



THE NEW HOME FRONT

We Can Do It!



Showing leadership: How we can learn from Britain's war time past in an age of dangerous climate change and energy insecurity



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Preface

Caroline Lucas MP

The changes now underway in our climate, if unchecked, pose probably the greatest threat to Britain that we have ever faced. Our health and security, our society and way of life, our natural environment, even our coastline, are all at risk from uncontrolled natural forces – disease, drought, flood and storm. In terms of the human and financial cost in the UK and internationally, the impact over the coming decades has been compared to the world wars of the twentieth century.

This danger has been known about for decades – first as a theory that the release of carbon dioxide, methane and other gases into the atmosphere on a vast scale could destabilise our climate; then as an observable phenomenon as world temperatures began to rise and storms, floods and other natural catastrophes became more frequent and more serious.

Since the 1980s, successive governments and their expert advisers have accepted the seriousness of the threat, and have known what actions are needed to avert it as far as possible and to prepare for the consequences. But they have not acted either to prepare the UK or to build an international agreement on reduction. And with every passing year, the threat to our country becomes more severe.

We have been here before. That's why I commissioned this report from the leading writer and analyst Andrew Simms, to explore what lessons history may be able to give us. There appear to be many. In the 1930s, some politicians of all parties ignored the threat of war brewing in Europe and failed to take the steps to deter aggression or prepare early enough to defend ourselves. At the time, the two main excuses put forward to justify inaction and appeasement were that there was not enough money to pay for proper defences, and that the British public would not support a government that took tough measures.

Yet by the end of the 1930s, public opinion was far ahead of Chamberlain's government in demanding tough measures, and the costs of the war itself ultimately far outweighed the costs of the measures that might have prevented it. And during the war itself, the British people were willing to make the sacrifices needed to deal with the horror of Nazism and to try and build a fairer society for the future.

Today, we can see some of the same patterns. The public, whether it is locally through movements such as Transition Towns or nationally in the work of bodies such as the Women's Institute, have helped people to understand better the dangers of climate change and what they can do as individuals. Some enlightened local authorities, too, are going further than central government in doing what they can to save energy and prepare for shortages of water and other resources, just as their predecessors did in the 1930s in providing air raid shelters. Some firms are clear-sighted about the dangers and are preparing either to limit the impact on their businesses or to seize the opportunities for enterprise that will follow.

British society has changed radically since the Second World War. The 1930s and 1940s were anything but a golden age and it would be wrong to romanticise those times. Yet many institutions which were active back then in mobilising popular opinion and action, remain important actors today: voluntary and campaigning groups, churches and other faith organisations, schools, colleges and universities, and public services such as fire, police and health. Social attitudes, too have changed: but those who lived through those times, some of whom are still with us, are either still with us or have shaped who we are as individuals and as communities.

Hence this report. In looking back to the 1930s and 1940s, it aims to begin to find the answers to these two questions:

- How can the public turn a widespread concern about climate change and a desire to do more to avoid it into a force that convinces the political classes that genuine action is possible – that with the right leadership, and with a fair sharing of costs that are unavoidable, but an appreciation of the many things we stand to gain, the public will support radical action?
- What does the experience of those who lived through the war years offer us now as we try to find practical ways to reduce waste and end our dependence on scarce resources?

This report is the start of a process. It shows some of the lessons that the war years offer, in everything from high politics to household management. It shows the importance of fairness in creating popular support for tough measures – so that rationing and conscription were introduced as much in response to popular pressure from below as it was to a desire for national controls from above. It shows, too, how great the collective gains from individual small actions could be: collecting aluminium pans to melt down to build Spitfires may have been mainly symbolic, but simply collecting household scraps was enough to feed over 200,000 pigs.

Next, the task is to build on these insights. First is a challenge to civil society and to government to consider ways in which this national consensus on radical action could be built. What is the role of civil society in raising greater awareness of the scale of the climate crisis, and in providing support for those who want to act themselves? What is being done already, and what more could be done if the country were on the equivalent of a ‘war footing’ to tackle climate change? What would be the role for information and persuasion – the modern equivalent of campaigns against wasting fuel and food, or the ‘SquanderBug’ of ‘shopper’s disease’? What could today’s writers and artists contribute to the public’s understanding and engagement, as their predecessors such as George Orwell did? Could universities and other educational establishments do more, as their predecessors did in scientific and social studies? And above all, what is the right role for

local and national government in providing the resources, leadership and organisation to meet the threat from climate change, both here and in building international, concerted action?

And because the answers lie in the individual experiences of those who lived through the war years, part of this task is to talk to those who endured those years and work together to find ways to deal effectively and fairly with the challenges to come – not only making do with less, but also turning to other ways to make life as rich and satisfying as possible, and in some ways, more so. Because, amid the turmoil and suffering of war, there were aspects of British society that changed for the better – from more people experiencing art and culture for the first time, to new opportunities for women in industry and the professions, to the determination of millions that the war would lead to a better peace and which led to the creation, amongst other things, of the National Health Service.

The analysis in this report is inevitably critical of the current political consensus on climate change, which might be characterised as ‘important but not urgent’ when compared to other pressures such as the financial crisis. But we recognise that at least some individual politicians have acknowledged the threat, and done what they can to shift opinion; and that we will only succeed in building Britain’s defences against climate change if such individuals become the majority amongst the political leadership. One of the lessons of history is that putting off difficult issues has a habit of making them far more costly to deal with in the long run: climate change is certainly in that category. Our aim is to help forge the national consensus that will support this or future governments in sustained, radical action.

This is an ambitious project: but only if we show ambition can we hope to resolve the threats to our country that the changes in our climate are bringing.



The New Home Front

“If he could see even a little, if he became even faintly cognisant of the turmoil of ideas and projects and schemes to save the country which are tormenting the rest of us, his superbly brazen self-confidence would be fatally impaired.”

J.M. Keynes on Neville Chamberlain in the *New Statesman*, 28 January 1939¹

Winston Churchill referred to much of the 1930s as the ‘Locust Years.’ It was a time when he saw the storm gathering in Europe, but official reluctance to act led to wasted time and missed opportunities. We are now living through our own Locust Years in the face of global warming, the decline of oil reserves and the over-exploitation of our planet’s life supporting biosphere.

This report looks at how Britain finally mobilised in the approach to World War II, in order to see what can be learned, positively and negatively, to help with the unprecedented challenges posed by global warming and the end of cheap, abundant oil. There are no exact parallels for the country’s current crisis, but the social change and national economic re-engineering around that time approach the scale of what is needed in the face of these modern threats.

Other examples of rapid change from more recent decades can no doubt also be instructive. South Korea’s accelerated development, Cuba’s response to oil shortages at the end of the Cold War, and the responses of several countries to the OPEC crises of the 1970s can potentially all yield important lessons for managing the dynamics of rapid change. But this report concentrates on the unique period of Britain in the run up to, during and in the aftermath of the Second World War. Why?

It was a time when politicians had to make life and death decisions in circumstances of great complexity and uncertainty. They had the challenge of meeting a huge external threat and of carrying the

population with them. Contrary to popular myth, initially at least, the threat and necessary course of action were not universally accepted. In government and in the population at large, many needed persuading. Even once persuaded, there was no consensus on *how* we should mobilise to meet the threat.

Of course, not every aspect of the dilemmas faced then still resonates today. But, at least, in these important ways, our leaders face similar challenges to those of Britain in the 1930s and 1940s.

And, back then, we met the challenge. And the nation did so with a remarkable mix of bold leadership, creative flourishes, bold social and economic experimentation, occasional ineptitude and failures of planning, coupled with a more impressive, overarching focus and commitment to achieve the objective of winning. Britain then came out of the war more equal and healthier, and had developed the desire to build a better society.

In that light it's time to ask how well our political leaders today are squaring up? Again, history is revealing.

The scale of transition we face has few historical precedents, and none of them exact, but the example of wartime Britain is exceptional, instructive, and illuminating. Our future efforts will be different and unique to our new circumstances, but we would be foolish not to learn from the past.

Some will say these parallels are melodramatic, others will argue that it is forlorn to hope for a contemporary mobilisation to compare with those of our war time past. Yet, only recently the world balanced on a precipice – a financial one of our own making – and whole economies were saved by massive, rapid, publicly funded bail-outs and international coordination compared to a ‘war effort.’² Total UK public sector support to the financial system amounted to around £1.2 trillion (this figure excludes the damage cost to the economy of the recession). Although the complex composition of that sum means this

is not a direct comparison, increased spending in the year after WWII on, among other things, rebuilding the damage caused by the Luftwaffe was less than one tenth of it, the equivalent in GDP terms today of around £100 billion.³

Launching ‘The Home Front Wisdom’ initiative: learning from the generation who lived through the hardest of times

There are many people still alive today who lived and learned through the experiences of World War II. But they are not being listened to, sometimes not at all and at other times not nearly enough. This report is just an introduction. Its launch marks the beginning of a search to find the best ideas from those whose imagination and resilience helped Britain to survive.

We want to learn from the generation who saved fuel to help the greater good, who knew how to function as communities, from the generation who knew how to work with their hands and make things last. Yes, times were hard. People suffered and endured for a greater good. They were all in it together. But, that is all the more reason not to waste what they learned. There’s an untapped store of knowledge, creativity, innovation and successful common purpose that we believe could help meet some very modern crises.

Over the next six months we are going to search for, and invite, the best ideas to live better, healthier and less wasteful lives from the generation who remember a time when their nation called upon them to do the same. Their experiences will be collected together and presented as a challenge to the Coalition government. We believe the British public is ahead of its political leadership in terms of understanding the need to live better within our means – both financial and environmental. We hope this campaign will prove that.

'The figures for infant mortality and, indeed, virtually all the other indications of nutritional well being of the community, showed an improvement on the previous standards.'

Dr Magnus Pyke, Nutritional Advisor,
Ministry of Food, *Memoirs* (1981)

What did we do in the war? Home Front achievements in the war effort:

- In just 6 years from 1938 British homes cut their coal use by 11 million tonnes, a reduction of 25 per cent.⁴
- By April 1943 31,000 tonnes of kitchen waste were being saved every week, enough to feed 210,000 pigs.
- Food consumption fell 11 per cent by 1944 from before the war, but thanks to a scientifically planned national food policy, the population's health got better.
- Scrap metal was saved at the rate of 110,000 tonnes per week.⁵
- Use of household electrical appliances dropped 82 per cent. A war on waste, new social norms and rationing helped general consumption fall 16 per cent (and more so at household level).
- Between 1938 and 1944 there was a 95 per cent drop in use of motor vehicles.

Was it all bad? There were unexpected, positive outcomes:

- The nation's health improved. After an initial upward spike at the beginning of the war, mortality rates fell dramatically among both men and women as active health policy was introduced, diets changed and people become more active.⁶

- Between 1937–1944: infant mortality (up to age 1) fell from 58 per 1000, to 45 per 1000.⁷
- After being relatively high during the 1930s, suicide rates also fell during the war.⁸
- A determination to enjoy life grew. Spending on ‘amusements’ went up 10 per cent.
- And public transport use increased 13 per cent from 1938 –1943.

Where are we now?

Cutting spending on low carbon technologies now would be like cutting the budget for Spitfires in 1939.

Tim Yeo MP, Chairman of the cross-party energy and climate change committee

With the prospect of spending cuts hitting all areas of public expenditure in the October 2010 Comprehensive Spending Review, Tim Yeo MP warned his own Coalition government that to reduce spending on low-carbon technology would be like ‘cutting the budget for Spitfires in 1939’.⁹

Britain faces the need for a rapid economic transition in the face of climate change targets, energy insecurity and the peak and decline of global oil production. Based on recent trends, and using a cautious, conservative estimate of environmental risk, in just 71 months from January 2010, taking us to the end of 2016, the accumulation of greenhouse gases in the atmosphere means that it will become ‘more rather than less likely’ that temperatures will rise by at least 2C.¹⁰ This is generally considered a critical threshold, after which environmental dominoes begin to fall more unpredictably and potentially uncontrollably. In other words we enter a world of ‘climate roulette,’ in which warming becomes possibly irreversible.

Events such as the BP debacle in the Gulf of Mexico merely increase the urgency. The UK has significant mandatory targets to reduce carbon emissions and expand renewable energy as part of its energy mix. And, according to Parliament’s Public Accounts Committee the country is set to miss them.¹¹

There are broader problems of resource scarcity too, and the consequent vulnerability of key systems and infrastructure. Of nine ‘planetary boundaries’ identified in an international and interdisciplinary study published in *Nature* last year, each relating to

a key life-supporting natural resource cycle, several danger lines have already been crossed.¹² Industrial agriculture is disrupting the nitrogen cycle, and rests on unsustainable phosphate extraction.

Where biodiversity is concerned, which also underpins our food and health systems, we are living through a human-driven mass-extinction event. In October 2010, a Kew/IUCN study indicated that over one-fifth of plant species are under threat of extinction. The same week another study revealed that unsustainable use of freshwater systems has left great swathes of humanity – 5 billion people - with poor water security.

The world's fragile, thin layer of topsoil – civilisation's foundation – is being eroded faster than it can form. Food prices globally are rising again after a price spike in 2008. With everything from land grabs in Africa to food nationalism and grain export embargoes in Russia – the geo-politics of food is easily a match for the geo-politics of oil.

Concerns about the global peak, plateau, and long-term decline of oil production are no longer limited to the dark conversations of a few former oil industry workers or environmentalists – Lloyds of London recently predicted that problems of supply not matching demand could see oil at \$200 per barrel by 2013. In the face of these trends, the UK is becoming more dependent on both food and fuel imports to meet our needs.

The UK's reliance on imported energy is rising and has risen steadily since 2004 when declining North Sea oil production meant we first became unable to meet our own energy needs since the North Sea's heyday.

Our rising dependence on imported food now sees our level of food self sufficiency at a 39-year low.¹³

Consequently, whether to fulfil national responsibilities as a good global citizen, or simply to build our own food and fuel security, Britain needs the equivalent of an environmental war effort.

Where do we need to get to?

“It is not enough for us merely to do our best – we have to do what is necessary.”

Winston Churchill

A transition on the New Home Front to a low carbon Britain can be based on three self-reinforcing dynamics. Firstly, re-powering Britain with green energy, and modernising its infrastructure will aid recovery, rebalance the economy and reboot it onto a greener and more secure path. It will harness enterprise in the private and public sectors, and at the community level, boosting employment in basic and highly skilled work. Innovations like the Green Investment Bank and Green bonds and pensions to help pay for the transition will create a healthier finance system too. Secondly, rapid economic decarbonisation is needed in line with the UK contributing its fair, global share of greenhouse gas reductions, tackling both climate change and energy security. Thirdly, moving to levels of economic equality comparable with that, say, of Denmark, would create an economic safety net to buffer the process of change. In more equal societies, according to the social epidemiologists and co-authors of *The Spirit Level*, Kate Pickett and Richard Wilkinson, reduced ‘status anxiety’ lowers the pressure for conspicuous consumption. As a result we may find ourselves both happier and less prone to consumerist behaviour.

Noticeably, a number of measures central to the war effort, including the employment generated by war production, the greater inclusion of women in paid work, and rationing, altogether significantly increased effective economic equality.

Helpfully, in more equal societies, a wide range of social costs ranging from health problems and crime are also lower. More equal societies are less prone to ‘keeping up with the Joneses,’ that negative cycle of conspicuous consumption linked to status competition, creating instead a positive cycle. Reduced environmental costs commensurate with lower consumption and lower social costs, aligned to greater income equality, then work to compensate for any loss of conventional

GDP income arising from a drop in wasteful ‘throw-away’ over-consumption.

This helps to address one of the most fundamental questions for the transition to a low carbon economy, namely, how to maintain the social contract – health and education services and security in retirement - when conventional growth becomes constrained. But transition is also about significantly increasing the resilience of Britain in the face of worsening food and energy security.

It is to history that this report looks to assess the prospects for the rapid re-engineering of infrastructure and the emergence of new social norms with regard to patterns of consumption. Just like on the Home Front during the war, it may be that some things, once taken for granted, become considered to be examples of anti-social behaviour: the single driver in a large SUV, the television screen the size of a wall, the patio heater...

The challenge is multiple: to deliver a low carbon, low material throughput economy; to increase resilience in the face of the potential for increasingly severe and often external shocks; to promote greater equality and social justice; to find a new, respectful environmental etiquette for our lives, and to maintain and enhance levels of well-being.

Numerous reports converge in their analysis on the need for rapid transition. They range from *The Green New Deal*, to the *Great Transition* published by nef (the new economics foundation), those of the Sustainable Development Commission, the *Stern Review on the Economics of Climate Change* and the recent *Zero Carbon Britain II* report. Whilst they may differ in terms of the precise depth and speed of change, all propose a transition that is atypical and beyond recent experience in boldness and ambition. It is a transition for which few historical precedents exist, and none of them exact, but for which the example of wartime Britain is exceptional, instructive and illuminating. Our future efforts will be different and unique to our new circumstances, but learning from the past in this case will take the tradition of turning swords into ploughshares to another, higher level.

Rapid transitions: the economics of a war effort

Everything in the past seems inevitable. When we look back at how Britain pulled together for the war effort it is hard to imagine any other course of action. But that is not how it felt at the time. An active lobby for appeasement stood diametrically opposed to Churchill, and in between were many possible different courses of action. Even in the face of open aggression from the Third Reich, in the run up to World War II, the case for government action and national mobilisation had to be strongly argued for. Influential parts of the establishment lobbied for engagement with Hitler, even accommodation.

When sufficient consensus was generated to go to war, the big question then was how to find the resources to fight industrially resurgent Germany. By the outset of the war, even the fiscally conservative magazine *The Economist* argued that government expenditure should be raised to more than three times the contemporary level of revenue.

The economist John Maynard Keynes lobbied the Treasury through a series of articles in *The Times* newspaper and through a groundbreaking pamphlet called *How to pay for the war*. Keynes set out to 'bring home the true nature of the war-time problems' and pointed out that even a 'moderate development of the war effort necessitated a very large cut in general consumption'.¹⁴

If taxes, rationing, and scarcity were inadequate to reduce consumption, Keynes foresaw the danger of an out-of-control inflationary spiral of wages and prices. In that case the 'spirit and efficiency' of the nation would be at risk. To avoid it Keynes proposed a plan of compulsory saving, backed with the promise of a payback at the end of the war.

Even with the spectre of Nazism looming, Keynes's medicine was thought too strong. Opinion was not ready. Keynes lamented:

*My discomfort comes from the fact, now made obvious, that the general public are not in favour of any plan.*¹⁵

Keynes faced problems that haunt modern officials tasked with re-gearing the economy to be climate-friendly and climate-proof. Yet, he understood this as no reason for inaction. His key to unlock official intransigence was agitation. His 'great service', wrote *The Economist* in 1939, 'has been to impel the so-called "leaders of opinion" to reveal the state of their ignorance on the central economic problem of the war'.

As the war progressed, purchase taxes were introduced as an attack on luxury spending. As time passed, the taxes became more sophisticated. Real luxuries like fur coats, silk dresses, and jewellery were hit with the top rate. Essentials such as towels, bed-linen, and utility clothing were exempt.

Famously, there were collections of pots and pans and the railings from outside houses to provide extra metal to help the war effort. Some believe that the more important purpose of the collections was demonstrative — they were to convince the public of the seriousness of the war situation, and that the metal itself was secondary. They were an advert for collective action and said, unmissably — 'we are all in this together'.

There should be no illusion about the hardships that restrictions and rationing led to. Rationing itself was to last from January 1940 until June 1954, and there were celebrations when it ended. But some of the good habits it engendered, such as avoiding waste, were to stay with some people for life, and leave a whole generation aghast at modern consumer waste, built in obsolescence and the disposability of goods.

Agitation from Winston Churchill about the threat of war led in 1936 to the creation of the Shadow Factory plan.¹⁶ The name was given because

new factories to increase the production of aircraft engines were to be built ‘in the shadow’, or ‘under the wing’ of existing ones. Logically the government turned to the growing vehicle industry to help. Morris Motors, based at Cowley in Oxford, was approached by the government about the possibility of making aero-engines. Initially, there were to be nine new factories. Rover was commissioned to build two of them. The new factories would operate well within capacity to begin with, but if the international situation worsened, the capacity was there to increase output rapidly.

From the early summer of 1940 until after the war, Rover’s only service to cars would be providing spares and maintenance for vehicles considered part of the war effort. Its focus had become making engines for aircraft and tanks, vehicle bodies, and aircraft wings. Key manufacturing sectors were not simply charged with aiding the war effort in addition to their usual business – their usual business was put on hold until the challenge of winning the war was met.

Less was necessary

To create the climate in which that might be possible, the general public were drenched with information about the need for a war effort. Short films in cinemas, public billboard posters, cartoon strips, newspaper advertising, radio programmes, every available means of communication was employed.

Obviously, many of these messages wouldn’t work today and would be done differently, some even fell flat at the time. But the best writers and artists in the country were brought together and much of their work was effective and garnered popular support. To cut waste, encourage responsible behaviour and get the nation to pull together it was the sheer comprehensiveness of the approach that worked, as much as any individual message.

Also, it wasn’t only done officially in a top down fashion. The messages were soaked into daily life, cajoling as well as instructing through

civic groups, leisure magazines and even in hotel bathrooms. 'Grow fit not fat on your war diet!,' said Food Facts No 1, from the Ministry of Food in 1940, 'Make full use of the fruit and vegetables in season. Cut out 'extras', cut out waste; don't eat more than you need. You'll save yourself money, ... and you'll feel fitter than you ever felt before.'

Good Housekeeping in 1942 suggested that people, 'Learn to regard every type of waste as a crime,' and 'If you have the will to win, Save your Rubber, Paper, Tin.' In *Feeding Dogs and Cats in Wartime* the RSPCA advised people that, 'Potatoes are plentiful and if you put in extra tubers when digging for victory you will not have it on your conscience that shipping space is being taken for food for your animals.'¹⁷

The government dubbed the need for energy conservation, *The Battle for Fuel*. If you stayed in a hotel in late 1942 and decided to wash away the anxiety of war-time Britain you would have seen a sign that read: 'As part of your personal share in the Battle for Fuel you are asked NOT to exceed five inches of water in this bath. Make it a point of honour not to fill the bath above this level.'¹⁸ The rail companies reminded us that, 'At this most important time, Needless travel is a 'crime.' And the Ministry of Fuel and Power pointed out that, 'Britain's 12,000,000 households are 12,000,000 battle fronts in this great drive to save fuel.'

Such concerted campaigns focused on changing public attitudes were successful and dramatically cut waste. Scrap metal was being saved at the rate of 110,000 tonnes per week.¹⁹ In just six years from 1938 British homes cut their coal use by 11 million tonnes, a reduction of 25 per cent.²⁰

By April 1943, 31,000 tonnes of kitchen waste were being saved every week, enough to feed 210,000 pigs. Food consumption fell 11 per cent by 1944 from before the war, even as health, especially of those more vulnerable in society, broadly improved. The Women's Institute set up 5,800 food preservation centres where people learned

to make pickles, jams and store food. Alongside these and the Village Produce Associations were more stick-like measures. Wasting food was frowned upon and sometimes even fined. An echo of which can be seen in the recent campaign by the government waste agency WRAP, which highlighted how modern shoppers throw away the equivalent of one basket in every three of the food they buy. New eating patterns were helped by a rapid growth in communal eating. By 1944 10 per cent of all food was being eaten in works and school canteens, cafes, and restaurants. The so-called British Restaurants that grew out of emergency feeding measures during the Blitz were widespread and their communal eating approach proved popular, with 60 per cent of people wanting them to continue post war.

SCIENCE AND PUBLIC PURPOSE

The approach to the Second World War and its duration witnessed a concentrated effort by Britain's scientific community to help achieve a wide range of national objectives. Rapid advances were seen in aviation technology and other forms of 'hard warfare.' There was a similar great leap forward in communications, code making and breaking, and complex transport and logistical operations.

Cutting edge science was also brought to bear on diet and health. The necessities of rationing combined with the latest science on healthy eating to produce, after the initial shock of war's outbreak, a rapid improvement in the health of the nation and dramatic declines in infant and maternal mortality.

Free of typical modern constraints to be commercial and operate in a world of fiercely protective intellectual property regimes, groups of scientists in different areas were brought together and supported to solve many life-or-death challenges. They were the often unsung heroes of the war effort.

As part of the push for greater food self-sufficiency, not only was more land brought into production (10,000 sq miles), but the balance of farming was changed. Land was used more efficiently to feed people, with a big shift away from livestock. It was calculated that one acre used for grazing animals could feed 1–2 people, but cultivating wheat it would feed 20 and potatoes, 40. Accordingly, while the output of sheep, pigs and poultry fell enormously (cattle increased marginally to provide milk), production of cereal, potatoes, wheat and vegetables rose enormously. With his talent for public messaging, and against the background of this wholly pragmatic shift, Churchill called on the public to, so to speak, save the nation's meat and eat it too. The public was called on to raise pigs, rabbits and poultry to compensate. By 1943 there were 3000 rabbit clubs and 4000 pig clubs, the latter producing enough bacon for 150 million breakfasts. The number of allotments leapt from 850,000 in 1939 to 1,750,000 in 1943. By then, 6 million were growing vegetables; they were Britain's 'Garden Army,' a little like the Carbon Army we need today. Overall, dependence on food imports halved between 1939 and 1945.

Apart from these initiatives being successful in their own terms, there were several unexpected outcomes. According to the historian Paul Addison, in the process of prosecuting its war effort, Britain almost stumbled into being a more inclusive and socially cohesive society:

From 1940, also, egalitarianism and community feeling became, to a great extent, the pervasive ideals of social life: whether or not people lived up to them, they knew that they ought to. The political influence of the ration book seems to me to have been greater than all of the left-wing propaganda of the war years put together. The slogan of 'fair shares', sometimes thought to have been invented by Labour propagandists in 1945, originated in fact in the publicity campaign devised by the Board of Trade to popularize clothes rationing in 1941.²¹

As the changed consumption patterns took hold, history also judged kindly the overall effect on people's health of the new ways of living. The period from 1937 to 1944 saw a dramatic fall in infant mortality, a clear indicator of more general improvements in the nation's health. At the start of the period around 58 children per 1000 died before their first birthday. By 1944 that figure had fallen to 45 per 1000.²² History suggests then, that the shift to a low-energy economy could create more convivial lifestyles. Conversely, on its current course of growth, transport – mostly vehicular – is predicted by the International Red Cross to become the third most common cause of death and disability by 2020.

As Hugh Dalton, head of the Board of Trade, put it in 1943: *'There can be no equality of sacrifice in this war. Some must lose their lives and limbs, others only the turn-ups on their trousers.'*

Behind all the schemes to manage demand, the objective was to:

*... Secure the fairest possible distribution of whatever supplies are available and to ensure... that as far as possible the things that everybody needs shall be within the reach of all.*²³

Also worthy of further exploration is the relative success in war-time Britain of efforts explicitly to substitute cultural activity and production – theatre, music, film, art, festivals, sport, and numerous other local entertainments – for material consumption.²⁴

Today's major industrial powers also have relatively recent experience of war economies. In 1942, the USA limited gasoline to 3 gallons per week for 'non-essential' vehicles. Germany had rationing throughout the war, and Japan introduced forms of rationing in 1941. Rationing in the USA was motivated by a patriotic desire to ensure that both citizens and soldiers received a fair distribution of goods. Gasoline entitlement was set by how necessary a person's vehicle was to them.

When the USA implemented energy rationing at the time of the first OPEC oil crisis in the early 1970s, a similar logic was used.

A *Congressional declaration of purpose* announced that ‘positive and effective action’ was needed to protect ‘general welfare. . . conserve scarce energy supplies’ and ‘*insure fair and efficient distribution,*’ [emphasis added].²⁵

A Special Relationship: the United States showed it could be done too

Britain’s past carries a message of hope for society’s ability to adapt its behaviour to survive and thrive in the face of new threats. But, historically, it is not alone. Today, the United States sets the global standard for apparently consequence-free conspicuous consumption. In the late 1930s, however, and during the war years, the US demonstrated the possibility of a very different ‘good society,’ and one with almost unrecognisable lifestyles, by today’s standards, to match. American author and historian Mike Davis delved into some of America’s past achievements in an article for *Sierra* magazine.²⁶ It was, he writes *the most important and broadly participatory green experiment in U.S. history*. After half a century of heavily promoted individualistic consumerism, the world he paints seems strange indeed:

Americans simultaneously battled fascism overseas and waste at home. . . millions left cars at home to ride bikes to work, tore up their front yards to plant cabbage, recycled toothpaste tubes and cooking grease, volunteered at daycare centers and USOs, shared their houses and dinners with strangers, and conscientiously attempted to reduce unnecessary consumption and waste. . . Lessing Rosenwald, the chief of the Bureau of Industrial Conservation, called on Americans “to change from an economy of waste – and this country has been notorious for waste – to an economy of conservation.

Victory gardening promoted by the Department of Agriculture and the First Lady, Eleanor Roosevelt, who grew beans and carrots on the White House lawn, led a national “Food Fights for Freedom” campaign. At its peak, 20 million gardeners were producing between 30 and 40 per cent

of vegetables for consumption. It was more than national self interest too, it was an act of solidarity. With that spare capacity the US farming system was able to provide food for its allies, Britain and Russia.

Davis comments that, *Victory gardening transcended the need to supplement the wartime food supply and grew into a spontaneous vision of urban greenness (even if that concept didn't yet exist) and self-reliance.* Even though this predated the massive post-war highways building programme, the 'dethroning' of the car as the 'icon of the American standard of living' was remarkable. King-of-the-road individualism was out: not sharing your car, it was said, helped the enemy.

The power of Britain's own high profile, energetically communicated example had an effect in America too. Over one in four people in Britain were cycling to work and it inspired a huge resurgence of the bicycle in the US. A 'Victory bike,' made from non-critical resources, was launched. Municipalities 'sponsored bike parades and "bike days" to advertise the patriotic advantages of Schwinn over Chevrolet.' Confident national leadership successfully set an international example. Holidaying by bike became popular as fuel rationing reduced leisure driving. Health and well being benefits from the combination of victory gardening and victory cycling were noted by public health officials.

After receding for a few years, New Deal values returned in wartime housing, employment, and childcare programmes, and the postwar economic conversion of factories from military to civilian production. This latter trend did, though, also lay the foundations of the productive capacity that would deliver the later consumer boom.

Notably, the Office of Civilian Defense (OCD), sponsored a "rational consumption" movement. Its consumer committees promoted "buying only for need." In Britain, an equivalent was the work of The National Savings Committee which reminded citizens that: *The 'SquanderBug' causes that fatal itch to buy for buying's sake – the symptom of shopper's disease.*

Consumer information centres in the US were established that advised on nutrition, food conservation, and how to mend and prolong the life of

appliances. Many of these initiatives could sit easily on the wish list of the contemporary Transition Town movement. As such, some mainstream media might dismiss them as ‘nice ideas’ but hopelessly idealistic and unlikely to happen. Yet, amazing as it may seem to a modern audience, these things did happen, and governments made them happen, with support from families, communities and local organisations.

Mass consumption was challenged in the home of . . . mass consumption. The cultures of restless, replaceable fashions and built-in obsolescence, were replaced with ideals of the household “economy soldier” operating along lines of “frugal efficiency”.

Davis quotes a feature in the New York Times from 1942. The paper’s journalists interviewed young women in a community near a defence factory in Connecticut. They expected to find them *yearning for the postwar future of suburban homes and model kitchens that the 1939 New York World’s Fair had prophesied*. But they found women war workers enjoying both their jobs and their simple trailer-style homes that needed little upkeep and housework. Long before the 1960s liberation movement, here were “wenches with wrenches,” living values as championed by women like the radical fashion designer Elizabeth Hawes, author of the 1943 book, *Why Women Cry*.

A new sense of fairness prevailed and the rich found themselves on the defensive in a way not unlike the recent wave of protests in the UK against big businesses and the wealthy avoiding tax payments. For example, war workers needed affordable homes, so the War Production Board ruled that no home should be built costing more than \$500 – much less than the average home at the time. In the potential ‘dead zones’ of America’s burgeoning suburbs, the fact that people were relearning old skills, and picking up new ones, from gardening to cycling, and fixing and mending everything from radios to clothes, prompted the *New York Times* to observe *the rediscovery of the home – not as a dormitory, but as a place where people live*. Less of one thing, consumerism, really did become more of something else, quality of life.

What next? Changing ‘normal’, fairness, and the real big society

What saves a man is to take a step. Then another step.

Antoine de Saint-Exupéry (1900–1944)

Britain’s war-time experience highlighted critical choices over which economic mechanisms were most likely to achieve key objectives. Where changing behaviour with regard to consumption was concerned, generally, the government deliberately chose rationing over taxation for reasons that were rational and progressive. Taxation alone, it concluded, apart from disproportionately and unfairly placing a burden on the poor, would be too slow to change behaviour. Rationing was considered quicker and more equitable. Tradable rations were rejected through fear of encouraging fraud and inflation and ‘undermining the moral basis of rationing’.²⁷ Historian Mark Roodhouse derives specific lessons for policy-making. If transferred to today, Government, he writes, would need to:

*... convince the public that rationing levels are fair; that the system is administered transparently and fairly; and that evaders are few in number, likely to be detected and liable to stiff penalties if found guilty.*²⁸

In 1940, Mary Adams, one of TV’s earliest producers, moved to Whitehall and was given the task of monitoring domestic morale. Inspired by Tom Harrison’s Mass Observation surveys before the War, from May to September 1940 information was phoned in from the regions daily, and from then on weekly. The reports relayed ordinary conversations – or ‘verbatim’ – providing vital information that quantitative analysis cannot. They revealed that the population were solid in the main; it was the authorities who were perceived to be wavering: “we are all anxious to be up and doing”. All people needed was “to be told precisely what to do”.²⁹

Government was not only emboldened by the evidence from these reports, it also included practical proposals:

Not only people in executive positions but also ordinary working classes are demanding that Government should take over and make use of every able-bodied man. It is suggested that Government should order all private gardens to grow at least 50% foodstuffs.³⁰

While recognising that information in wartime was sensitive:

News broadcasts were condemned for being too repetitive, too flippant and – most seriously – for not telling the truth.³¹

Neither were people motivated by Britain's interests alone, but: “for a community of interest for the people of Europe”.³² The historian Paul Addison argues that the effect of “national unity” was to open up the political agenda through the experience of collective endeavour.³³ Without it, some of the subsequent achievements to do with universal healthcare and the provision of education and social housing, may have proved impossible.

The Best of British... good ideas from the past that we can learn from today: The Peckham Experiment

You use the word ‘community,’ the Centre needs a much warmer word than that, we did feel mutually responsible for each other

The Peckham Experiment is not directly attributable to wartime mobilisation and organisation, but it deserves inclusion in this report for two reasons. Firstly it coincides with Britain being at war, and secondly it was shaped by the experience and social challenges highlighted in Britain by the First World War and its long shadow, and in the approach to the WWII. It is also representative of the boldness, practical and intellectual curiosity and willingness to experiment of the time.

Between 1926 and 1950 experimental biologists George Scott-Williamson and Innes Hope Pearce developed what was to become known as the 'Peckham Experiment.' It was a pioneering project that set out to make health "more contagious than disease". Its principles were self-organisation, local empowerment, organic farming and a holistic focus on human relationships, the social connections within a community being fundamental to health.

Early health checks on the Peckham community in which Williamson and Pearce worked revealed widespread, and often untreated, disease and ill health among families. But an early insight of their research was to realise that simple health examinations, information and medical treatment were not the answer. The problem was not just one of money (Peckham at the time was mainly characterised by artisanal, working families), it was to do with lifestyle and environment. It was also about asking a different question. Instead of following normal medical practice and saying, what makes us ill, they asked, what are the conditions that make us well?

The Pioneer Health Centre which Williamson and Pearce went on to found became a research project and a living experiment, established to explore new ways to improve health and well being through meeting peoples' needs for "physical, mental and social activity". At its height, it received 10,000 visitors a year. Here was the seed of a progressive, modern public health movement.

The Centre, run as a subscription club, provided for a range of activities, including a swimming pool, gym, theatre, nursery, school and cafeteria with food from the Centre farm. Whole families were members, paying a small fee and taking part in annual 'health overhauls' and consultations. It operated like a 'social contract' predating the National Health Service and, perhaps, with greater reciprocity between those providing and receiving a service. The

families were, in effect, actively creating their own wellness, rather than simply seeking cures for sickness. Although findings from the Experiment's research subsequently informed things like the World Health Organisation's Healthy Cities Programme and the Health Living Centres in the UK, today the design of the UK's economy, food system and health service still lags behind the Peckham Experiment's successful approach to public health.

Radical in its time, the lessons of the Peckham Experiment still resonate in a society challenged by inequality, energy insecurity and poor health related to induced bad diets and sedentary lifestyles. It showed that healthy, equitable, economically resilient and environmentally thriving communities can be cultivated by people working together to make it happen. Now, a small steering group has been established to investigate the potential for a New Peckham Experiment. It is built on the understanding that healthy, fair, economically resilient and environmentally thriving communities are possible, and can be cultivated alongside environments that increase well-being, revitalise local economies and increase equality (for further information and contacts, see footnote).³⁴

Conclusion

Britain's wartime mobilisation had many dimensions. Political leadership was crucial. There was cultural change based on mass public education, leading to peer pressure for changes in the definition of what was considered social and anti-social behaviour. More recent examples of this might be campaigns on smoking, drink driving, racism, football hooliganism and domestic violence.

The campaigns which were designed to change social norms, were carried out with wit, threat, and brilliant design. Campaigns were comprehensive, echoing through business and civil society. They meant that the population understood why they were being asked to make changes in their lives.

Change was not tentative and incremental, it was deliberately bold and visible. Signs were hung from public buildings, and parks and gardens were given over to growing fruit and vegetables. There was rationing, or the distribution of fair entitlements to available resources, and key goods. And there were taxes on luxury goods. Altogether this led to reductions in waste and domestic consumption. Crucially there was an active industrial policy and a major re-orientation of industrial priorities – it wasn't left to the whims of the market place or to 'nudges' from economic policy. Backing it all up was a major programme of War Savings in which people's money was invested in securing a better future for all. The big question now is, what would a modern equivalent look like?

One difference today is likely to be the precise role of the state. Whilst the modern state is unlikely to be the sole architect, agent and judge of change, it would have to set the parameters for the delivery of key transition objectives, through a combination of local, community and private actors.

A proper, and increasingly shared, grasp of risk and the need for change, planning, local initiative, enterprise, vision, ambition, and shared objectives coupled with a rugged collective endeavour – all these appear to be part of the dynamics of rapid transition. They create the conditions in which change becomes possible.

Successfully pursued, they may answer a vital, current question: namely how to find, in economically stressed times, affordable finance to kick-start new, low carbon, energy, transport, food, and housing sectors? One useful precedent for finding finance to support strategically important new sectors is the example of South Korea. Over the years it channelled lines of low-cost credit to key parts of its economy. The success of this policy can be measured in the fact that the sections of South Korea's industry which benefited are now 'world leaders'.³⁵

Historically, it is clear that things didn't just happen through the alchemy of market forces – both Britain's and America's war effort, and several other 'miracle' developments, like South Korea's rise as an industrial power, took concerted effort, active application to the task in hand, and leadership at local and national level.

Where do we start?

The amount of state intervention (in the banking system) in the US and UK at this moment is at a level comparable to that of wartime. We have in effect had to declare war to get us out of the hole created by our economic system.

John Lanchester (2010) *Whoops!*

If we are to overcome the threat of climate change, our country will need to move onto the equivalent of a war footing, where the efforts of individuals, organisations and government are harnessed together and directed to a common goal. Only this will provide the urgency, energy and creativity we need to avert disaster.

We have seen some examples of how people, civil society and government worked together in the face of Fascism and where, despite the inevitable mistakes, injustices and missed opportunities, the result was victory. This is proof that it can be done.

More recently, it took a war-like effort internationally to stage a short-term rescue of the economy from the recklessness of the financial system by finding, almost overnight, the billions required to bail out the banks – something that, with properly regulation, should never have been necessary. Yet it sets a precedent for what governments can do when they understand the risks and act together.

The New Home Front, responding to climate change, energy security, peak oil and threats to the food chain, presents the next battle line. The experience of war economies needs to inform current plans for necessary, rapid transition. The most effective policies and approaches should be re-interpreted for today and built into our programmes with an enabling regulatory environment, targets, timetables and appropriate resources.

Home Front Wisdom

That's why, with The New Home Front, we are also launching the *Home Front Wisdom* initiative, to spend time talking to people whose imagination and resilience helped Britain to survive and thrive all those years ago. We want to catch and learn from their experience and not let it go to waste. All the best ideas will be collected, published and presented in Parliament and to the Government.

This is not a substitute for Government action, but a complement to it and, we hope, will spur political leaders to act with greater urgency and ambition.

For while it is for politicians to enact the legislation we need on everything from greater investment in energy efficiency and renewable energy, to changes in procurement rules to promote more local

production and consumption, there is much that can be learned from existing community initiatives – the Transition Town movement, for example – as well as from the experience of the 1930s and 40s, which forms the focus of this report.

Information and Awareness

Many people want to do more to help fight climate change, but are unsure what will make the most difference. They need clear and authoritative information from trusted sources. In the war years this ranged from official publications – often produced by the leading artists and writers of the time – to the BBC and national and local newspapers, and organizations such as the WRVS. There is a challenge here to today's designers and communicators – how to put over practical yet compelling messages that inform and also motivate people. **A competition to design new campaigns** could harness that creativity and the internet could be used to distribute the best material for people to use in their own homes and workplaces or pass on to others. So too might a prize for the best works – across all the arts – that help make the threat of climate change real for people, just as writers, musicians, performers and other artists – ranging from J B Priestly to Myra Hess – contributed to people's awareness and morale before and during the Second World War.

Over-consumption is supported and constantly reinforced by a multi-billion pound advertising industry. In this atmosphere, creating the momentum for ending waste, for social responsibility and pulling together, rather than just thinking about yourself, will be hard. Why not create a **New Home Front advertising agency** and invite the best comedians, writers and artists to explore how best to communicate the need for change and to pull together? Media agencies could set aside an amount of air time, print and billboard space. Or, following examples in both North and South America, some public areas could be advertising-pressure free zones, where the removal of public adverts could create calmer, clutter free spaces.

Skills Talents and Work

During the war, many people re-learned skills that would make limited resources go further – particularly with food and clothing, but also with mending household items rather than throwing them away and replacing them.

The same approach could lead to new campaigns to allow people young and old to acquire these skills – such as an **‘Eat seasonal, local, sustainable’ campaign**, which would marshal the talents of artists, chefs and cooks to help educate people in re-skilling to cook, enjoy and appreciate food as a precious and enjoyable commodity. Schools too could help, making cooking, growing food, mending and conserving part of the school curriculum rather than an optional extra. Some of this is already happening, but could be rolled out far more systematically.

There could also be a greater role for **annual sustainable design forums** – like mini-World’s Fairs – where the best of eco-design and re-use is celebrated and becomes a source of national pride as well as disseminating good ideas within industry and amongst the public.

Change is not just an economic, social and cultural challenge, but a big scientific one too. But scientists are too often hampered by restrictive intellectual property regimes and other commercial considerations. To solve the big problems of rapidly re-engineering the nation’s infrastructure, they need to be able to work together, supported, sharing research for public benefit, free of the usual constraints. This could happen under the umbrella of a new **Centre for the Science of Rapid Transition**.

Recession hit Britain is scarred by cultures of overwork and high unemployment. **A voluntary shorter working week** could help address these problems and create the opportunity to do things that raise well being. When the municipality in recession-hit Utah, in the US, put its workers on a four day week out of necessity, they were

amazed by the results. Absentee rates went down, staff morale went up and carbon emissions dropped by 14 per cent.

Community

The war years saw many millions of people join voluntary and community bodies doing vital work locally, and less formal ‘neighbourliness’, such as helping with repairs or passing on a share of the ration to someone who needed it more. Existing voluntary groups and local networks would have a crucial role to play in a concerted national response to climate change – there may also be a role for a modern ‘**National Skills Bank for Transition**’, using the Time Bank model, so that anyone could swap an hour of fruit and vegetable growing skills, for example, for an hour of DIY insulating the home or mending a tyre on a bicycle.

Communities could also use proposed new powers to take on scarce resources not being used effectively by local and national government and put them to use in the fight against climate change. Buildings of all sorts in towns and cities kept empty and vacant by owners exacerbates the housing problem, while derelict land prevents opportunities for innovative urban farming. **A Big Society Good Use Order** could be introduced which, while specifying time frames for use and the type of activity allowed, could bring empty homes back into use, and make some derelict plots useful. In Detroit in the US, waste land is being used by community groups to grow food – they call it ‘from Mo-Town to Grow-Town’. This could strengthen communities and reduce carbon emissions here too.

Following this, empty properties in our hard hit high streets could be turned into new **High Street Food Hubs, Energy Hubs and Arts Hubs**. Why not create places at the heart of our local communities where micro and small producers can sell and exchange, where people can swap knowledge, learn more about energy saving, mending, making your own entertainment, growing food, how to cook and conserve it, and tool and transport sharing schemes? It would bring

back vibrant local life where a combination of the bank-failure driven recession and the march of the supermarkets has left our high streets pock-marked with empty properties.

Even simple community initiatives, such as **planting fruit trees on urban streets**, could make a positive contribution.

Leadership

During the war, government and other **public buildings carried highly visible displays showing what they were doing to conserve fuel and energy**. Visible leadership proved vital during the war to encourage wider change. Following this example, each government body today could publish, prominently, its energy usage: not only on the buildings themselves, but on their websites or other publications.

Similarly, large landowners – not only private, but also bodies such as the Church of England and local authorities – could **pioneer sustainable and progressive land use** at the local level through insisting on organic/sustainable land management and production from those who lease their farms, and by committing to buy the products for local procurement. Public procurement more generally should be tied to rigorous carbon and sustainability targets. Changing how you eat is one of the easiest ways to cut your carbon ‘foodprint’ – up to 30% of the average European’s carbon use is down to food, mainly through transport and waste. Cutting this could quickly make a huge difference.

A new Battle for Energy

Saving energy was a major concern on the Home Front in the 1940s and is equally vital to tackling climate change. Reducing energy demand including more efficient use and less waste is something every one of us can contribute to every day, and which can also save us money on energy bills. The proposals in **A Green New Deal**³⁶ offer a blueprint for rapid action to bring improvements in energy efficiency to

homes, businesses and public buildings, paid for in part by long-dated green bonds issued by the Green Investment Bank for insurance and pension funds, and creating or sustaining hundreds of thousands of jobs across the country.

Fair Shares for All

These are some of the areas where we can take inspiration from the past and start to build a national consensus on the fight against climate change. But we also know that there were debates from the war years which we now face again, such as how to reduce the consumption of precious resources fairly and with the minimum disruption to people's lives.

People were prepared to put up with a lot of hardship during the war, and even make additional contributions, for example through War Bonds or charitable appeals – but in return they wanted everyone to play their part. While people grumbled about rationing, and were often prepared to bend the rules or buy black market goods, it was still seen as fairer than the alternative of allowing prices to govern demand, so that goods became unaffordable to all but an elite, as in Soviet-era Russia. Both in the UK and US, public opinion led the push for governments to introduce rationing; while a 1943 survey of public opinion found that nine out of ten housewives thought the system of rationing was fair.

Current policy is to deter people from using precious resources such as fuel by making it more expensive, which inevitably hits hardest those with less money or whose personal circumstances mean they have higher basic needs. We should now start a national debate about whether some element of rationing or quotas would be a fairer approach. Existing research into the implementation of **Tradeable Emissions Quotas**, a scheme which ensures fair access to environmentally safe levels of fossil fuel use, offers a useful starting point.³⁷

Over to You

The aim of this report is to highlight the potential for learning from Britain's experiences in the 1930s and 1940s – and particularly in hearing directly from those who lived through those years – and applying that experience to the fight against climate change.

As we travel, work, shop and heat our homes, almost unnoticed we have become locked into energy intensive ways of doing things that are no longer supportable. But how are large, complex societies and economies like ours going to achieve the rapid transitions now needed? We can begin by listening to people who have done so before.

We see a potential. Now it is for individuals and organisations of all kinds – teachers, commentators and academics, managers and professionals, designers and communicators, artists and writers, and for civil servants and politicians to begin to make that potential a reality.

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