

The ten point plan for a green industrial revolution... what does it mean in practice?



David Kemp
(Sustainability and Growth, Procure Plus) gives his view on the latest developments.

The ten point plan sets out the approach government will take to build back better, support green jobs, and accelerate our path to net zero.

We've been patiently waiting for years for Government to more actively support the low carbon agenda across the housing sector and spell out its policy commitments to enabling social landlords (and homeowners) to improve the energy performance of their buildings to address fuel poverty and tackle climate change. Good things come to those who wait? Perhaps.

What we have recently seen is an un-precedented number of announcements and initiatives from Government with, often, unrealistic timescales for bidding and delivery and all, to an extent, outside of a coherent policy framework for how to support low carbon in our domestic dwellings. That said, anything that focuses the mind on the need for and benefits from deploying energy efficiency and low and zero carbon technologies in housing is warmly welcomed. When these announcements come with cash attached, even more so!

Boris Johnson has announced the Government's 'Ten Point Plan for a Green Industrial Revolution'. Does this further support or confound social housing providers and their supply chains wanting guidance on what the low carbon future might look like?

Of the ten points listed I think there are three which impact on or could be influenced by the social housing sector and I'll address them in turn.

Point 1: Advancing Offshore Wind

How does this impact on housing?

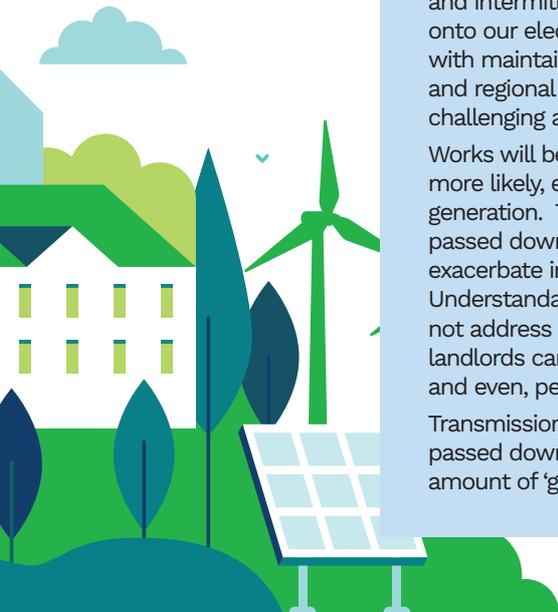
Simply put, by increasing the amount of 'diverse' and intermittent renewable energy generation onto our electrical network, the work associated with maintaining and managing both the national and regional electricity networks becomes more challenging and, perhaps, costly.

Works will be required to upgrade networks and, more likely, enable flexible storage of excess generation. These costs will ultimately be passed down to all consumers which could exacerbate incidences of fuel poverty. Understandably this high level document does not address or acknowledge this risk. Social landlords can prepare for it though to mitigate and even, perhaps, turn it into an opportunity.

Transmission and distribution costs are currently passed down via electricity bills. Reduce the amount of 'grid supplied' energy to a home

through deployment of PV and battery for example, and you've helped to reduce this burden to tenants. Likewise, energy storage within dwellings can help in two further ways. Time of use tariffs for electricity can be coupled with energy storage to maximise consumption during periods of low cost electricity and equally, landlord portfolios of storage can be used to offer energy network management services and, potentially, generate a revenue stream for owners of energy stores. Projects such as our own ERDF funded Homes as Energy Systems project are currently exploring this very opportunity.

A 10 Point Plan is a catchier title than an Eleven Point one, but addressing increased renewable energy generation without considering flexible energy storage is an opportunity missed. Effectively, a drive for offshore wind could also be the catalyst for a renaissance of the domestic PV and energy storage market, creating significant employment opportunities, too.





Point 2: Driving the Growth of Low Carbon Hydrogen

The UK will require green hydrogen if it is to meet its legally binding carbon reduction targets both as a replacement fuel for natural gas and petrol / diesel but also as means of energy storage, converting excess electricity into a useable energy source instead of switching off the additional 40GW of offshore wind. That is undisputed and the investment and support from Government is required.

The issue for housing arises from the continued ambiguity from Government over decarbonisation of domestic heat (and yes, that is despite the final point I will cover) as the challenge for landlords considering heating system replacements is twofold – tenants running costs and carbon emissions.

On the face of it, a hydrogen ready boiler works for both these things and the reference to hydrogen estates (300 home trial by 2023 and a ‘town’ by 2030) sort of supports an asset manager’s view that this kit will do the job. However, explore in more detail and it’s not as clear cut.

The work undertaken by energy stakeholders in the North West indicates that when it comes to the domestic network there is unlikely to be any meaningful quantity of hydrogen in the pipes before 2035. Industrial clusters are a separate story. This means that landlords may take decisions now in the belief they are saving carbon whilst effectively doing nothing of the sort and, potentially, even replacing boilers before they’ve even had the chance to burn H₂. Those with the carbon reduction deadline of 2050 in mind might be relaxed about this however it’s not the date for carbon neutrality that’s actually important, it is the trajectory of de-carbonisation that matters.

National and regional carbon targets are based on a carbon emissions budget. Greater Manchester, for

example, calculated a carbon budget (the city regions ‘share’ of UK emissions between now and 2050 to hit the 1.5 degree temperature rise) and it has effectively 15M tonnes of carbon to play with. If no effort was made into emissions reduction but net zero was achieved in one big hit on 31 Dec 2049, the 15M tonne budget would have been well and truly spent and a 1.5 degree rise in temperature a distant, wishful memory. In other words, the area under all carbon reduction graphs is more important than the trajectory of reduction itself.

On the running cost perspective, there is little understood about what hydrogen as a fuel will actually cost the consumer. As a manufactured fuel, using either natural gas with carbon capture and storage or from electricity (excess renewable, nuclear or straight renewable) it will not be as cheap as natural gas. Even as blending increases to the 20% mentioned in the Plan, no reference is made to end consumer fuel bills or measures to be explored to minimise negative impacts. Landlords may be tying tenants into a more costly to run system than first thought.

This isn’t a call for landlords to do just anything to save carbon, but to explore more actively those domestic heating and renewable energy generation technologies that are ‘no / low regret’ interventions and save carbon now.

This does not preclude a switch to hydrogen as a domestic heating fuel in the future when / if it proves to be a commercially viable and truly green alternative to renewable electricity as long as Government has continued to support development of generation and transmission of hydrogen, which it appears to be doing. The lack of clarity from Government over the immediate role for domestic hydrogen is unfortunate.

Point 7: Greener Buildings

This is the obvious element of the Ten Point Plan that impacts on landlords. There are some really great takeaways, as well as one that’s conspicuous by its absence.

- **600,000 heat pumps a year in the UK by 2028 – brilliant!**
- **Bring forward the Future Homes Standard to 2023 – amazing!**
- **Extension to Green Homes Grant voucher scheme to march 2022 – great!**
- **Social Housing Decarbonisation Fund – at least it was mentioned!**
- **Where was PV?**

Looking beyond the very welcome headline, of 600,000 heat pumps a year, how is this going to be supported by Government?

Domestic RHI has been extended for 12 month but, as an incentive, RHI hasn’t sparked the imagination of social landlords for a number of reasons. The proposed Clean Heat Grant, as outlined in a recent consultation, offered a more attractive CAPEX funding option to landlords but realistically only for individual ASHP installations. Equally, there were additional concerns around the proposed administration of the scheme, its duration of 24 months and the level of funding behind it (which equated to supporting current levels of ASHP installations). Regardless of the concerns, there’s been no update on Government’s response to that consultation.

The recent changes to the non-domestic RHI equally don’t help dramatically to ramp up heat pump deployment to 2028 as the majority of social landlord schemes we have been working on are for shared loop GSHP solutions. If a project was big enough to

secure a Tariff Guarantee for non domestic RHI, the Guarantees need to be claimed before March 2021 and the systems commissioned by March 2022. So no support for future installs beyond 2022. If a shared loop scheme isn't big enough to secure a Tariff Guarantee, the most recent announcement from BEIS does give an extension to 2022 to commission, but only if an extension request is applied for and the project can evidence spend on its development or delivery prior to 17 August 2020. Confused? You're not alone, but again, the upshot is no support for future installs beyond 2022.

Bringing forward the Future Home Standard would of course contribute significant numbers to the 600,000 annual heat pump target if all new dwellings benefit from a heat pump. In reality though, they won't given the emphasis on direct electric heating and district heating systems in city centre high density developments. Despite this, there is not a lot of downside to this announcement and it will, through their installation in new build developments, help normalise heat pumps in social housing organisations. Without a clear and stable policy framework that set outs how we'll get to delivery of 600,000 heat pumps, supply chains are unlikely to be enthusiastic about spending time and effort upskilling staff or diversifying into heat pump installations and securing MCS certification. It is as important to support skills and training for the sector as it is to support deployment of heat pumps.

The 600,000 heat pumps line does give an alternative view on the direction of travel for decarbonising domestic heat to hydrogen boilers, however in the same paragraph in the Plan there is talk of Government choosing to 'ultimately pursue hydrogen heating, an electrified heating system, or a mixture of both?'. It's not a case of choosing one or the other, both will be needed. It should be a question on what's best right now and what is low or no regret.

Extending Green Homes Grant was expected. Realistically speaking, spending £1.5b on EWI and heating system interventions in 6 months and in the middle of Winter was always going to be a bit of a

technical and logistical 'ask'. Extending the scheme for 12 months does make delivery more of a realistic proposition but again, does a (now) 18 month feeding frenzy encourage and entice installation contractors to go through the relevant (and required) training and accreditation processes, investing time and finances into becoming a certified GHG installer?

Not really seems to be the answer as repeated reports indicate many in the supply chain, having had bad experiences with previous energy efficiency funding initiatives like Green Deal and FIT, aren't prepared to get on board. As with MCS certified heat pump installers, the grant extension needs to encourage installer training to ensure quality and consumer confidence and protection in the installations delivered. Green Homes Grant Vouchers do offer opportunities to social landlords though, subject to State Aid positions, as those larger SME contractors operating in the social housing sector are able and prepared to gain the necessary qualifications to qualify for vouchers – so that's a bonus at least.

As for other items of interest for landlords, the ECO extension is welcome. ECO funding isn't the most attractive source of funding for social landlords either in terms of value or how it is normally delivered, but financial support via this route is often preferable to none.

Also, the reference to the Social Housing Decarbonisation Fund is encouraging. If it constitutes a firm guarantee that this fund is definitely going to be supported by Treasury, which was stated as not currently being the case during a recent webinar on the SHDF Demonstrator with BEIS officials, I'm not sure. The issue remains for landlords that given competing priorities, many of which are regulated, finite financial resources often cannot cover the essential investments they have to make as well as the low carbon and fuel poverty interventions they want to make. The SHDF is a valuable step towards recognising that if social housing is to help make the market and support economic growth through letting energy efficiency and renewable energy contracts, then it needs financial support to be the vanguard

Now what's missing from all this?

Of all the low carbon technology interventions that could relatively quickly have a positive impact on employment and growth, domestic PV (with or without energy storage) has to really be described as the most obviously 'low or no regret' investment that Government can support.

It is not dependent on a certain level of building fabric performance or preclude further building upgrades; it supports heat pump deployment by ensuring running costs

for these systems remain low; it doesn't impact on a gas or future hydrogen boiler; it can reduce stress on the energy network and can actively support its management with energy storage installed; it increases disposable household income which can be spent on other goods and services in the local area; delivery can be through 'local' SME supply chains and it's a proven and trusted technology.

If the aim of this Plan is to stimulate and drive green growth, then surely PV and energy storage should be considered?

In Summary

All in all, not bad.

As a headline and statement of intent it is very encouraging.

However, there is enough ambiguity and areas not addressed in here that leaves as many questions unanswered as it responds to.

Looks like we'll have to read the [Energy White Paper](#), [National Infrastructure Strategy](#), [Net Zero Strategy](#), [Heat and Buildings Strategy](#), [Hydrogen Strategy](#) and [HMT Net Zero Review](#) to get the sort of clarity needed about what the future holds.

