Recently it has become clear that we all need to be reminded of some of the key issues that we face in preparing our country for success for future generations. These include identifying and removing some of the many barriers to economic growth; finding ways to create jobs in the enterprise zones; maintaining and rebuilding our industrial export performance to rectify our adverse balance of payments deficit, following the deterioration in UK manufacturing performance since the peak in 1997; and providing new homes for our growing population.

This topic must be of concern to us all and it is this need that prompted me to think about encouraging developers and investors to re-develop our industrial heritage wastelands, to renew life and focus in our inner towns and cities and at the same time to protect the swathes of green belt land in our countryside that are threatened by current development projects.

All over Britain there is a plethora of largely post-industrial areas of unused land, mainly in the centres of our towns and cities, which are commonly known as brownfield sites. In May 2003 the UK Environment Agency stated, in their position statement on brownfield land redevelopment, that in England 66,000 hectares, equivalent to over 160,000 acres or over 250 square miles, of brownfield land (an area the size of the West Midlands conurbation) are either vacant, derelict or available for redevelopment. Assuming the British average of sixteen houses per acre, this is enough land for two-and-a-half million homes. That is thirteen times the number of homes that the Environment Agency has approved for building on greenfield flood-risk plains since 1996.

In the United Kingdom, the term brownfield site applies more generally to previously used land or to sections of industrial or commercial facilities that need to be upgraded for future use. With this situation of land availability, why do we even think of building new towns outside existing conurbations?

As recently as February 2014, in answer to a parliamentary question from Labour MP Chris Ruane, it was revealed that official figures show that the Environment Agency had approved the building since 1996 of no less than 190,000 homes on greenfield flood plains alone, and the most recent record of 2011 shows 8,000 homes having been built in flood-risk areas in that one year. Almost by definition, the 66,000 hectares of brownfield sites that are available for development are not in flood-risk areas.

If we were to develop these sites for our industries and housing, rather than the current
trend to build new factories and housing estates on our greenbelt countryside, not only would many of these brownfield eyesores in towns and cities disappear, but the pressure for new roads, schools, public transport, shops, hospitals and other costly infrastructure to support new developments in greenfield areas would be eased; much of our countryside would be preserved for food production and, crucially, we would be investing in a thriving future for our town and city centres and their communities. This is not to mention the huge cost that we face now in the relief effort, particularly in the counties of Southern England, following the recent widespread flooding.

As I said in an article that I wrote in 2011, the heavy cost of renovating and decontaminating our brownfield industrial sites, in a scenario of ever tightening environmental requirements, falls on the current incumbents of the site. Not only is this costly but it discourages new arrivals, making them prefer to build factories and houses on greenfield locations. The Mayor of London said, in January 2014, that there are over 30 large post-industrial sites in East London alone, but nevertheless planners are ignoring these and talking about creating two new cities in what is currently Home Counties greenbelt. Moving our gaze away from London, post-industrial brownfield sites are scattered throughout the country, particularly in the Midlands, the North West and the North East, yet new factories and houses are being built in the countryside, with all the cost of new infrastructure that this implies, leaving city centres to decay, when the reverse could be the case.

Staggeringly, in my own home town of Macclesfield, which is full of developable sites following the decline of the silk industry, Cheshire East Council announced in November 2013 proposals to declassify 375 acres of agricultural greenbelt land to the south of Macclesfield town, renaming it ‘safeguarded land’, which is a misnomer that means it will be available to developers for house building after 2030. One immediate result of this policy announcement, with such a misleading description, has been the imposition of a planning blight on all those unlucky enough to have homes near this area.
You have all seen sights, or should I say sites, like those shown in the pictures included in this paper, most of which were taken in different parts of the United Kingdom.

The pictures on this page were all taken by Alastair Kennedy in 2014 and show some of the post-industrial brownfield sites that could be developed in the centre of Macclesfield. In spite of the existence of these, green belt agricultural land is going to be sacrificed for development outside the town as I have described in previous paragraphs.

Overleaf is an example of brownfield land at a disused gasworks site after excavation, with soil contamination from removed underground storage tanks.

Reference has already been made to the likely high costs of decontaminating and cleaning up brownfield sites and, in the absence of any central or local government grants to help mitigate these costs, unless the site has the potential for a very large development, potential developers will always prefer the easy option of building on green fields, with the bill for any necessary infrastructure falling on the local authority. Of course this assumes, and is dependent on, the local authority granting the necessary planning permission to build on the greenfield site. The result of this is that, unless changes are made, our towns and cities will continue to be scarred by ugly derelict sites left to rot and our beautiful countryside (which tourists cross continents to see) will be gradually eroded by building development.

Even today, in those towns and cities that suffered bomb damage during the Second World War, there are ugly vacant lots – now often used as car parks – and this is almost 70 years after the war ended! We should be ashamed of this lack of civic pride and our seeming inability to do any better.

Although there are, at present, no specific grants to help meet some of the costs of cleaning up sites, there is – in theory – a relatively minor contribution if the developer makes a profit on the development. This is in the form of corporation tax relief.

The UK now has the longest tax code in the world, running to 11,520 pages – more than double the number of pages from 12 years ago. Although it is claimed that tax relief is available
for the remediation of contaminated and derelict land for new facilities, which is strictly true, the fact is that the pages of small print covering what is claimable and what is not make the relief not only virtually impossible to obtain and the burden of pursuing it virtually insurmountable, certainly for a small firm of builders; but the whole exercise is of no encouragement to a potential investor. As the help is only obtainable in the form of tax relief on profits, and as the cost has to be paid at the initial construction stage, when there are often no profits to claim the relief against, the chances of obtaining reimbursement are perceived as minimal. Furthermore, when developing contaminated land, a remediation plan will need to be agreed with the Environment Agency to secure planning permission. Once the agreed remediation has been carried out, it is difficult to obtain a definitive sign-off from the Environment Agency that will give complete certainty of no more remediation work being required later. Such uncertainty causes future purchasers or potential occupiers of the newly developed land to require indemnities and long-term insurance policies to cover future issues that may arise, all adding to cost. In recent years, the duration of environmental insurance policies available on the market to cover such environmental liability has decreased. It is now impossible to obtain a policy for longer than ten years. It is true that there is the prospect of renewing such a policy at the end of ten years for a further period, often with conditions, but this again adds to the cost for the developer and to the uncertainty a new purchaser or occupier will need to take into account when taking on the remediated land. Is this something the government could engage in with the insurance industry to help put land back into use? I need hardly say that these definitive completion agreements are not required for developing sites in the greenbelt, and ten years ago the Environment Agency admitted that: ‘At present, the regulatory complexities of reclaiming some brownfield land act as a barrier to new development on these sites. The Agency has a

Contaminated soil at a disused gasworks site.

Southchurch Road, Southend-on-Sea. Photo by David Bullock.
role in assessing whether the regulatory route can be streamlined to enable brownfield development to be brought forward more quickly. That statement remains on their website to this day.

When greenfield sites are available, why should a developer consider the alternative of a cash-draining and by definition almost certainly a loss-making investment in a brownfield site which requires possible demolition, decontamination and other clean-up costs? If the government measures are effective, why is it that brownfield sites are not being developed and greenbelt land is being sacrificed for factories and house-building? It seems that current policy is not working and that a change in policy would result in benefits to both the country and the Exchequer. We need to find a way of removing this discouragement, thereby effectively utilising and bringing new life to our post-industrial wastelands.

At Luxfer Holdings PLC, where we have above 50 per cent of global market share in aluminium and composite gas cylinder manufacture and where we announced for 2012 our third consecutive record year in our 116 year history, we have spent over £10 million in the past decade on environmental issues such as decontaminating landfill and removing old storage tanks and slurry pits which we have inherited from the previous occupants on our sites. Furthermore, we expect to spend over £5 million over the next two years. We are doing it at our cost, which is a painful no-return investment for us; but the deterrent to new investors on these sites is terminal. We have to find a way genuinely to encourage inward investment on our brownfield heritage sites.

In his letter of the 8 July 2013, Sajid Javid, the then Economic Secretary to the Treasury, referred to tax relief of 150 per cent being available against qualifying expenditure. This sounds good but is irrelevant for two reasons: firstly, as I have explained above, the chances of obtaining reimbursement are perceived as minimal in any event due to the pages of small print covering what is claimable and what is not; but secondly, and crucially, with corporation tax at the current 20 per cent, the 150 per cent claim for qualifying expenditure of Y would generate a tax saving of $1.5 \times Y \times 0.2$, which equals 0.3 times Y, or 30 per cent of the qualifying expenditure, ten per cent additional tax relief, leaving the developer still to absorb the crippling remaining 70 per cent of the cost.

I wrote to Mr Sajid Javid in reply to his letter explaining this misconception but I never received a response from him. I did, however receive a letter from the Assistant Private Secretary to the new Economic Secretary to the Treasury some three months later, which in three pages of print tended to confirm the points that I had been making. He said that the government believes that local planning authorities are best placed to assess which land is suitable for development; he confirmed that contamination can be a factor causing development of viable sites to stall; and he referred to the 2011 £570m Get Britain Building programme and the availability of the local infrastructure fund, which allows developers to apply for loans and equity for infrastructure work; but these subsidies apply to all projects including greenfield developments and do not, therefore, specifically encourage redevelopment of our post-industrial heartlands. Generally, he underlined the points made by Sajid Javid, and agreed with my relief calculation, whilst suggesting that in practice reimbursement might be higher than my example of 30 per cent, leaving the developer to pay somewhat less than 70 per cent of the multi-million pound cost of preparation and decontamination in my calculation. He used this to underline the significance of the 20 per cent corporation tax rate, saying that one of the government’s key reforms has been to make substantial cuts to corporation tax, saving businesses around £7bn by 2015, and he inferred that this was why relief for development costs had been reduced; but what has this to do with encouraging development of our brownfield sites? Worryingly, in his letter, he spelt brownfield sites as ‘Brownfield Sights’.

Many industrial companies are weary of tax complexities. For example, manufacturers are now being penalised by the HMRC for any expansion plans in the UK, through targeting them for inclusion as Star Lane Brickworks, Southend-on-Sea.

Photo by David Bullock.
a ‘main contractor’ in the Construction Industry Scheme, which can add substantial administrative costs to their activities. This is despite Parliament’s original desire to have manufacturers exempt from this burden through special ‘Deemed Contractor’ measures. I have been informed of a case in which the HMRC’s inspectors have aggressively targeted a manufacturer that sought this exemption and instead threatened them with penalties and fines for expanding or even just maintaining their operations to required safety levels. Here the HMRC are knowingly applying main contractor legislation, because of its flawed, complex and wide ranging definitions, to a completely different industry group and using that to raise additional revenue for the Treasury. In turn, this frightens senior management and discourages development of manufacturing sites in the North West of England in particular and in the UK in general.

The complexity of tax legislation can either deter the use of special reliefs, like those for remediation of brownfield sites, or in fact lead to those trying to utilise them being penalised by the HMRC, as the complexities of such laws are used to catch out industry rather than support it.

We have much to learn from successes in the United States in the utilisation of brownfield sites. A number of innovative financial and remediation techniques have been used in the USA in recent years to expedite the clean-up of brownfield sites. For example, various reference documents obtained on Wikipedia refer to some environmental firms having teamed up with insurance companies to underwrite the clean-up of distressed brownfield properties and provide a guaranteed clean-up cost for a specific brownfield property, to limit land developers’ exposure to environmental remediation costs and pollution lawsuits. The environmental firm first performs an extensive investigation of the brownfield site to ensure that the guaranteed clean-up cost is reasonable so they will not wind up with any surprises. Investigation and clean-up of brownfield sites is largely regulated by state environmental agencies in cooperation with the Environmental Protection Agency (EPA). The EPA, together with local and national government, can provide technical help and some funding for assessment and clean-up of designated sites. They can also provide tax incentives for clean-up that is not paid for outright. Crucially, in the United States clean-up costs are fully tax-deductible in the year they are incurred.

Decontamination across the Atlantic involves a range of innovative remedial techniques. Often, these strategies are used in conjunction with each other or with other remedial strategies such as soil vapour extraction. In this process, vapour from the soil phase is extracted from soils and treated, which has the effect of removing contaminants.
from the soils and groundwater beneath a site. Some brownfields with heavy metal contamination have even been cleaned up through an innovative approach called phytoremediation, which uses deep-rooted plants to soak up metals in soils into the plant structure as the plant grows. After they reach maturity, the plants – which now contain the heavy metal contaminants in their tissues – are removed and disposed of as hazardous waste. A newer technology for remediating brownfields involves an \textit{in situ} injection of an iron-embedded organosilica material that creates a permanent soft curtain barrier underground. Groundwater passes through the barrier, which absorbs toxins and solvents, while the iron dechlorinates them to non-toxic products.

Below is a brownfield residential development in New Jersey, and on the left a brownfield relic serves as a monument in a new park in the Atlantic Station area of Atlanta, Georgia, USA.
Finally we owe it to future generations and their quality of life in our inner towns and cities to put a stop to the neglect of our heritage in favour of desecration of our green fields – even the ones that are above the flood risk plains.

Ministers say that they are in favour of development of brownfield sites and that they are encouraging local authorities in this endeavour. Indeed, they have written to me to say so; but they don’t say what practical form this encouragement takes, and it certainly isn’t working.

If the costs of clearing up brownfield sites were genuinely met by central government, then developers would be eager to make profits on them. Not only would the subsequent corporation tax flow to the Treasury, but many brownfield eyesores in towns and cities would disappear; the pressure for new roads, schools, public transport, shops, hospitals and other infrastructure to support new housing in green field areas would be eased; much of our countryside would be preserved; and, crucially, we would be investing in the future of our town and city centres and their communities.

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