



Recovery from the Coronavirus pandemic: Renewable energy, housing and town centres

Introduction

This paper was written in July 2020. It is one of a series of six briefings commissioned by the Counsel General and Minister for European Transition to inform and challenge the Welsh Government's strategy for reconstruction and recovery from the Coronavirus pandemic.

The briefings focused on topics selected by Ministers. They built on [our work to support earlier roundtable discussions convened by the Minister](#) and helped to frame and inform the work of an [Expert Group](#)¹ which met with the Minister between July and September 2020. We wrote up the Group's conclusions which fed into Cabinet discussion about the Welsh Government's priorities for tackling the economic and social impacts of the pandemic.

This paper focuses on initiatives to support renewable energy, low carbon and social housing, and 'transforming towns'. It considers:

- Potential enabler and barriers;
- Increasing renewable energy;
- Increasing and upgrading housing stock; and
- Repurposing urban centres.

Key messages

The Welsh Government should be thinking about how it uses the full range of available policy levers it has, to shape the development of markets in key areas like low carbon housing, retrofitting or upgrading housing, and renewables.

Even with this, delivering on its ambitions will require overcoming some significant structural barriers, especially in relation to capacity within the public sector (e.g. in local authority planning teams), and the mechanisms for governance and coordination among public bodies.

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In relation to supporting urban renewal in particular, thought needs to be given to the processes by which vulnerable areas are identified and then rapidly supported to mobilise

¹ The Expert Group comprised four standing members: Torsten Bell (Chief Executive of the Resolution Foundation), Rebecca Heaton (UK climate change committee), Paul Johnson (Director of the Institute for Fiscal Studies) and Miatta Fahnbulleh (Chief Executive of the New Economics Foundation).

local communities in order to help shape the future of their area. This might require an innovative approach to mobilising and deploying public sector resource.

Potential enablers and barriers

In seeking to deliver on any ambitions around housing, energy and urban renewal, the Welsh Government will want to consider how it uses available policy levers to address potential barriers and enablers, in particular:

- **Economic development and skills policy:** Efforts to accelerate the provision of renewable energy, low carbon housing, and domestic energy efficiency measures should be designed in concert with economic and skills policies. In each case there could be opportunities to foster the development of local supply chains, and to create apprenticeships/traineeships/skills programmes that support these.
- **Planning:** The Welsh Government should work with partners to accelerate the finalisation of the National Development Framework and the regional and local plans that will flow from this, and similarly to finalise the work of the Infrastructure Commission – which is assessing transport, energy and digital infrastructure needs in Wales. An integrated framework that identifies priorities and opportunities and supports the active pursuit of associated developments will be key.
- **Regional governance and capacity:** Regional governance within Wales is overly complex, hampering effective and efficient decision making. In recognition of this, prior to the crisis, the Welsh Government was working with stakeholders to streamline governance structures. The aspiration should be to maximise the opportunities available from bringing together policy on

planning, skills, energy, economic development, urban renewal, and public service delivery. Without action to simplify current governance arrangements they will act as a brake on effective and timely decision making. Whatever new structures emerge, they will need appropriate capacity to manage effectively the planning and urban renewal processes that the propositions imply.

Increasing renewable energy

The Welsh context

Wales currently generates about twice as much energy as it consumes (Welsh Government 2019a). Around 25% of total energy generation is from renewables, with the remainder coming from fossil fuels (overwhelmingly gas). There is a recognised need to decarbonise energy generation, particularly in light of wider Welsh Government policy. However, only three renewable energy projects with a capacity greater than 1MW were approved in 2018 (Welsh Government, 2019a).



Planning consent for power generation over 350MW is reserved to UK government, although there is no upper limit for onshore wind. It is important to note that Wales does have the power to license (or refuse to license) new onshore coal, oil and gas extraction, as well as marine energy projects.

Despite the potential for marine energy in Wales, technological and feasibility challenges remain (Uihlein and Magagna, 2016) and it is

not likely that tidal stream or wave energy projects will be commercially viable in the near future. Projects like the Swansea Bay Tidal Lagoon illustrate the difficulties and the expense of untested or immature projects. Tidal barrages offer better prospects but could be ecologically harmful (POST, 2013). Offshore wind represents an abundant resource that could provide an additional 2GW of power generation from only two or three projects under the right circumstances (Carbon Trust, 2019), and there is ongoing potential for onshore wind farms, although these often provoke local opposition.

Key considerations

Finance: At present the Welsh Government does not provide significant funding to support renewables. It uses the powers it has over the planning, licencing and consent of energy projects to support the development of renewable energy projects.

The Coronavirus pandemic had an immediate and drastic effect on the construction sector in the UK

A recent attempt to estimate the costs of producing sufficient renewable electricity to meet projected Welsh energy demand in 2035 suggested a need for £25bn of investment at 2018 prices (Jones, 2018). The Welsh Government would not be able to fund this directly and will need to attract investment in renewables for its ambitions to be realised. Some have argued that it should use its convening power to explore how it might leverage investment from both the private sector and from pension funds in the public sector (IWA, 2019).

Potential for 'growth sectors': Public sector investment and support could be directed towards projects that maximise return in and to

Wales. There are a number of areas where it has been suggested that Wales should seek to develop domestic markets by deploying a range of policies (e.g. procurement, business support, skills programmes, investing in R&D, etc). These include:

- **Domestic heating:** Compared to the rest of the UK, a higher proportion of properties in Wales are not connected to the gas grid (21%) (CCC, 2017). There could be scope to link Government support and investment in renewable heating for these properties to the development of the necessary skills base and supply chains; and
- **High-skilled, high-technology manufacturing:** Capital investment could promote 'reshoring' of supply chains around, for example, batteries and generator parts. It could also foster the development of innovation clusters around newer technology such as tidal and floating offshore wind, recognising that these are immature technologies at present.

Upgrading the electricity grid: A barrier to smaller scale renewable energy projects, and the siting of larger scale projects in rural Wales, is the capacity of the electricity distribution and transmission grid. This is not an area of devolved responsibility, but the Welsh Government will need to consider whether and how it wants to try to influence decisions on investment in grid capacity.

Increasing and upgrading housing stock

The Welsh context

The Welsh Government has put significant effort and resources into expanding the housing stock. It has emphasised both social and affordable housing across a range of tenures, energy efficiency, and new methods of high-quality construction. Despite this, however, the number

of housing completions in Wales continues to fall below estimated and projected need (Welsh Government, 2019b).

Modern Methods of Construction (MMC)² have been championed as they are seen to offer the capacity to deliver housing more quickly and using different supply chains compared to traditional housebuilding methods. The Welsh Government accepted the recommendation made in the Independent Review of Affordable Housing Supply (2019) to continue trialling MMC as a means to increase the scale and pace of affordable housing provision in Wales.



The Coronavirus pandemic had an immediate and drastic effect on the construction sector in the UK, with lockdown measures and supply chain shutdowns leading to widespread site closures (Staton, 2020). This has had a knock-on effect on housebuilding, and with capacity remaining reduced despite an easing of lockdown measures, a slowing down in housebuilding capacity may continue in the longer term (Hammond, 2020). However, it has been argued that a restriction in the construction of new houses will not have a significant impact on overall supply, given the small contribution new homes make to the overall housing stock (Cheshire and Hilber, 2020).

The Chancellor's summer statement introduced a new Green Homes Grant – a grant scheme for domestic energy efficiency measures – which households in Wales will be eligible to apply for.

Stamp duty is a devolved tax – Wales has a Land Transaction Tax – so the announced cut does not automatically apply in Wales.

Key considerations

Capacity, coordination, and governance: As noted above, the planning framework, regional governance and local capacity will all be key to ensuring that there are increases in housing supply and improvements in the existing housing stock.

Market shaping: There may be scope for the Welsh Government to consider setting new ambitions or targets for standards for the energy profile of housing in Wales.

The Welsh Housing Quality Standards – which apply to social housing – effectively expire at the end of the year. Updating these and introducing higher energy efficiency standards could be a mechanism for accelerating improvements in social housing stock.

Consideration could also be given to setting ambitions for the energy profile of all new and existing housing in Wales.

Creating incentives: New standards could be complemented by using the planning and devolved tax systems to incentivise private investment alongside existing government initiatives.

The Green Homes Grant scheme, should help stimulate retrofitting of the existing housing stock in Wales (subject to seeing the details). Experience to date suggests incentives like this need to be designed in a way that actively seeks to address behavioural barriers (Green Finance Institute, 2020). Welsh Government may, therefore, want to proactively promote the new scheme and support homeowners and landlords to access the funding; particularly among low income groups.

² 'MMC is an umbrella term that includes various construction methods and technologies that can either replace traditional methods (e.g. using innovative technological/digital advancements such as 3D printing, drones and on site robotics) or complement them (e.g. producing components for hybrid construction that reduce resource required on-site and/or speed up assembly). As such, MMC techniques can be used both on and off-site.' (Welsh Government, 2020, p.14)

Repurposing existing buildings: In England, planning law allows conversion of office buildings to housing under permitted development rights. However, many of the resulting developments have been criticised as substandard potential ‘slums’ (Evans, 2018). These conversions may reduce overall housing quality, particularly for the poorest. While Wales might consider a more restrictive use of permitted development rights, this will not necessarily translate to a higher standard of development unless local planning teams have the capacity to rigorously enforce standards.

Repurposing urban centres

The impact of the Coronavirus pandemic on retail and urban centres

Prior to the pandemic, there were already significant shifts in retail, including financial difficulties and a number of bankruptcies among large-scale retailers. The impact of the pandemic appears to have accelerated this trend.

However, some of the trends we have seen over the last few months may be reversed as restrictions are lifted, and it remains to be seen what will happen to patterns of demand, and what this will mean for the impacts on retailers.

As a result, it is unknown whether there will be a change in the role of ‘anchor’ retailers. It will be important, therefore, that the policy response is not predicated on presumptions about future behavioural shifts, if these might be reversed.

Similarly, the impact will not be uniform, so any intervention will need to respond to and target areas in need. It is likely that the risk will be concentrated in those town centres which were vulnerable prior to the current crisis, while others may be less affected, if at all.

Key considerations

Approaches to renewal: Good neighbourhood design requires integration of policy and practice

across a range of fields including planning, transport, housing, community services, and local economic growth.

And whilst well-designed neighbourhoods are considered an important policy objective, this is often overlooked during the planning, procurement and development process, partly owing to a lack of agreement of what design value on a neighbourhood scale means in practice (CaCHE, 2018).

It is likely that some town centres already integrate a range of services and community hubs. Smaller market towns in mid and west Wales often perform a range of functions for a wider rural community (for instance, livestock markets and specialist services) alongside public administration, health and social care and education. The ways in which these uses interact should be studied and learned from.

Community engagement: It is commonly accepted that urban renewal or regeneration should incorporate public engagement, although this varies in practice. To ensure the acceptance of renewal schemes, it will be important to engage local people throughout the process (Lawson and Kearns, 2010). Publishing data about empty units and incentivising their re-use could also empower community groups to make use of them (Kim et al., 2020).

Finally, policymakers will need to be sensitive to the diverse nature of ‘community hubs’. Alongside the traditional community hall, these might include places of worship, libraries, or services provided by the third sector. Leisure facilities including pubs, bars, cafés and restaurants also serve a community function, and are currently under significant pressure as a result of the pandemic.

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Our other work on the Coronavirus pandemic

We have conducted a range of projects to provide policy makers and public services with independent evidence on economic and social recovery from the Coronavirus pandemic. In addition to papers prepared for the Expert Group convened by Welsh Government Ministers, we have led a comprehensive assessment of the evidence on Supporting Public Services for the UK Government's initiative on 'Rebuilding a Resilient Britain' led by

Sir Patrick Vallance; published [the conclusions reached by six expert roundtables](#) on recovery from the pandemic; published an analysis of [responses to the Welsh Government's consultation](#) on 'Our Future Wales'; and produced [a series of blogs](#) on key issues including: [loneliness in the lockdown](#), the [implications for the Welsh economy](#), the [importance of a green stimulus to aid recovery](#), and the [future of health and social care](#).

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