market forces alone although both are essential. Western economies appear to have suffered a greater difficulty from runaway Covid infection and the unwillingness of a large numbers of citizens to fully comply with regulations must be a significant factor in the severity. These people feel that as they have grown up in a consumer shaped world which encourages and rewards personal choice at the expense of civic responsibility that they are also free to make Public Health decisions for their benefit at the expense of others. High rates of student infection draws the inference that this is not a matter of education or by corollary potential path to riches and

entitlement. Covid has allowed city dwellers to appreciate improved air and quiet, and for many appreciation of the wonders of the natural world its healing qualities and our dependence on it. For many what was invisible has now become visible. Pathways to stopping a return to the 'bad old days' will be applauded by many. A personal Carbon budget addresses many issues at once. It's fair and can be seen to be so. It will direct all citizens to look at their lifestyles but mostly the wealthiest who are the biggest problem. It will lead to healthier eating, more gardening and cooking. Policy initiatives to say reduce transport emissions will be viewed through the prism of the allowance so if this is personally important reductions can be made elsewhere or credits bought. As a policy tool it is infinitely adjustable just like a tax system. It would be gradualist designed however to ramp up to meet zero Carbon by 2050 Implementation of a uniform carbon allowance will help level up the nation and provide funds from high consumers to implement the structural changes. Those at the bottom may sell surplus allocation. This will be seen as eminently fair as recompense for the damage and danger that high emitters pose to the majority. This is the new green economics implied in the Stern Report. Carbon ratings will benefit and stimulate new Green farming practices and provide rural stimulus generally. We will eat less meat but that we do eat will be healthier. Fish stocks can recover by reducing industrial feed trawling and encouraging low waste frozen produce. UK tourism will benefit likewise from reduced international tourism by the rich and divert spending to high return UK tourism. Urbanism and the need to stop green field rural development will benefit by swapping current local opposition to support for low carbon development and planning policy. The '20 minute' city neighbourhoods will be enshrined in development policy and will be the backbone of any new urban greenbelt extensions and existing city restructuring. Large cities will become more decentralised, more localised, more green, more inclusive, healthier quieter and residents more likely to support green change. This fits neatly with home working and less commuting. Manufacturers knowing innovative low carbon products have a ready market will be encouraged to invest. R&D and transition costs could be offset against other taxes or allowances to pump prime this once policy is established. Early adoption by the UK will stimulate international sales as all countries will follow suit to the same or a lesser degree. • The First step is to set up a Carbon Institute who will pull together existing carbon rating research, methodologies and assessment standards and advise on government policy to set personal carbon budgets . At government level there will need to be a new department and cabinet seat (s) and legislation designed for flexibility. • Second step is for mandatory labelling of all consumer products and services to drive consumer and business awareness initially and then for carbon accounting purposes. • In parallel a, from the ground up centralised IT system needs implementing. This will need to be a point-of-sale carbon recording like VAT or instead of it and linked to the personal or business HMRC ? account. It is likely that this will require a restructuring of the tax system as many current tax policies reward increased carbon emissions but this can be seen as providing the justification and getting support for beneficial • Third step

is adoption of policy pathways and timelines for enabling and tracking personal budget.