Canolbwynt Iechyd a Chynaliadwyedd
Health and Sustainability Hub

GIG CYMRU NHS WALES
Iechyd Cyhoeddus Cymru
Public Health Wales

GREEN OPPORTUNITIES

Supporting Wales' COVID-19 *Green Recovery* by identifying opportunities to *support population health* through *sustainable means*

SPRING 2021

GUEST FOREWORD

The coronavirus pandemic has caused a global crisis that has tested the strengths of the world's healthcare systems, with devastating consequences across the globe. It is a stark warning that healthcare systems can be made vulnerable – this pressure on healthcare is increasingly further at risk due to another global crisis – climate change.

To tackle climate change, the UK and devolved governments have committed to 'net-zero' emissions targets by 2050. This is further enforced by declarations of a Climate Emergency by governments across the UK.

If the coronavirus pandemic has taught us anything, it is that in the face of a great threat we can enact major fundamental changes to the way we live our lives. We all have taken responsibility – governments, businesses, and the public - to make changes to safeguard ourselves in the short term; it is now time to channel that responsibility with absolute urgency to safeguard our future generations from an impending climate crisis.

David Powlesland, Senior Manager, Carbon Trust Cities & Regions

The Carbon Trust is an independent, expert partner of leading organisations around the world that are seeking to deliver sustainable, low carbon economies. To learn more about their work with the public sector click here.

GREEN RECOVERY

A report from the green recovery task and finish group, led by Natural Resources Wales on behalf of Welsh Government, identifies a range of priority actions to support a green recovery in Wales, including nature based solutions and transitioning to a net zero, circular economy, which supports nature and creates significant opportunities for jobs and skills development. A second report informs a wider discussion on how best to support the environmental third sector, which has been hit hard by the pandemic and identifies opportunities to support the sector to become more resilient and effective. The Wales Council for Voluntary Action's (WCVA) Third Sector Resilience Fund provides support to help organisations through the pandemic.

DECARBONISATION

Wales' greenhouse gas emissions are driven by a range of factors including a high share of industry and manufacturing. Public sector organisations can have an influence on a wide range of emissions, both directly and indirectly, with the largest portion of emissions resulting from indirect emissions including procurement of goods and services, staff commute and business travel.

The NHS is one of the largest organisations in the world, and makes up a significant part of the UK's economy and workforce. It is also the largest public sector emitter of carbon emissions in the UK. The NHS has a significant leadership role to play in contributing to decarbonising – both for its own direct emissions, its supply chain, and for wider society. Emissions within NHS Wales are broken down into building use, transport and procurement, with procurement accounting for 62% of emissions in 2018/19.

Welsh Government and NHS Wales Shared Services Partnership have developed a 'NHS Wales Decarbonisation Strategic Delivery Plan 2020-2030' in partnership with the Carbon Trust, due to be published in Spring 2021, to contribute to Welsh Government's ambition for a carbon neutral public sector by 2030.

Over the border in England, the new Greener NHS team builds on the initial work of the former Sustainable Development Unit, while expanding to achieve a more outward-facing remit with enhanced capacity to focus on net zero healthcare and the broader sustainability agenda.

Decarbonisation and creating a more sustainable economy can contribute to a wide range of short and long-term population health benefits. A study in the BMJ, which explored the impacts of different decarbonisation policies, found that actions to reduce carbon emissions often lead to net benefits for population health. Policies which target carbon emission producing sectors including power generation, housing, land, transport and the food industry have a range of health benefits due to reduced environmental pollution, increased physical activity, and improved diet.

Decarbonisation policies have the potential to not only improve population health, but also to save billions of pounds in the UK, through savings to the NHS and social care. These health and economic co-benefits of decarbonisation can be seen in the short-term, while also reducing the long-term health impacts of climate change.

CLEAN AIR

COVID-19 has resulted in a pause in many people's day to day activities, initially causing a dramatic reduction in carbon emissions. However, overall carbon emissions have barely reduced. Hundreds of health professionals in Wales have called on Welsh Government to support a healthy recovery to the pandemic, calling for environmental issues including clean air, clean energy and a cleaner environment to be prioritised, demonstrating that healthcare workers support the climate agenda and recognise the potential health benefits that a green recovery can provide.

Poor air quality is currently the largest environmental risk to public health in the UK. Long-term exposure to air pollution causes chronic conditions such as cardiovascular and respiratory diseases, and leads to reduced life expectancy. In December, in a world-first ruling, a coroner confirmed that excessive air pollution made a material contribution to the death of a 9 year-old child. Air pollution has also been linked to poorer outcomes from COVID-19. A study undertaken in Milan demonstrated a relationship between air pollution levels and mortality from COVID-19. It found that every unit increase in the concentration of fine air particles (PM2.5) was associated with a 9% increase in COVID-19 related mortality.

Government statistics estimate that air pollution in the UK reduces the life expectancy of every person by an average of 7 to 8 months. Welsh Government's Clean Air Plan for Wales highlights how it will collaboratively reduce emissions and deliver vital improvements for health and well-being, nature, environment, ecosystems and biodiversity.

DID YOU KNOW?

The World Health Organization estimates that globally air pollution causes about 3 million premature deaths a year, making it a significant environmental risk. Energy efficiency measures targeting indoor and outdoor air quality can have major positive impacts for global health.

SUPPORTING BIODIVERSITY

While renewable energy is essential to support a green recovery, a recent study reveals how our demand for energy threatens biodiversity loss and ecosystems overseas. Currently, about 17% of current global energy consumption is achieved through renewable energy, a figure that needs to rapidly increase to keep global warming below 2 degrees Celsius this century.

However, mining for the minerals and metals required for renewable technology infrastructure can have a negative impact on biodiversity, destroying habitats and surrounding environments. For example the majority of lithium, a key component of lithium-ion batteries used in electric vehicles, is found among the world's biodiversity hotspots including the Ramar-listed wetlands, which are crucial breeding and nesting sites for flamingos.

A recent report found the production of minerals, such as lithium, could increase by nearly 500% by 2050 to meet the growing demand for clean energy technologies. With renewable energy essential to combat climate change, we need strategic planning and effective environmental impact assessments to ensure that mining threats to biodiversity caused by renewable energy production do not surpass the threats averted by climate change mitigation. Sourcing materials through sustainable mining schemes, such as the Initiative for Responsible Mining Assurance and recycling to reduce primary demand for the materials will help preserve biodiversity and reduce ecosystem threats from renewable technology.

NEW WAYS OF WORKING AND TRAVELLING

Findings from the Climate Assembly UK show that people would be prepared to continue with the lifestyle changes enforced by the pandemic to help tackle the climate emergency, including embedding new ways of working, creating green jobs and embracing a low carbon future. On a national level, Public Health Wales' How Are You Doing? Campaign highlights 37 per cent of people are living a more climate-friendly lifestyle since the start of the pandemic, while 21 per cent of people have become more concerned about climate change.

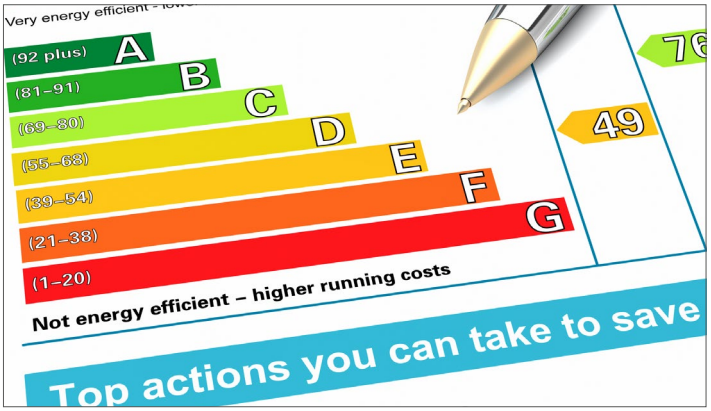
A green recovery plan could lead to carbon dioxide emission reductions of 7% globally by 2030, while findings from a Greenpeace review suggests a green recovery stimulus totalling £100bn over a period of four years would create around 1.8m jobs. The Wales TUC estimates almost 60,000 jobs could be created in Wales with government investment in key projects, including decarbonisation, public transport and social housing.

Public transport in many rural part of Wales is "infrequent, inadequate and more expensive than elsewhere"; the consequences of this are that many people are excluded from services and from employment opportunities if they do not have private transport. Investment in increasing access to new technologies and/or improving green public transport would deliver a win-win of lowering carbon emissions, reducing air pollution and tackling poverty and social exclusion.

The need to travel for employment is diminishing as many organisations have embraced online working practices during the COVID-19 pandemic, and are likely to continue to do so; investment in the digital infrastructure needed to support these work patterns would also open up employment opportunities for citizens in rural areas, improving productivity and social inclusion. In combination with a focus on cutting down supply chains, particularly in the food industry, sourcing and trading more locally have the potential to stimulate local economies, thus further tackling poverty on the one hand, and climate change on the other.

VULNERABLE GROUPS, FUEL POVERTY, AND MENTAL WELL-BEING

Groups considered most vulnerable in our society include older people, people with disabilities, people living in poverty and citizens with long-term physical and mental ill-health (including some who fall into two or more of these categories). These groups have been most at risk and hardest hit by the COVID-19 pandemic, both in terms of contracting and falling ill or dying from the disease itself, and potentially from the subsequent economic and social fallout.



There are around 150,000 households in Wales living in fuel poverty (where energy usage for running and maintaining their homes constitutes a disproportionately large amount of their expenditure), and these groups are at greatest risk. For example, people with disabilities often have higher domestic energy needs because of trouble keeping warm (for those with limited mobility) and additional energy needed for assistive technology.

It can be hard for vulnerable people to engage with fuel poverty support (with barriers such as digital exclusion and a lack of outreach by services), and a significant proportion of this population live in homes that are particularly difficult to improve in terms of energy efficiency. The surge in the numbers of people staying home due to the pandemic could increase the average household energy bill by £195 per year, with costs likely to be higher for those living in homes with poor energy efficiency.

A policy focus on this group could yield significant sustainability benefits, as suggested by National Energy Action: "As fuel poor homes are the most expensive to run and often the most polluting, the direct impact of upgrading them will bring substantial environmental benefits." Investing in alternative energy production within Wales could also be part of an economic stimulus contributing to tackling poverty.

A recent report by the International Energy Agency identifies how energy efficiency measures impact on physical and mental well-being. Recent evidence indicates extreme cold or hot indoor temperatures and fuel poverty can have negative mental health impacts (anxiety, stress and depression). Improvements to energy efficiency are often associated with improvements in mental well-being. Welsh Government has given £20million to the Optimised Retrofit Programme (ORP) to upgrade at least 1,000 homes through a mixture of new energy-efficient materials and technologies.

DEVELOPMENTS FROM THE FUTURE GENERATIONS COMMISSIONER FOR WALES

The Future Generations Commissioner recently delivered a 'TED' talk on 'leaving the world better than we found it' to support a green recovery following the pandemic, focussing on cutting carbon emissions, increasing sustainability, creating green jobs and promoting well-being as a national goal.

WHAT CAN WE DO?

The pandemic has revealed a solemn truth which highlights the difficult challenges that lie ahead to reduce our impact on climate change. Although carbon emissions fell dramatically at the start of the global economic shutdown, overall they barely reduced and will have no measurable effect on the world's carbon concentration.

Our rapid shift to a less carbon intensive lifestyle at the start of the pandemic resulted in cleaner air and an increase in urban wildlife, revealing the scope of what can be achieved while providing inspiration for future changes to reduce emissions to net zero, through a complete transformation of our industrial, energy and transport systems. Can we sustain these positive behavioural changes alongside the future relaxation of COVID-19 restrictions?

We're all responsible for the energy we use in our homes. Spending less time in the shower and draught proofing windows and doors are just a few quick tips to save water and energy, lower our bills and reduce our carbon footprint, particularly as many of us continue to work from home. Support is also available for public sector organisations and community groups to reduce carbon emissions and generate local benefits.

REMEMBER...

Many of us are realising that all areas of life will be very different after this pandemic and a collective response to build back better and fairer represents a once in a generation opportunity to recover from COVID-19 while also addressing the underlying nature and climate emergencies.

'*BE THE CHANGE*' FOR WALES' WELL-BEING GOALS

'Be the Change' is a campaign to encourage and support staff to take sustainable steps in the workplace, individually and within teams, to contribute towards Wales' seven well-being goals (in the Well-being of Future Generations Act). The Be the Change Toolkit has been designed to help organisations adopt 'Be the Change' in their places of work, providing information and knowledge to support small sustainable changes across a range of topics.

Ni yw'r Newid

Be the Change