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Self-build and Custom Housebuilding in the UK: An Evidence Review

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January 2022



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1. Executive summary

The UK currently faces a housing crisis. For more than a decade, successive governments have been unable to meet their housing supply targets. Indeed, the current government's aspiration to build 300,000 new dwellings annually and to deliver 1.5 million homes by 2022 seems to be far from attainable (HM Government, 2018). Several factors contribute to this persistent shortfall in the supply of new homes. These include the dominance of large-scale speculative housebuilders controlling large development sites and building housing that is not very differentiated, and the challenges of a discretionary planning system (Letwin, 2018a; Letwin, 2018b, MHCLG, 2018; DCLG, 2011). There is, however, a strong recognition among key actors, including the government (MHCLG, 2020, DCLG, 2011), thinktanks (Morton, 2013), commentators (Toms, 2016; Pickerill, 2016), advocacy groups (NaCSBA, 2019a) and academics (Benson & Hamiduddin, 2016; Wallace et al., 2013), that the UK can better address the housing crisis if more diversity in the supply of new homes is encouraged.

In light of this, with the support of the government and industry actors, self-build and custom housebuilding has been promoted as a way to boost the diversity of housing supply and increase the build-out rate of new homes (Letwin, 2018a; 2018b). The existing literature has identified numerous benefits of self-build housing, including individual, community, industry and economy-wide benefits (Duncan & Rowe, 1993; Hamiduddin & Gallent, 2016). Self-building is associated with giving people agency and control in the design and building of their homes (Hamiduddin & Gallent, 2016), allowing them to manage the cost, quality and environmental footprint of their homes (Benson & Hamiduddin, 2016). Similarly, group self-build has been linked with fostering a strong sense of community and the development of important social skills such as tolerance, compromise and mutual respect among group members (Hamiduddin & Gallent, 2016). At the industry level, developing a substantial market share of self-build housing is associated with resilience in construction output during economic downturns (Duncan & Rowe, 1993) and skills development among the population (HM Government, 2011).

In the UK, it has been estimated that the self-build and custom housebuilding market delivers between 10,000 to 12,000 units annually, representing 7 to 10% of all new dwelling completions (Wilson, 2018; Morton, 2013). This market share is considered to be extremely low when compared to European counterparts like Austria, Belgium and Germany, where self-building makes up over 50 percent of all built homes (HM Government, 2018; Morton 2013). However, there is less clarity regarding how the UK's share of the self-build and custom housebuilding market is estimated. Furthermore, although reference is made to European countries, there is a lack of systematically documented evidence and analysis on

why self-building appears to be exceptionally high in some European countries, and a lack of clarity about where such data are sourced from.

In this context, this report addresses several objectives. Firstly, it presents the available evidence on the nature of the self-build and custom housebuilding market in the UK. It pays particular attention to the following aspects of the sector:

- the approaches adopted in the existing literature to arrive at the current market share of self-building and custom housebuilding in the UK;
- the types and tenure of housing units developed as self-build;
- the demographic characteristics of people who self-build;
- the nature of government policies and commitments towards boosting the market share of self-build and custom housebuilding in the UK; and
- the opportunities and constraints associated with self-build and custom housebuilding.

Secondly, to explore the idea of learning from best practice, the report brings together available evidence regarding self-building and custom housebuilding in selected European countries. Particularly, it focuses on the issues associated with higher market shares of self-building and custom housebuilding in certain European countries:

- the sources of evidence regarding the share of self-building and custom housebuilding across European countries and how those statistics have changed over time; and
- case studies exploring possible reasons why some European countries have higher market shares of self-build and custom housebuilding.

The report draws on secondary data and sources about self-build and custom housebuilding in the UK and Europe that are available in English. For the UK, the secondary data comprised insights gathered from legislation, government publications (such as published data, commissioned reports, white papers and policy documents), reports by industry actors, peer-reviewed journal articles, journalistic pieces and grey literature. Insights from European countries came from a synthesis of published reports and peer-reviewed journal articles on specific European countries.

The key findings from the analysis presented in the report on self-build and custom housebuilding in the UK and Europe are summarised below.

1.1. The UK

- Five approaches on how the share of self-build and custom housebuilding in the UK housing market is generally estimated were identified. They comprise the VAT reclaim approach, the data pool approach, the opinion poll and population data approach, the single dwelling data approach, and the recent Self-build Register approach. The report found that each approach had limitations that potentially result in either over- or under-estimation of the share of the self-build and custom housebuilding market in the UK.
- The scant evidence found regarding the types of housing units developed as self-build conclude that an overwhelming majority of people (between 80 - 97%) rely on a combination of builders, subcontractors and project managers to complete their self-build projects, while only a very small proportion of people (between 3 - 8%) actually self-build in a 'DIY fashion'.
- In terms of housing types and tenure, authoritative evidence is similarly lacking, but there is a consensus that most individuals who self-build opt for detached houses that are built using conventional styles. Also, the report found no conclusive evidence to contradict the anecdotal understanding that most self-built homes are in homeownership, although there was evidence that some group self-builds embrace different housing tenures, including renting.
- The contribution of small developers specialising in self-build and custom housebuilding also remains largely undocumented, with limited data or evidence identified about their scale, nature or role.
- In terms of the demographic profile of people and households who self-build, the report found that they tended to be of older age, with most already owning assets and having more than one property which can easily be used to secure a mortgage. This profile, however, seemed to differ from the majority (48%) of those interested in self-build which is predominantly young people (18 to 24 years). There appears, therefore, to be a difference between the people who aspire to self-build, and those who manage to do so.
- From a policy perspective, the report found evidence suggesting growing government support to make the self-build and custom housebuilding market a key part of diversifying the housing supply in the UK. Interventions so far have involved the enactment of legislation specific to self-building and custom housebuilding,

calling for evidence into factors of low build-out rates on large sites, the establishment of funding schemes to support self-builders, and the development of close working partnerships with the National Custom and Self-Build Association (NaCSBA).

- As for the barriers and constraints to self-building in the UK, the report found that access to serviced plots, difficulties in raising development finance and residential mortgages, uncertainties in the planning system, and an undeveloped culture of self-building, were those most commonly cited.

1.2. The European context

- The report identified a lack of recent evidence supporting the statistics often referenced to demonstrate how the UK lags behind most of its European counterparts in terms of its share of self-build and custom housebuilding.
- Contrary to the statistics often cited on the share of self-build and custom housebuilding in European countries which showed either a static or stable self-build market share, the report found that most countries seem to be experiencing a decline in their share of self-build relative to their peaks, which were typically between 1990 and 2009.
- Regarding the reasons behind the high shares of self-build and custom housebuilding in some European countries - including Germany, Belgium, Italy and to some degree the Netherlands - the report did not find conclusive evidence for the particular factors that led to a high market share. However, a synthesis of the available English language information suggests that there are both common and country-specific factors that have triggered and shaped the development of self-building. For example, the leniency of the planning system in southern Italy allowed individuals and families to build houses outside the formal planning system, and Belgium's pre-1960s lack of spatial planning, to guide and direct where and to what standards residential development could or could not occur, seem to have created the impetus for high shares of self-build. In addition to these country-specific factors, common factors such as a planning system that recognises the importance of self-build, effectively supplies adequate serviced plots, and specifies minimum guidelines to be met in order to receive planning permission, are all found with countries where self-build seems to flourish.

1.3. Summary of recommendations

The report also suggests recommendations to boost the development of the sector based on the insights gathered from the review. They address the lack of clarity in the assessment of the share of self-build and custom housebuilding in the UK, the scaling-up of government interventions, and the constraints associated with self-build. The recommendations also tease out relevant lessons from European countries with a higher market share of self-build and custom housebuilding.

1.3.1. Better data and evidence

- Given the lack of a commonly agreed approach for estimating the size of the self-build and custom housebuilding market in the UK, the report recommends that the Department for Levelling Up, Housing and Communities (DLUHC) partner with organisations who hold data associated with self-build and custom housebuilding to bring together and consolidate the available evidence on the size of the market. This will add authority and credibility to the statistics often quoted to evaluate the development of the self-build and custom housebuilding market.
- The report identifies the need for a study to enhance understanding of the supply-side of the self-build and custom housebuilding market, including addressing the lack of up to date evidence regarding the housing types and tenures developed as self-build, and the regional distribution of the self-build housing stock. The new single dwellings data gives a suggestion of the regional picture of self-build. However, we do not have a very good understanding of how the nature of the local market relates to the viability of self-build, and whether self-build and custom housebuilding might be more attractive and/or viable in some local housing markets than in others. To meet the aspirations of the levelling up agenda, a better understanding of what makes a self-build scheme a success, and what factors make it more challenging, will help to ensure that self-build can work for a diversity of people in different places.
- Given the lack of evidence around the high shares of self-build in European countries, coupled with the lack of up to date statistics, it is recommended to pursue further in-depth research specifically focusing on European countries that demonstrate high market shares of self-build and custom housebuilding.

1.3.2. Planning

- To overcome the difficulties associated with accessing serviced plots, the report recommends that local planning authorities currently struggling to adhere to the legislative requirement of bringing forward serviced plots (for which there is demand)

need to be supported with staff training and guidance on fulfilling their new duties towards self-build and custom housebuilding without being overburdened.

- To address uncertainties in the planning system, the report's recommendation to local planning authorities is to strive to increase the number of sites designated specifically for self-build and custom housebuilding, and to provide simple, clearly specified requirements for obtaining planning permission.
- Reflecting on lessons from European counterparts, the UK government needs to continue to support efforts aimed at making the planning system less discretionary to increase self-build construction. We believe the Local Development Company (LDC) and the Local Authority Master Planner (LAMP) models proposed by the Rt Hon Sir Oliver Letwin would help to diversify housing supply, increase build out rates, bring forward more serviced plots, and offer greater clarity regarding projects likely to be granted planning permission.

1.3.3. Access to mortgage finance

- Help to Build is likely to support aspiring self and custom builders with modest mortgage deposits. The report also notes the suggestion from lenders that the government could make available finance from a revolving loan fund for potential self-builders in order to help them demonstrate viability to lending companies and meet development costs before transferring to a traditional mortgage. In addressing the limited information available to lenders about the self-build and custom housebuilding market, it is recommended that key stakeholders (e.g., government or industry associations, such as NaCSBA) collate up to date, robust information about the different models of self-build and custom housebuilding, and make them easily accessible to banks and funding bodies.

1.3.4. Government support of a self-build culture

- The report recommends that the government, relevant housebuilders and manufacturers of custom-build units establish support schemes and disseminate information in an accessible format that can be accessed by potential self-builders. More publicity on the activities of the National Self Build and Renovation Centre in Swindon, as well as government-led avenues for sharing evidence of good practice, would be a welcome intervention to boost self-building.
- The UK lags behind European countries with an established culture of self-building. Developing such a culture is both a function of time, deliberate policies and sustained actions from national and local governments and the wider industry. There is already

evidence that self-build and custom housebuilding appears to be increasing and this means that there is scope to develop the culture of self-building. It is therefore recommended that ongoing government commitments, including legislation, funding and partnerships with industry be scaled up. Wider promotion of self-build, easier access to authoritative information to guide potential self-builders and custom housebuilders, support for finance options, and greater supply by the construction industry of packaged solutions of professional services, could help to develop a greater culture of self-build in the UK. The clear evidence of demand for and aspirations towards self-build and custom housebuilding are an opportunity to both increase and diversify new housing supply.

2. What is self-build and custom housebuilding?

Self-build and custom housebuilding represents 'a wide spectrum, from projects where individuals are involved in building or managing the construction of their home from beginning to end, to projects where individuals commission their home, making key design and layout decisions, but the home is built ready for occupation' (MHCLG, 2021). While there is no clear legal distinction between self-build and custom housebuilding in the Self-build and Custom Housebuilding Act 2015, in considering whether a home is a self-build or a custom build home, relevant authorities must be satisfied that the *initial owner* of the home will have primary input into its final design and layout (ibid). Self-build and custom housebuilding provide routes into homeownership and allow individuals or groups to play a role in the design and/or construction of their homes (Wilson, 2017).

Although some modular and offsite-built housing might have options for considerable customisation, these products do not qualify as self-build and custom housebuilding, as homes purchased at the plan stage, prior to construction and without input into the design and layout from the buyer, do not meet the definition (MHCLG, 2021).

The 'relevant authorities', who determine whether a home is a self-build or custom build, are also in charge of keeping a register of such homes. They include (ibid):

- district councils;
- county councils in England, in so far as they are councils for an area for which there are no district councils;
- London borough councils;
- the Common Council of the City of London;
- the Council of the Isles of Scilly;
- the Broads Authority and National Park authorities in England are the relevant authority for the whole of their respective areas, to the exclusion of any authority mentioned above.

With the growth of this sector of the market, it is becoming more common to distinguish between self-build and custom build approaches. *Self-build projects* involve those where an individual or a group organises the design and construction of their new home, as explained by the National Custom and Self Build Association (NaCSBA) (Wilson, 2017). It can range from traditional 'DIY self-build' homes, to a self-builder's arrangements for an architect/contractor to build their home for them, and to homes that are delivered by kit home companies for assembly on a plot of land approved for self-building. Kit homes rely on

offsite manufacturing technology and refer to homes where most of the major components, such as the framing, are prefabricated in a factory and delivered to the site for assembly. Some community-led projects are also defined as self-builds.

Alternatively, *custom build* housing refers to projects that involve the work of an individual or a group in conjunction with a developer who helps to deliver their home (Wilson, 2017). Custom build developers are in charge of different elements, such as securing or providing a site, through to managing the construction work and, if needed, arranging the financial schemes (ibid). It is known as a 'hands off' approach, where a custom build developer tailors a home to meet the homeowner's requirements. This can include a range of custom build options, from selling a serviced building plot to building the entire house.

The key ways of undertaking a self-build and custom build project can be grouped into seven types (BSA, 2012):

- contractor-built, one-off home;
- self-built, one-off home;
- kit or package home;
- developer-built, one-off home;
- supported community self-build group;
- independent community collaboration;
- developer/contractor-led group project.

The Squirrel Wood development by Places for People is an example of a custom-build home scheme¹.

Case Study: Design Your Home

Design Your home was created after discussions with customers and colleagues about the lack of choice home buyers are offered when they purchase a new build property. Places for People wanted to give home buyers real choices whilst keeping the process as simple as possible.

Squirrel Wood, located in Basingstoke, is the first custom-build home scheme by Places for People in partnership with Homes England. It is close to shops, restaurants, leisure facilities and the beautiful Hampshire countryside. As is crucial with all large developments, the scheme's supporting infrastructure comprised a new road entrance, roads and services within the site, and a new substation.

¹ <https://www.designyourhome.com/>

The scheme responded to demand in the market to offer a wider mix of custom build, custom choice, self-build and speculative build. It also includes 43 affordable homes. The scheme started on site in June 2018 with construction now complete on over half of the homes. It offers a selection of 1, 2, 3 and 4 bed Custom Choice homes.

How Custom Choice works

Places for People build a variety of properties for customers to choose from, but leave the interior design to the customer, meaning they can select from an internal range of doors, bathrooms, kitchens etc.

Customers get to choose their plot, but the exterior is already built, meaning they get to do the creative part of choosing everything on the inside from the Options Brochure without designing the whole house, which many people find too onerous.

Custom Choice homes can also be bought with a standard high street mortgage which means customers can also use Help to Buy to purchase their home.

How Custom Build homes work

1) Choose and reserve a perfect spot

Customers choose and buy a fully serviced plot from Places for People, who then make the arrangements to build the customer's new home.

2) Arrange a Custom Build mortgage

Places for People help the customer to find the best financial option for their Custom Build.

3) Design the perfect home

The customer specifies their design choice.

4) Building begins

The construction process commences. Places for People hold design team meetings so that high standards are achieved through regular quality inspections.

Squirrel Wood was the first custom build site of this nature. Through the development and build out process Places for People have been able to identify ways to improve the process for customers and ensure the final product meets their expectations. The most critical lesson is that mortgage finance needs to be more readily available early in the

process to ensure customers are not put off and that the sequence of the build out on site is not affected by delays.

3. Approaches to estimating the size of the self-build and custom housebuilding market in the UK

A common observation in the existing literature is that there are no authoritative statistics on the size of the self-build and custom housebuilding market in the UK (Wallace et al., 2013; BSA, 2012). HM Government (2011) stated that 13,800 self-build and custom housebuilding projects are completed annually and that the market size of the sector is worth £3.6 billion. In 2020, the rates rose to around 15,000 self-build and custom build home types built every year – an increase of 50% in 2 years (MHCLG, 2020b). Wilson (2017) reported that the sector constitutes between 7% and 10% of all new housing completions per year across the UK.

On the demand side, a Building Societies Association's survey (BSA, 2011) suggested that 53% of people in the UK would consider building their own home given the opportunity. In 2011, the Government Housing Strategy (HM Government, 2011) pointed out that there were over 100,000 people looking for building plots across the country and that 'one in two people would consider building their own home if they could' (p. 14). In 2017, the Housing White Paper indicated that 'more than a million people across the UK expect to buy a building plot, secure planning permission or start/complete construction work on their new home' (Department for Communities and Local Government (DCLG), 2017, p.49). A recent study from NaCSBA suggests that one in three people are interested in building their own home (NaCSBA, 2020).

Despite these statistics about the size of the self-build and custom housebuilding in the UK, it is not clear how the above statistics are derived. From the existing literature, we have identified that, before the Ministry for Housing Communities and Local Government (MHCLG) published its latest data on the demand for self-build and custom housebuilding, four approaches were predominantly used to quantify the size of the self-build and custom housebuilding market. These four approaches are elaborated as follows.

3.1. The VAT reclaim approach

One of the approaches that has primarily been relied upon to estimate the size of the self-build and custom housebuilding market is the number of VAT refunds that HMRC makes each month for projects completed under 'VAT431NB – VAT refunds for DIY house builders' (see Wallace et al., 2015; BSA, 2012). Using the VAT reclaims data in Figure 1, it appears that it is from this approach that the 7 – 10% market share of new completions derives. Figure 1 also shows that the share of self-build houses estimated from the VAT reclaim approach stayed relatively steady from 1996 to 2011.

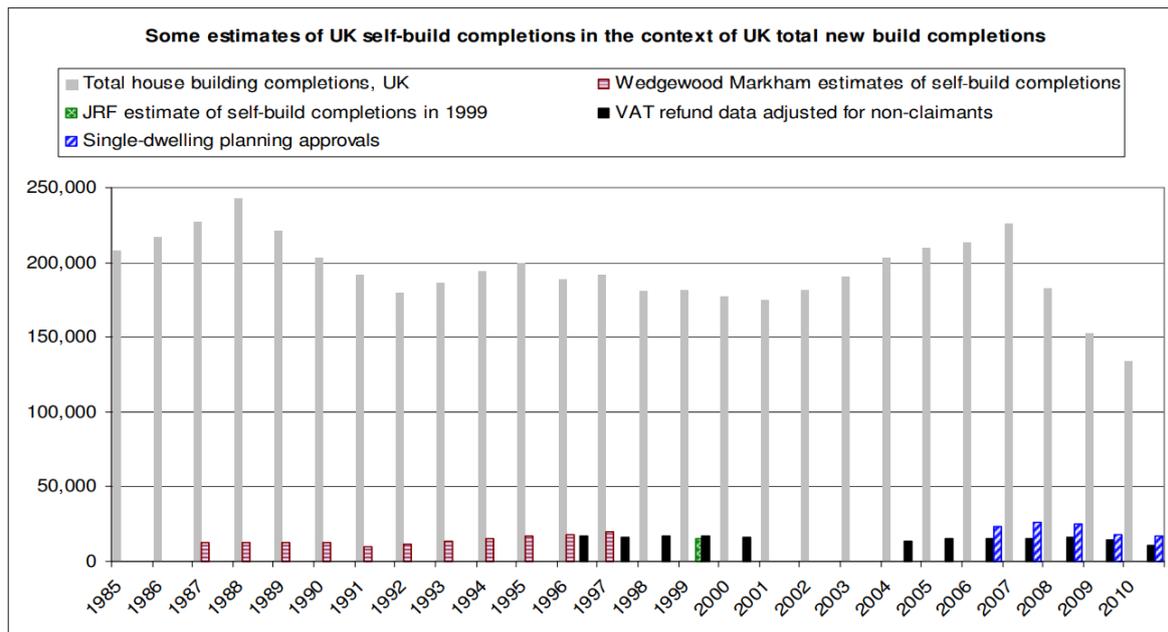


Figure 1 Some estimates of UK self-build completions in the context of UK total new build completions

Source: BSA (2012)

However, this approach has been criticised because it is thought to underestimate the actual size of the market (see Wilson, 2017): the size of the market is inferred from the number of VAT refunds paid out to people who self-build, this approach risks excluding people who self-build and apply for such refunds but are unsuccessful. Another criticism that could be advanced is that, because of information asymmetries, not all individuals or groups who have self-built their homes would know about such VAT refunds and are therefore not captured in this data. The recent Bacon Review (2021) notes that between 83% and 87% of the general public are unaware of the availability of VAT refunds.

3.2. The data pool approach

The second approach involves two separate but related techniques. The first draws primarily on completions data from a range of organisations, including housing associations, banks, construction companies, and property and plot search portals like BuildStore. It appears NaCSBA arrived at its 13,210 estimate of the number of self-build and custom housebuilding completions for the 2018-19 financial year using this approach. Using this data, it has put together a 7-year forecast for the number of self-build and custom build completions in the UK under three scenarios (Figure 2). These are an 'as is' scenario where it is presumed that there will be a general increase in the number of completions in the sector following current trends; a 'full support' scenario that assumes that Help to Buy is extended to the sector and

challenges with legislation are addressed; and a 'limited support' scenario that assumes no Help to Build offering is included in the growth within the 'as is' scenario.

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| As is | 14,000 | 14,500 | 15,500 | 17,000 | 19,000 | 21,500 | 24,500 | 28,000 |
| Limited support* | 14,000 | 15,000 | 17,000 | 20,000 | 24,000 | 29,000 | 35,000 | 41,000 |
| Full support** | 14,000 | 17,000 | 23,000 | 30,500 | 39,000 | 51,500 | 64,500 | 78,000 |

Figure 2 Annual forecast of the number of self-build and custom-house building completions 2020 – 2027

Source: NaCSBA (2020a)

NaCSBA's forecast suggests that, with the government's full support, the cumulative impact of the sector could reach 91,000 self-build and custom house building completions by 2025 (Figure 3). However, if the current trend persists without any intervention from the government, the market will be adding 21,500 new homes by 2025 (Figure 2), which will in turn translate into a cumulative addition of only 17,500 new homes (Figure 3).

| | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|--------------------|------|-------|--------|--------|--------|--------|---------|---------|
| As is | 0 | 500 | 2,000 | 5,000 | 10,000 | 17,500 | 28,000 | 42,000 |
| Full support part | 0 | 2,500 | 10,000 | 23,500 | 43,500 | 73,500 | 113,500 | 163,500 |
| Full support total | 0 | 3,000 | 12,000 | 28,500 | 53,500 | 91,000 | 141,500 | 205,500 |

Figure 3 The cumulative increase in the number of self-build and custom housebuilding forecasted from 2020 - 2027

Source: NaCSBA (2020)

3.3. The opinion polls and population data approach

Demand for self-build and custom housebuilding is also estimated using opinion polls to ascertain people's interest in and future intentions to self-build. Several polls commissioned by charities and advocacy groups have been used to estimate the market share of self-build and custom housebuilding. For example, in October 2011, YouGov conducted a survey on behalf of the Building Societies Association (BSA) to determine the potential level of demand for self-build. A total of 2,051 people participated in the poll. The results revealed that 53% of those polled said they would be interested in building their own home. It was further indicated that 59% of self-builders were anticipating starting their projects within the next 2 years, 22% anticipated that they would start building in the foreseeable future (between 2 and 5 years), while 46% had already purchased land.

In 2014, NaCSBA commissioned Ipsos MORI to conduct a survey of self-build intentions among the British public. Around 2,000 people participated in the survey and the results showed that 28% of the British population expected to watch a television programme on self-building, a further 14% (equivalent to 7 million people) will research how to build a home for themselves within the next 12 months, while a further 2% expected to move

beyond research to the action stage within the next 12 months, by considering buying a plot, submitting a planning application, starting construction work, or completing construction on their self-build home. Similar results can be seen in recent polls².

More recently (October 2020), NaCSBA and the BSA jointly commissioned YouGov to survey people’s attitudes to self-building. The survey attracted responses from 2,017 adults in Great Britain who were aged 18 years and above. It found that 32% of those polled were interested in building their own home. These results suggested that younger adults appeared more interested in self-build homes, as illustrated by Figure 4, which shows a breakdown of responses by age:

| Interest in building a home in the future (10/2020) | | | | | |
|---|-------|-------|-------|-------|-----|
| Age | 18-24 | 25-34 | 35-44 | 45-54 | 55+ |
| % | 48% | 45% | 40% | 31% | 18% |

Figure 4 Interest in self-building among adults in Great Britain

Source: NaCSBA Longer-Term Forecasts for custom and self-build (2020)

The results from the YouGov survey are generally consistent with the Self Build Property Market Survey 2020, commissioned by the Ipswich Building Society³, which also surveyed 2,000 people and found that 35% of adults in the UK, equivalent to 22 million people, would consider a self-build project in the future. Of this, people aged between 18 and 24 years were the most interested. The age and regional breakdown of their results are illustrated in Figure 5, indicating once again that young people appear to be more interested in self-build housing, and that people in the South East region are the most interested in self-build.

² Ipsos MORI (2016) Survey of Build Intentions. Available at Survey of Self-build intentions 2016 | Ipsos MORI. Accessed on 21 April 2021.

³ Ipswich Building Society (2020) Celebrating Right to Build Day: A look at the Self Build Property Market 2020. Available at Celebrating Right to Build Day: A look at The Self Build Property Market 2020 - Ipswich Building Society (ibs.co.uk). Accessed on 21 April 2021.

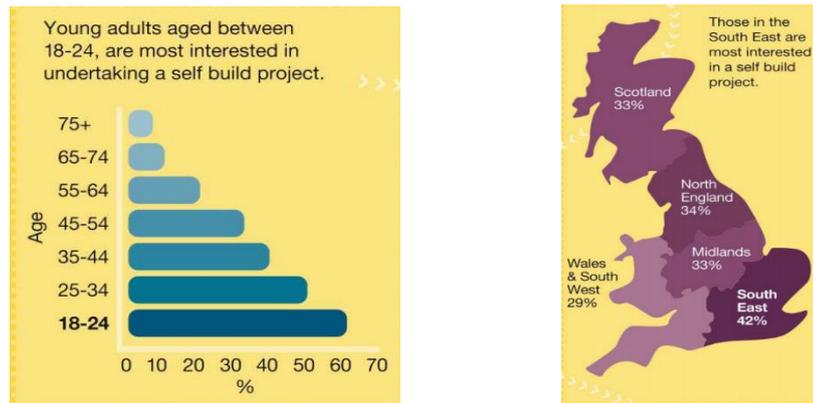


Figure 5 Age and regional distribution of interest in self-build in the UK
Source: Ipswich Building Society (2020)

Some analysts have used the results of the Ipsos MORI survey commissioned by NaCSBA to estimate the demand for self-build and custom housebuilding, i.e., the 2% of the adult population (those 18 years and above) who would actually take action. For example, Gingell and Shabab (2021) sought to compare the difference between the demand for self-build and custom housebuilding in local authorities across the South West of England using 2% of the region's adult population and comparing this to the number of people registered on the self-build register. They found that the total demand for self-build and custom housebuilding across the 26 local authorities in the South West was 72,240 and 4,791 respectively, with the number of people in the register representing only 7% of the estimated demand. Gingell and Shabab cautioned that the differences between the demand estimates may have resulted from the fact that the population data profiled people aged 15 years and above, while only people aged 18 years and above could join the self-build register. Limited publicity regarding the availability of the 'serviced plot with planning permission' option was also cited as a plausible cause of the low demand in the local authorities' self-build registers.

3.4. Single dwelling data as an indicator of market size

Another approach for estimating the size of the self-build and custom housebuilding market involves extrapolation from the number of single dwellings completed or converted over time. Data on single dwellings and conversions collated by Future Publishing, the company which owns *Homebuilding and Renovating* magazine, and reported by NaCSBA, gives a regional breakdown of self-build and custom housebuilding in the UK. This is summarised in Figure 6 below. It shows that the South East and the South West have the highest numbers of single new dwellings across the UK, with the South East producing slightly more new single dwellings (2,284 and 2,422) than the South West (about 1,959 and 2,227) in 2016 and 2019 respectively (see Appendix 1). Taken together, the total number of new single dwellings completed each year indicates a steady rise in the number of new single dwellings, rising from 14,952 in 2016 to 15,902 in 2019 (see Appendix 1). The North East recorded the lowest

number of new single dwellings for the past four years, averaging 304 new dwellings per annum. Monthly breakdowns of the number of single new dwellings completed across the UK regions between 2016 to 2019 are presented in Appendix 1.

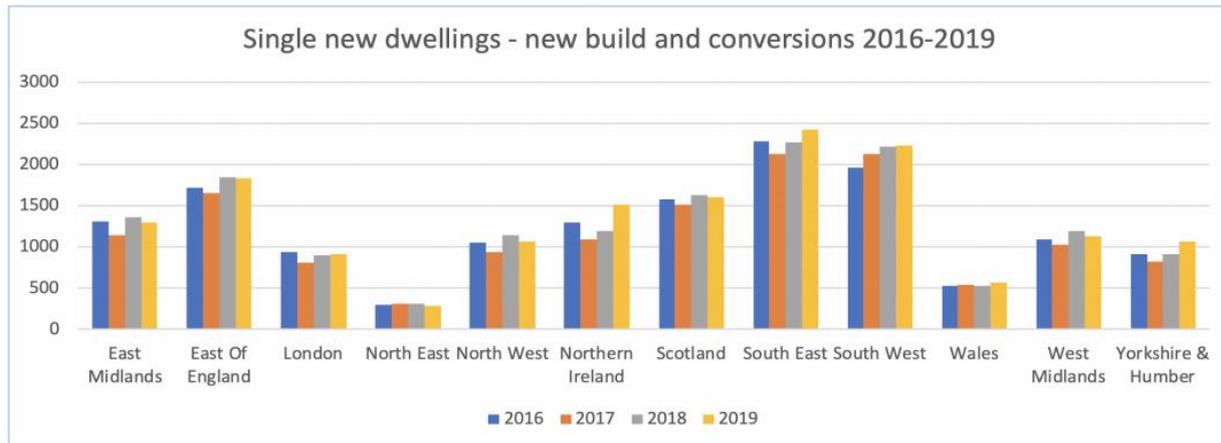


Figure 6 Single new dwellings across UK regions (2016 – 2019)

Source: NaCSBA (n.d.)

According to NaCSBA (n.d.), although the new single dwellings data offer the closest approximation for estimating the size of the self-build and custom house building market across the UK, there are still important caveats worth noting when using the data. The first is that the empirical nature of the collated data makes it difficult to distinguish between single dwellings for occupation and single dwellings for speculative purposes.

The second is that converted single dwellings are counted as part of new single dwellings and both datasets are combined to arrive at the number of new single dwellings. The third is that the datasets do not include holiday homes, self-build semi-detached homes, terraced housing, flats or other multi-dwelling units.

The new single dwellings data gives a suggestion of the regional picture of self-build. However, we do not have a very good understanding of how the nature of the local market relates to the viability of self-build, and whether self-build and custom housebuilding might be more attractive and/or viable in some local housing markets than in others.

3.5. Using the serviced plot register to estimate the demand for self-build and custom housebuilding in England

The Self-build and Custom Housebuilding Act 2015 places a duty on Local Planning Authorities (LPAs) to maintain and make publicly available a statutory register of individuals and groups within their administrative areas who are seeking to acquire a serviced plot of

land in their local authority area for self-build or custom housebuilding. From these registers, it is possible to estimate the demand for self-build and custom housebuilding in the UK and to show how responsive local planning authorities are becoming to this segment of the housing market. A base period was specified within the legislation by the end of which LPAs must publish the number of applications received for serviced plots for self-build and custom housebuilding and the number of planning permissions granted for serviced plots suitable for self-building. The first base period spanned the period 30 April 2016 to 30 October 2016. The second and subsequent base periods span from 31 October of one year to 30 October of the following year.

MHCLG (now DLUHC) has published its current data on the demand for serviced plots for self-build and custom housebuilding and the number of planning permissions granted for serviced plots across England. This data is illustrated in Figures 7 and 8 and analysed in Tables 1 and 2 below. Figure 8 presents the number of individual, group, and combined applications submitted for serviced plots in each base period and the number of planning permissions granted for serviced plots in the same base period. Analysis reveals that in the first base period (30 April to 31 October 2016), 99% of the combined applications received were individual applications for a serviced plot and only 1% were group applications. This pattern is repeated in base periods two, three and four (see Table 1). The number of planning permissions granted for serviced plots relative to the combined applications for serviced plots has risen significantly, from 51% in base period 2 to 86% and 95% in base periods 3 and 4 respectively (see Table 1).

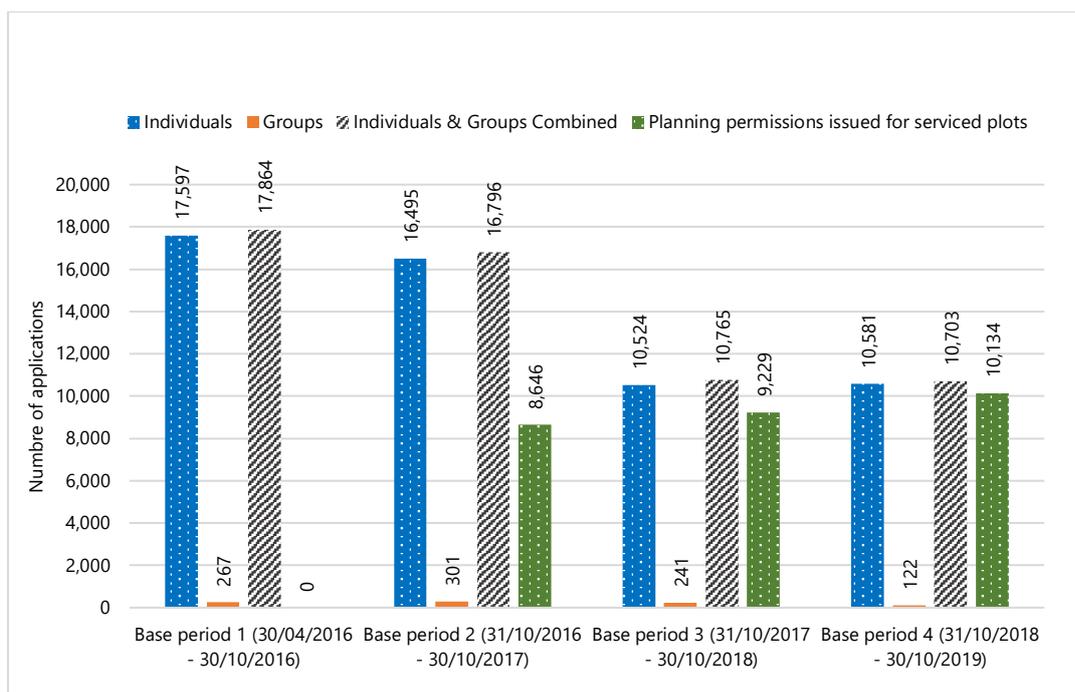


Figure 7 Number of applications for serviced plots for self-build and custom housebuilding and number of planning permissions for serviced plots issued from Base Year 1 to 4

Source: Authors' recreation from MHCLG Self-build and custom housebuilding data (2021)

The data suggest that, across the four base periods, individual, group and combination applications have averaged at 13,799, 233, and 14,032 respectively. The number of planning permissions granted for serviced plots has averaged 7,002 for the same period (see Table 1).

| Base Periods | Individuals | Groups | Individuals and Groups Combined | Planning permissions granted for serviced plots |
|---|-----------------|-------------|---------------------------------|---|
| Base period 1 (30/04/2016 - 30/10/2016) | 17,597 (99%) | 267 (1%) | 17,864 (100%) | 0 |
| Base period 2 (31/10/2016 - 30/10/2017) | 16,495 (98%) | 301 (2%) | 16,796 (100%) | 8,646 (51%) ^a |
| Base period 3 (31/10/2017 - 30/10/2018) | 10,524 (98%) | 241 (2%) | 10,765 (100%) | 9,229 (86%) ^a |
| Base period 4 (31/10/2018 - 30/10/2019) | 10,581 (99%) | 122 (1%) | 10,703 (100%) | 10,134 (95%) ^a |
| 4-Year's average | 13,799 (98%) | 233 (2%) | 14,032 (100%) | 7,002 (50%) |

Table 1 Four-year average number of applications for serviced plots for self-build and custom housebuilding and average number of planning permissions granted

Source: MHCLG self-build and custom housebuilding data (2021)

Note: (%)^a denotes the number of planning permissions for serviced plots as a percentage of individual and group applications combined.

Where the number of applications submitted for individual, group and combined individuals and groups are compared individually across the different base years, the absolute figures show an increase in overall submissions (Figure 8). However, viewed in terms of the rate of change, the number of applications submitted appears to be slowing, while the number of individual applications increased from 34,092 to 55,197 between the end of base periods 2 and 4, the rate of change decreased from 31% to 24% within the same period (see Table 2).

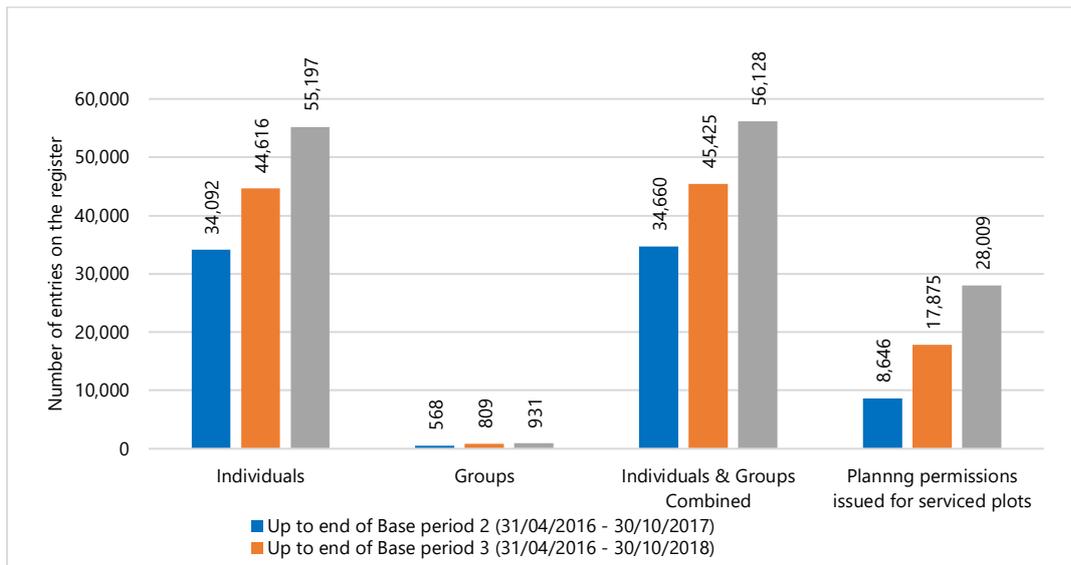


Figure 8 Cumulative number of entries for self-build and custom housebuilding and planning permissions issued for serviced plots from Base Period 1 to 4

Source: Authors' recreation from MHCLG Self-build and custom housebuilding data (2021)

Similarly, for group applications, the rate of change for the same period declined from 42% to 15%. On the contrary, the percentage change for the number of planning permissions granted for serviced plots for the period is increasing at a faster rate (from 107% to 117%). Based on this data, it can be concluded that LPAs are responding to the demand for serviced plots by granting increasing numbers of planning permissions.

| Base Periods | Individuals | Groups | Individuals and Groups Combined | Planning permissions granted for serviced plots |
|---|--------------|-----------|---------------------------------|---|
| Up to end of base period 2 (31/04/2016 - 30/10/2017) | 34,092 (-) | 568 (-) | 34,660 (-) | 0 |
| Up to end of base period 3 (31/04/2016 - 30/10/2018) | 44,616 (31%) | 809 (42%) | 45,425 (31%) | 17,875 (107%) ^a |
| Up to end of base period 4 (31/04/2016 - 30/10/2019) | 55,197 (24%) | 931 (15%) | 56,128 (24%) | 28,009 (117%) ^a |

Table 2 Cumulative number of self-build applications made by individuals, groups and both individuals and groups at the end of each base period and the number planning applications granted or serviced plots

Source: MHCLG self-build and custom housebuilding data (2021)

Note: (%) and (%)^a respectively denote percentage changes in the cumulative number of serviced plots applications in successive base periods and planning permissions granted for serviced plot for self-building

However, both academics (Gingell and Shahab, 2021; Sadler and Shahab, 2021) and NaCSBA have expressed concerns regarding the use of these registers to estimate demand for self-build and custom housebuilding, as well as the effort that local authorities are putting in to ensuring that more serviced plots with planning permissions are brought forward. For example, Gingell and Shabab (2021), analysing how effective LPAs have been at classifying suitable development permissions for self-build and custom housebuilding, concluded that it has been left to the discretion of LPAs when determining permissions that could be considered suitable, and that 27% of LPAs in the West of England who provided permissions data offered no specific evidence as to how the permissions recorded have been compliant with the legal definition. They also held the view that counting all single dwellings permissions is inappropriate because permissions can be more robustly captured through monitoring Community Infrastructure Levy (CIL) exemptions, Section 106 agreements, planning conditions or by contacting applicants directly (p.13). They also highlighted the fact that satisfying the local connection test required by LPAs in order to join the register suppressed some of the demand for self-build and custom housebuilding. The Bacon Review (2021) also adds that 'the Registers show a level of demand that is consistently below the level of international delivery or that from consumer survey, partly because only 13% of the population are aware of the Self-Build Registers, including more than half of self-builders' (p.31).

In their analysis of the transaction costs and policy effectiveness of the self-build and custom house building register, Grace and Shabab (2021) found that some LPAs charged as much as £700 in order to register prospective self-builders - a disincentive to people who might have otherwise registered their interest. Some planning officers interviewed also likened publishing higher numbers of prospective self-builders on the register to 'making a rod for

their own back' (p.15), in that if the number of serviced plots brought forward for self-build and custom housebuilding persistently falls short of number of people on the register, punitive actions could be taken against them. Hence, there was an incentive for some LPAs to suppress the number of people on the self-build register to avoid being sanctioned. NaCSBA (2020c) identify that 31% of councils impose some kind of restriction on joining the register and that the number of people denied the opportunity to join the register because of failing the local connection test continues to rise. Figure 9a shows the fees charged by some LPAs for joining their register, while Figure 9b illustrates the number of local connection tests imposed by councils.

Taking into account the limitations of the different approaches to estimating the demand for self-build and custom housebuilding units in the UK, the Bacon Review (2021) argues that it is likely the true demand for custom and self-build housing in England is at least 30,000 homes a year as a minimum and possibly as high as 100,000 homes a year.

Fees charged over 4 years
FOI 2019

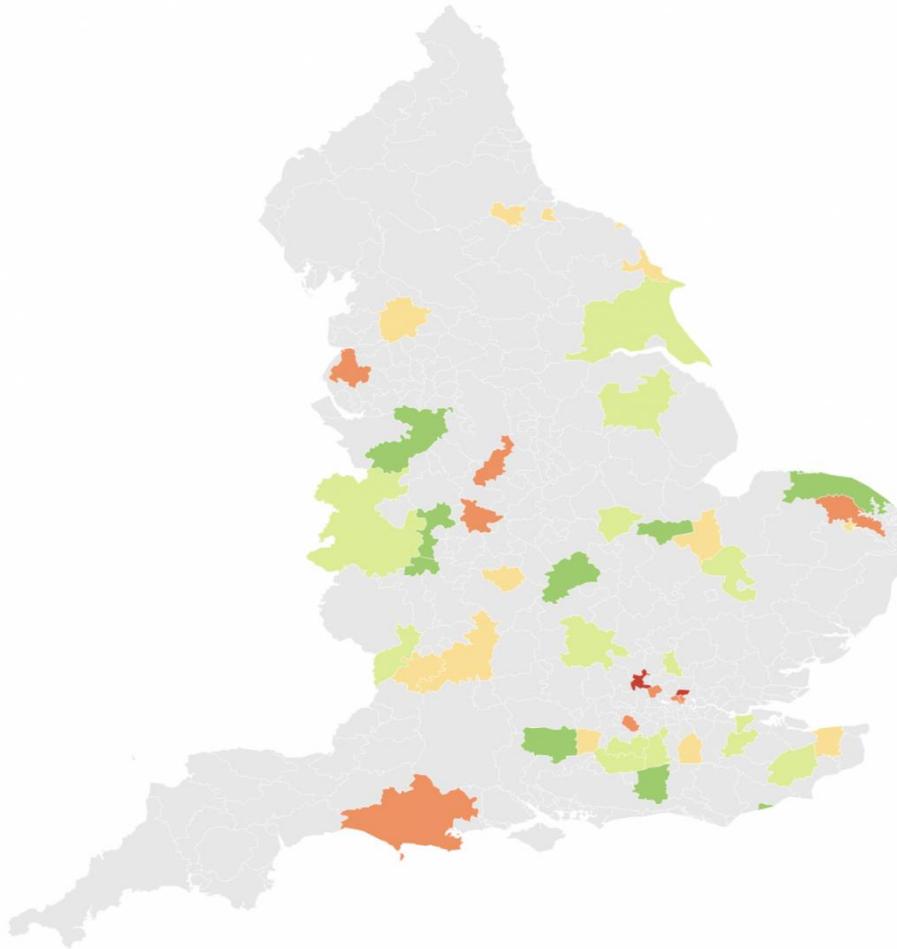


Figure 9a Fees charged by councils in order to join the self-build register 2019
Source: NaCSBA (2020c)

Local connection test imposed by date

FOI 2019

1. To 30 Oct 16 2. y/e 30 Oct 17 3. y/e 30 Oct 18 4. y/e 30 Oct 19 5. y/e 30 Oct 20

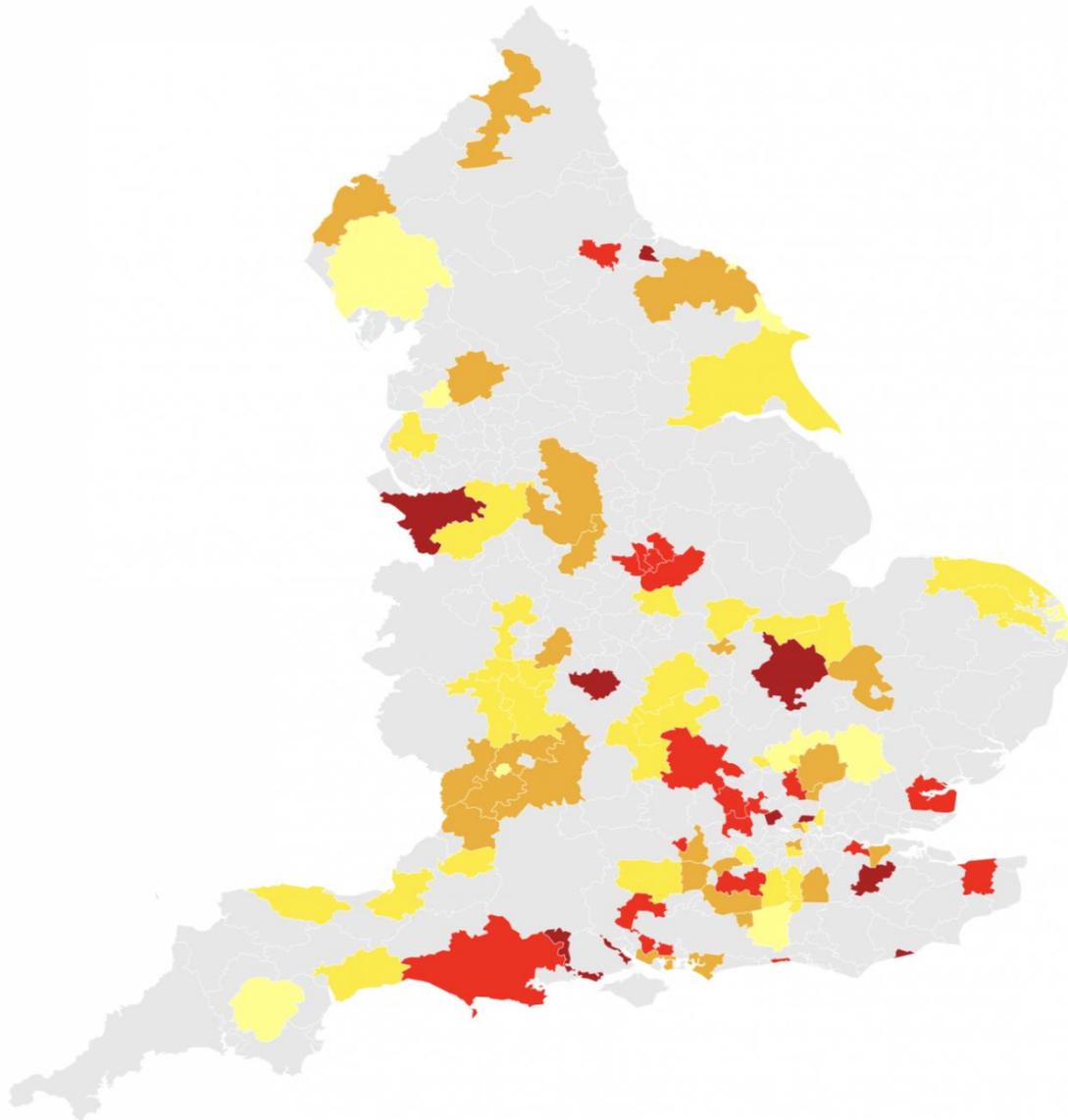


Figure 9b Number of local connection tests imposed by councils in 2018

Source: NaCSBA (2020c)

From Figure 9b, it appears LPAs in South East and parts of the East Midlands seem to have imposed more local connection tests (ranging between 3 and 5 connection tests), than those in North East, North West and the West Midlands, who impose between 1 and 3 tests. What this means is that LPAs in the North East, North West and the West Midlands are theoretically offering prospective self-builders more options to get onto a self-build register than their counterparts in the South East.

3.6. Characteristics of the self-build or custom housebuilding market

One of the arguments advanced to support the need for more self-build and custom housebuilding is that it affords people choice by giving them an opportunity to input into the design and build of their homes, resulting in greater diversity in the housing market. This diversity is seen in terms of the type of housing built, including the physical design and attributes of the property, the number of suppliers and the forms of tenure allocated. In his analysis of the slow rates of build out on large housing development sites in England, Oliver Letwin (2018a) reported that a greater variety of houses is needed on the largest sites if build out rates are to be increased.

3.6.1. Forms of self-build and custom housebuilding projects

Self-build and custom housebuilding takes different forms. In an older report, the BSA (2012) noted that most self-build projects were not true Do-it-Yourself (DIY) homes and that only a few people (8%) who want a self-build house actually build a home themselves. The overwhelming majority (80%) of people rely on a combination of builders, subcontractors and project managers.

Quoting data from an unpublished DCLG survey and referencing data from BuildStore, the BSA (2012) observed that 64% of self-builders preferred either timber frame or traditional brick or block construction. 8% of self-builders were interested in kit homes and 11% were planning to either renovate or convert an existing building, carry out home improvements, or build an extension.

According to the BSA (2012), Build-Zone's⁴ examination of its insurance database showed that projects for which they provided insurance over the previous 12 months involved collaboration between self-builders and professionals, and they tended to have the following characteristics:

- 12% were custom-build, meaning a self-builder hires a builder to largely carry out the work without the self-builder taking on any significant work in the building process;
- 33% were watertight shell projects, where a self-builder contracts a builder for the structural and outward design of the building which is then handed over to the self-builder to complete the interior design and finishes;

⁴ Build-Zone, created as a 10-Year Structural Warranty provider in 2003, is a trading style of Sennocke International Insurance Services Limited, which was established in 1990: <https://www.build-zone.com/>

- 14% were kit homes, where a supplier handles the design, supply and erection of the structure and the self-builder gets involved by preparing the ground works;
- 33% were self-managed with subcontractors, with the self-builder arranging all the trades on the build project;
- 39% were self-managed with own labour and subcontractors, whereby the self-builder carries out some tasks and engages subcontractors to manage other aspects of the project;
- 3% of projects were exclusively DIY.

More recently, the Bacon Review (2021) refers to a survey of customers actively exploring the possibility of self or custom building which revealed that:

- 47% don't mind whether they build their home on a single plot or alongside other new build homes;
- 48% would like to build a bespoke home built by contractors/builders;
- 21% would like to build a customisable home; and
- 31% would prefer to build or manage the project themselves (versus using a contractor).

The above confirm the argument by Parvin et al. (2011) that 'self-provided housing is not a single housing model but rather a spectrum of models, some of which can be almost unrecognisably different in terms of the needs and motivations they are tailored to serve' (p.37).

3.6.2. Suppliers of self-build and custom-build homes

According to the Bacon Review (2021, p.38), 'the UK self-build market is currently largely made up of architect-designed individual homes, located on individual plots and distributed across the country'. Most self-build projects are typically viewed as single units built on single plots. However, there is evidence that this is changing and that more self-build projects in the UK are being commissioned as group build schemes. According to DCLG's unpublished survey data reported by the BSA (2012), 26% of self-builders showed interest in building their home as part of a group scheme and a further 35% were undecided. Ash et al. (2013) noted that there was significant interest from private companies in the opportunities presented by collective custom build or volume self-build. Although no statistics are readily available on the exact number of private companies involved in self-build and custom

housebuilding, it has been suggested that private companies such as igloo⁵ and Urban Self Build⁶ are directly involved in the design and development of self-build and custom housebuilding projects, as is Solidspace⁷ (Ash et al., 2013). Private companies such as Potton⁸ offer self-build packages that span the entire development process, including finding a plot, translating ideas into designs, applying for planning permission and building a house.

3.6.3. Housing type, sizes and tenure within the self-build and custom housebuilding market

Robust, up to date evidence of what is built as self-build and custom housebuilding is lacking. Snippets of insights can however be gleaned from claims made in reports although the source of evidence is not always clear. For example, Parvin et al. (2011) suggested that the average size of a self-built home in the UK was 219 m², and that self-built houses typically had between 3 and 4 bedrooms, with an average number of bedrooms of 3.75. Other data put forward included 60% of self-builders building a garage, with 55% building a double garage, and that 10% of self-build houses included a basement level (Parvin et al. 2011). Quoting figures from BuildStore's Accelerator mortgage scheme, Parvin et al. (2011) pointed out that the average project finance for self-build housing was £336,000, based on 2007-08 figures. In an empirical study of the changing landscape of the UK self-build market commissioned by the Lloyds Banking Group, Wallace et al. (2013) observed that the majority of individual self-build projects are detached houses. They also noted that, although the sector is characterised by a wide range of property styles, many builders tend to go for relatively conventional styles. This view has been echoed in the Bacon Review's (2021) assertion that among those currently looking to self-commission a home, their ideal option is a detached individual house, potentially as part of a smaller development and demand for terraced homes or apartments is limited among prospective self-builders (p.31).

Insights from case studies of group self-build projects also illuminate the types of houses developed as self-build and the tenure assigned to them. For example, Springhill Cohousing in Stroud, Gloucestershire, an award-winning 35-unit scheme situated on a steep sloping site which was unattractive to mainstream builders, built a variety of dwelling types, including flats, terraces and semi-detached homes, in a largely car-free development (Ash et al., 2013).

⁵ igloo is a real estate business that works with investors, communities, local authorities and landowners to deliver better places, by funding, actually delivering and sometimes helping to regenerate places. See www.iglooregeneration.co.uk/purpose/. Accessed 26/04/2021.

⁶ Urban Self Build is a team of qualified housing development and design professionals with expertise in planning, architecture, environmental performance, finance, project management, construction methods and turn key delivery. See www.urbanselfbuild.com/aboutus.html. Accessed 26/04/2021.

⁷ Solidspace is an architect-developer firm leading a campaign to bring forward more small sites often overlooked by volume builders for independent developers. See <https://solidspace.co.uk/about-us/>. Accessed 26/04/2021.

⁸ Potton provide individually tailored package of services and products that meets customers' self-build needs. See <https://www.potton.co.uk/what-we-do/potton-package>. Accessed 26/04/21.

Ash et al. (2013) also noted that while some of the homes were for rental, some were sold outright in order to repay the £4.2m loan used for the project. Springhill's ownership model seeks to create an equitable distribution of housing needs and every cohousing group member is made a director of a special purpose company after paying £5,000 equity into the project.

Similarly, the Threshold Centre Cohousing Community in Gillingham, Dorset was created through a joint initiative involving Synergy Housing, a housing association, and the fund provider, the Homes and Community Agency (HCA). This cohousing community delivered 14 cottages of mixed tenure, including co-ownership and houses for rentals. Other projects such as the Tilbury self-build project, Darwin Road, Tilbury, include self-built homes for rent (Parvin et al., 2011).

3.6.4. Demographic characteristics of self-builders

One of the arguments advanced in support of why self-build housing must become mainstream is that it is relatively affordable when compared to speculative market homes and hence it allows first-time buyers and middle-income households to get onto the property ladder (Ash et al., 2013; Wallace et al., 2013). Indeed, according to Parvin et al. (2011), who do not provide a source for their claim, despite the perception that self-builders are mostly affluent and high net worth households, only 1% of them can be considered as belonging to the 'top (business) executive class', who come from affluent households and for whom planning consent is the only major constraint to self-building. The authors thus seem to be suggesting that self-builders are more heterogeneous than previously thought. However, the lending information held by the BSA (2012) on people who want to self-build suggests that 'average' self-builders are well-capitalised couples who are homeowners aged between 35 and 54 years, with the majority having no children.

The unpublished DCLG survey quoted in the same BSA report (2012) provided the following profile of people applying for self-build finance:

- 51% of them are between ages 35 to 54, and 28.5% are between 55 and 64;
- 25% have household income between £35,000 - £50,000, and 23% have an income between £50,000 - £75,000;
- 22% own more than one property; and
- 43% want to build in southern England.

The empirical study commissioned by the Lloyds Banking Group (Wallace et al., 2013) similarly confirmed the above demographic profile of self-builders when they observed that most self-built detached houses were completed by older, relatively affluent households.

While the demographic profile of self-builders presented above would seem to suggest that more young people are significantly interested in self-build and custom housebuilding, as more recent polls by Ipsos MORI and YouGov have established, there is a significant homogeneity in the demographic profile of people who are actually able to self-build. This demographic profile of 'actual' self-builders also suggests that first-time buyers and young people without assets to use as security for a loan are disadvantaged in terms of securing finance for their self-build projects.

4. The UK housing policy context

4.1. The housing supply crisis in the UK and potential of self-build and custom build housing

The UK housing crisis is long term and wide reaching with a historical under-supply of housing (Parvin et al., 2011). Hence, there is continued need to increase housebuilding rates (Burgess et al., 2020). The aspiration of the current government is to build 300,000 new homes a year and to deliver 1.5 million homes by 2022 (HM Government, 2018). However, current housebuilding rates are just half of what is required, and the supply shortage contributes to making housing less affordable, reducing the levels of home ownership and increasing the share of private rental market (Burgess et al., 2020).

One factor that contributes to insufficient levels of new build supply is that most new homes are built by large speculative and profit-seeking housebuilding companies, rather than by individual households or groups of people building homes for themselves (Ash et al., 2013). It is argued that the housebuilding industry in the UK has been overly fixated on building at scale, requiring delivery by the small number of volume builders who are able to build at high rates to address the housing shortage (Parvin et al., 2011). Against this backdrop, self-provision of housing gets little attention or support, and hence it remains a fairly niche market in the UK, accessible to relatively few people (Ash et al., 2013). Another argument in support of the self-build and custom housebuilding sector is that it often utilises smaller sites that are of little interest to major builders (MHCLG, 2021b) and could complement the efforts of volume builders in addressing housing need.

The quality of new housing has been highlighted as another challenge in the UK housing market (Burgess et al., 2020). While the use of modern methods of construction, including OSM and BIM technologies, has the potential to improve housing quality and construction speed when compared to traditional housebuilding (Oti-Sarpong and Shojaei, 2021), self-build and custom housebuilding is another way to deliver homes of higher quality. Self-build and custom housebuilding can be viewed as an alternative, more affordable solution to tackling housing quality issues with the potential to increase the quality of new build housing significantly: from design to construction, self-build and custom housebuilding can be tailored to the needs of the residents, giving them control over the look and feel of their home (HM Government, 2011). It can bring other benefits, including bespoke market housing at affordable rates, and promotes design quality and environmental sustainability, driving innovation in building techniques and entrepreneurialism (ibid).

There is growing acceptance of the idea that end users should have a greater say in the procurement of housing. It has been agreed that a fundamental change is needed in the way housing is procured in the UK in order to provide greater consumer choice and stimulate a competitive environment for private housebuilding, as well as developing alternative routes to affordable and social housing (Barlow et al., 2001; Parvin et al., 2011). Not only does self-build and custom housebuilding provide hands-on customisation of homes and a diversification of housing market options, building and designing a home is an important part in helping people to get onto the housing ladder and offers a pathway to homeownership (MHCLG, 2020b). Moreover, self-build and custom housebuilding can ensure homes suit people's specific needs, such as home working or caring for relatives (MHCLG, 2021c).

Government support of self-build and custom housebuilding is driven by the belief that this sector has a huge, untapped potential and there is a demand for this market sector (HM Government, 2011). Evidence presented in Section 2 suggests that there has been consistent, significant unmet demand for self-build housing in the UK over a number of years, and the government acknowledges that there is still more to be done to support the self-build and custom housebuilding industry, which is now estimated to be worth almost £4.5 billion to the UK economy (MHCLG, 2020b).

In summary, as noted by Parvin et al. (2011), 'self-provided' housing can be a route to higher quality and energy-efficient dwellings as part of a more resilient housing supply, and would make more diverse and flexible housing stock available. In turn, self-build and custom housebuilding could complement other government efforts to increase housing supply and tackle the housing crisis.

4.2. UK housing policy goals regarding the self-build and custom housebuilding market and how it has changed over time

Government engagement in supporting and encouraging the expansion of self-build and custom housebuilding as a part of efforts to tackle the housing crisis has been longstanding. In 'Laying the foundations: A Housing Strategy for England' (HM Government, 2011), the government set out plans to support people and communities who wanted to build or commission their own home. It highlighted the importance of the custom build sector for the national economy, which was then estimated to be worth £3.6 billion a year, and which could safeguard and create new jobs, strengthen the construction supply chain and considerably support local economies (ibid). This Housing Strategy not only included self-build housing in the Action Plan, but also claimed that 'the Government wants to make building your own home a mainstream housing option' with an aspiration to double the size of the self-build

and custom housebuilding market over the next decade and create up to 100,000 homes, enabling the industry to support about 50,000 jobs per year (HM Government, 2011, p.15). As a result of this report, various measures were introduced to help those seeking to build their homes, including easier access to funding, an exemption from the CIL, amendments to planning guidance, and improved access to public sector land. The regulations on CIL allowed people and groups who engaged in self-build and custom housebuilding to apply for an exemption from the levy, and some communal schemes and multi-unit developments could also qualify for the exemption if they met the required criteria. Up to £30 million was allocated to support the provision of short-term project finance to this sector on a repayable basis (ibid). As part of the close working relationship between government and industry, the Self-Build Portal run by NaCSBA was created in 2012 to provide information and support to those seeking to self-build (Wilson, 2017). Although considerable progress was made in this sector, the delivery goals set in the 2011 Housing Strategy (HM Government, 2011) were not achieved.

To further demonstrate its commitment to meeting the target set in 2011, the government supported a Private Members' Bill introduced by Richard Bacon MP in the House of Commons session 2014-15. Following its passage into law, the bill, which is now The Self-build and Custom Housebuilding Act 2015, requires local planning authorities in England to establish local registers of custom builders who wish to acquire suitable land on which to build their own home, beginning from April 2016 (Wilson, 2017). The Act also requires local authorities to have regard to the demand on their local register when exercising planning and other relevant functions (ibid).

In the 2017 Housing White Paper, the government reiterated its aspiration to further support the growth of custom build homes (DCLG, 2017). This time, priority was given to custom build homes where people could choose the design and layout of their home and a developer finds the site, secures planning permission and builds the property. This was presented as 'a less risky business model for builders, as the house has been effectively sold before it has been built' (ibid, p.49). As a result of this, steps were taken to improve access to land. The Right to Build was introduced in the Housing and Planning Act 2016 to compel local planning authorities to find land for individuals and communities who want to build their own home and to maintain a register of them. Designed to meet demand by making more individual and serviced plots available, this legislation also requires local authorities in England to ensure that they have sufficient plots available to meet demand, and to demonstrate that planning permission (or permission in principle) has been granted on these plots within three years. They are also required to provide evidence that the demand is met on Right to Build Day, which takes place annually on 30 October, to monitor change being made in the sector. Additionally, the Home Building Fund became available to help custom

build firms and lenders increase their lending in line with customer demand. The Right to Build Taskforce was established by NaCSBA. Based on the Dutch model, the taskforce aimed to support the growth of the sector and incorporated community-led housing initiatives such as cohousing schemes and Community Land Trusts (CLT). As a result, 2,740 communities have started up since the Act came into force, and over 1,000 communities have passed through the neighbourhood planning process and have a 'made' plan or order in place (MHCLG, 2021c).

As well as setting goals to increase the share of self-build and custom housebuilding in the housing market, the government has contributed substantial funding in support of this sector over the years. Initially, a Custom Build Investment Fund of £30 million supported the provision of repayable short-term finance for land acquisition for self-build projects. It was established in 2011 and operated from 2012 to 2015. In the 2014 Budget, the government committed to provide a further £150 million fund to support loans for the provision of 10,000 serviced building plots for self-builders. In 2016, the DCLG merged several existing funding streams and, with additional investment, formed the Home Building Fund, opening up £3 billion to bids from small builders, community builders, custom builders and regeneration specialists, as well as from larger builders and developers (Wilson, 2017).

The government continues to support the sector and has significant plans to expand the self-build and custom housebuilding sector in the coming years. In the 2020 White Paper, Planning for the Future (MHCLG, 2020a), proposals in support of custom and self-build housing were made. These included plots on larger sites, plots on Homes England land and continued exemption from the new Infrastructure Levy, that will replace CIL (NaCSBA, 2020b). The Spending Review (HM Treasury, 2020) committed a £100m fund to bring forward serviced plots in 2021/22 and to launch a new Help to Build Equity Loan scheme for the sector.

In 2021, the government announced further new guidelines for its Planning Practice Guidance relating to self-build and custom housebuilding, including recommendations relating to the Right to Build registers (MHCLG, 2021a). It later published the Self and Custom Build Action Plan, which included plans 'to kickstart the self-building revolution' (MHCLG, 2021c). The steps outlined in the Action Plan include the following (MHCLG, 2021b):

- Launch multi-year funding for 'Help to Build', with an initial £150 million over 4 years, to deliver low deposit mortgages and improve the affordability of home ownership for self and custom builders;
- Allocate additional funding for local authorities (up to £25 million) to release their surplus brownfield land through the Brownfield Land Release Fund (BLRF).

This will enable them to bring forward serviced plots for self and custom build on public sector land;

- Conclude the legislative review of 'Right to Build' to consider whether government interventions are having the desired effect, and whether reforms are needed;
- Publish the collected data for 2020-21 on self-build and custom housebuilding;
- Confirm further funding for the Right to Build Task Force to help local authorities, community groups and other organisations deliver self-build and custom housebuilding projects across the UK; and
- Commission Richard Bacon MP to lead a review on how the government can scale up the delivery of self-build and custom build homes.

In April 2021, the government announced a new £150 million 'Help to Build' scheme intended to make it easier and more affordable for people to build their own homes. The scheme will provide an equity loan on the completed home, similar to Help to Buy. NaCSBA (2021) explain how Help to Buy is not suitable for self-build and custom housebuilders because 'the current Help to Buy Equity Loan requires the equity loan to be paid on legal completion to the developer. This approach means that the scheme cannot be readily used for Custom and Self Build which typically has multiple payments to different parties'. Being able to fund a mortgage deposit is a barrier for self-build and custom housebuilders and Help to Build is intended to give aspiring self-build and custom housebuilders access to lower deposit mortgages.

Help to Build⁹ will be available to people in England who want to custom build or self-build their own home. It will be an equity loan based on the estimated costs to buy a plot of land and build the home. The equity loan amount can be between 5% to 20% (up to 40% in London) of the total estimated cost. If you are eligible, you can spend up to £600,000 on your new home. This must include the cost of the land if you do not already own it, and no more than £400,000 on the cost to build it. You can apply for Help to Build if you are 18 years of age or over, and have a right to live in England, will live in the newly-built home as your only home and secure a self-build mortgage from a lender registered with Help to Build.

As one of the outcomes of the Action plan, in his recently released review, Richard Bacon MP (Bacon, 2021) proposes a list of recommendations to the government highlighting what support can be provided to enable growth in all parts of the custom build and self-build market. The changes proposed in the review 'House: How putting customers in charge can change everything' (Bacon, 2021) focus on six key areas:

⁹ <https://www.ownyourhome.gov.uk/scheme/help-to-build/>

- (1) Creation of a new Custom and Self Build Housing Delivery Unit within Homes England to support the creation of serviced plots;
- (2) Raising awareness of the Right to Build through the creation of a custom and self-build 'Show Park' and by strengthening existing legislation to mandate the wider publicity of the Self-build and Custom Housebuilding registers;
- (3) Reignition of the Community Housing Fund and creation of accessible opportunities for communities to self-build, through a Self-Help Housing Programme and a Plot to Rent Scheme;
- (4) Promotion of Net Zero Housing ambitions and increases in the use of modern methods of construction in housebuilding;
- (5) Alignment of changes in custom and self-build housebuilding with planning reforms, including making focused changes to the Right to Build legislation to ensure that it achieves its objectives; and
- (6) Ironing out tax issues, in particular to neutralise possible disadvantages in the tax system between the self-build and custom housebuilding and other housing delivery models.

The government recently announced £2.1 million in funding for communities 'to have a greater say in how their local area is developed' (MHCLG, 2021c). This fund will support neighbourhood planning by giving additional support to local authorities in under-represented areas. This Action Plan contributes to the government's wider Plan for Jobs as the development of self-build and custom housebuilding is assumed to also benefit small building firms (ibid). A timeline of government support for the Self-build and Custom Housebuilding sector since 2011 is summarised in Figure 10.

Summarising the government initiatives in support of the self-build and custom housebuilding market, the Bacon Review (Bacon, 2021, p.24) observes that 'since 2011, the Government has introduced several progressive measures to boost the self-build and custom housebuilding sector focusing on overcoming key barriers relating to land, finance and bridging knowledge gaps on effective delivery'. These measures include the necessary 'legislation, planning policy and guidelines to bring forward more land; financial support for self-builders, councils, landowners, builders and building groups; a vanguard programme of supportive councils and pilot projects on public land; support through an industry-led Task Force, and promoting development quality' (ibid, p.24).

It is evident from the foregoing that there is strong government interest in and support for the self-build and custom housebuilding sector, despite the fact that the projected growth in the size of the market has not, to date, occurred.

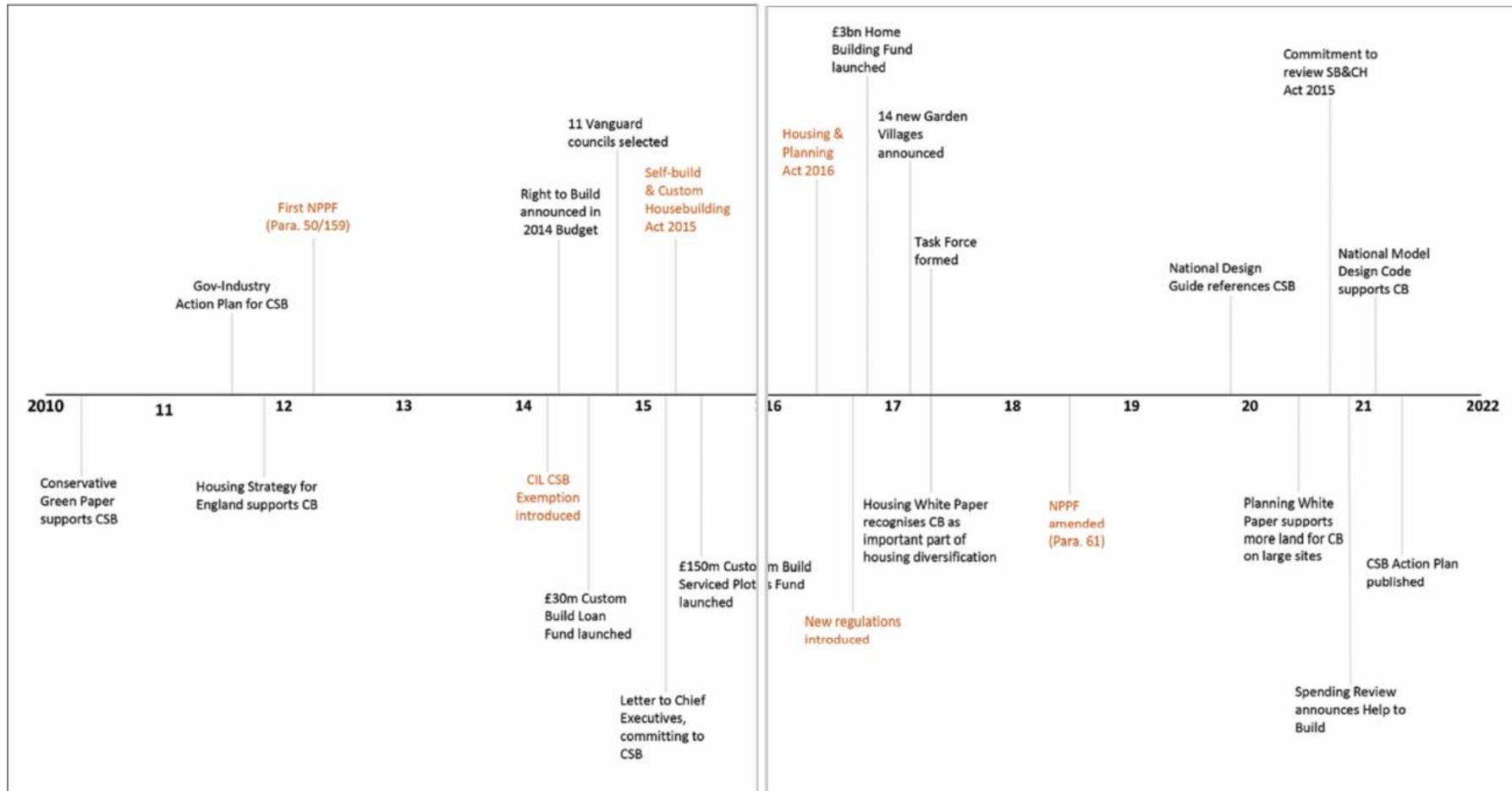


Figure 10 Government support for the self-build and custom housebuilding sector since 2011
Source: Bacon (2021)

5. International comparisons of self-build and custom housebuilding markets

This section brings together some evidence regarding the proportion of self-build and custom housebuilding found in different countries across Europe in order to draw out relevant insights into the higher proportion of self-build and custom housebuilding found therein. It does not review housing policies across those European countries with significant amounts of self-build and custom housebuilding but rather attempts to draw attention to specific issues in those countries which can inform the UK's efforts to scale up its self-build and custom housebuilding sector.

A comparison of the UK's share of the self-build and custom housebuilding sector with other international examples is frequently made in government and industry reports. An example of such analysis is illustrated in Figure 11 and, viewed in this way, it becomes evident that the UK seriously lags behind its peers and therefore has significant potential to scale up the contribution of its self-build and custom housebuilding sector.

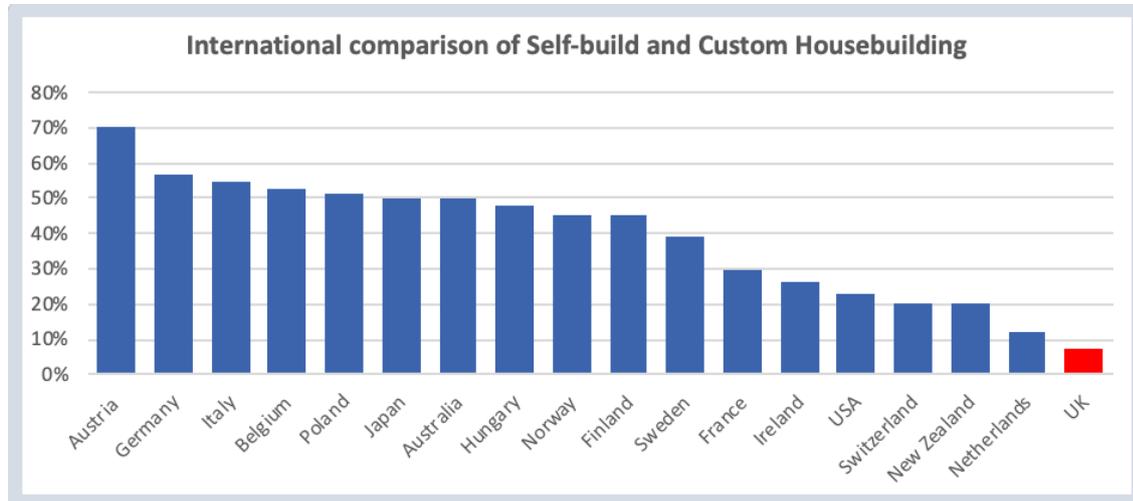


Figure 11 International comparison of Self-build and custom housebuilding

Source: Right-To-Build Taskforce (2016)

However, our review discovered that data regarding the self-build housing sector across the European countries are not systematically documented, nor are they up to date. For example, the only reliable historical data we could access regarding self-building in European countries was published by the National Statistical Institute in 2010. This reported the proportion of self-provided houses as a percentage share of total residential permits issued

in some European countries for which data existed. It showed considerable variation in the share of self-provided housing as a percentage of residential permits among the selected European countries over time (see Table 3), and appears to suggest that the shares of self-built houses are gradually declining in most of the countries, relative to their peaks. The exception to this downward trend is Sweden, which is still showing signs of growth after declining from its 2000 peak of 30.2%.

| Countries | Year | | | | | | | | | | | |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| | 1990 | 1995 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| Austria | 37.4 | 27.1 | 36.5 | 34.2 | - | - | - | N/A | N/A | N/A | N/A | N/A |
| Belgium | - | - | - | 53 | 52 | 53 | 52 | 52 | 53 | - | - | - |
| France | - | 43.2 | 51.6 | 52.7 | 51.9 | 50.3 | 49.3 | 46.1 | 43.4 | 40.9 | 38.5 | - |
| Hungary | - | - | - | - | 63 | 62 | 57 | 50 | 55 | 52 | 52 | 48 |
| Netherlands | | 16.1 | 16.3 | 16.2 | 12.2 | 9.7 | 10.5 | 9.8 | 9.5 | 10.2 | 10.3 | 11.1 |
| Poland | 43 | 71 | 56.9 | 63.8 | 55.5 | 70.3 | 56.8 | 52.3 | 47.3 | 46.1 | 51.2 | - |
| Slovak Republic | - | - | 74.3 | 70.6 | 64 | 54.3 | 68.1 | 58.6 | 53.2 | 47.9 | 49.5 | 47.9 |
| Spain | N/A | N/A | 4 | 5.7 | 5.8 | 6.2 | 6 | 5.8 | 6.3 | 6.4 | 11.8 | N/A |
| Sweden | N/A | N/A | 30.2 | 24.4 | 29.2 | 26.5 | 27 | 24.6 | 20.5 | 29.6 | 30.7 | 30.7 |

Table 3 Self-provided housing as a percentage of total residential permits issued in selected European Countries

Source: Recreated from the National Statistical Institute (2010)

Note: '-' denotes data not reported

Notwithstanding the outdated and volatile nature of the above data, the conclusion that the UK trails most of its European counterparts is still valid. Based on this conclusion, UK government, advocacy groups and construction companies have repeatedly suggested that the UK should do more to increase the self-build and custom housebuilding market to become more in line with those European countries which have a more significant share of self-build and custom housebuilding than the UK.

However, the statistics on self-build housing in European countries with a higher share of self-build do not explain why there is a higher share of self-building. Sources citing different countries as examples do not often state where the data comes from and do not interrogate how the statistics have changed over time. It is therefore not always clear why some European countries are held up as aspirational examples for the UK. For example, in most of the literature, Germany and the Netherlands are two of the most commonly cited examples, even though Austria tops the list in Figure 11, Germany trails behind Italy and Belgium, whilst the Netherlands has almost as small a share as in the UK, making it a surprising choice for citation as a country from which the UK should learn.

In the next section, we consider brief case studies of selected European countries to try and tease out information that might help to explain why the rates of self-building are high in

some of the European countries often compared to the UK. In doing so, we can contextualise such comparisons and help to inform where the UK should look to for inspiration and what exactly should be considered as transferable lessons.

5.1 Some insights into the high rate of self-building in European countries

Before presenting the case studies, some crucial caveats are warranted. First, there is no consistently documented evidence that explains the high rate of self-build and custom housebuilding in the European countries with higher shares of self-building. In fact, according to De Decker et al. (2010), authorities on self-build housing research, 'a comprehensive explanation for the existence of self-provided housing (across Europe) is under-developed' (p.312). Hence, an in-depth and systematic review of empirical evidence into why the proportion of self-build and custom housebuilding is high in the leading European countries is beyond the scope of this report, and would require primary data collection. Instead, this section provides a broad brush overview of issues pertaining to housing tenure, critical junctures or crucial national events, spatial planning policies, government interventions in housing markets and local planning systems that can help to provide plausible insights into the high self-building rates found in specific European countries. Secondly, it is worth emphasising that the insights from European case studies presented here are based on evidence published and available in English, which in many cases is very limited. New primary research would need to be conducted to understand the nature and true scale of the self-build and custom housebuilding markets in European countries.

Pursuant to this, we have drawn insights from four European countries, including Germany, Italy, Belgium and the Netherlands. We selected these four countries because three of them are among the top five European countries with more than 50% of self-build and custom housebuilding, as per Figure 11. The Netherlands, although near the bottom of the list of self-building countries, was also included in the case studies because the Almere Municipality is often referenced in the UK as one of the most relevant case studies to learn from (DCLG, 2011) and therefore insight into that case study could be informative. It should also be noted that although Austria is the leading self-building country in Europe as per Figure 11, it is not included in these case studies because there is hardly any secondary literature published in English that we could draw upon.

5.2. Germany

Germany is an interesting case among the European countries with a higher share of self-build and custom housebuilding. However, Germany has the second lowest share of homeowners among all OECD countries (Leo et al., 2020). Germany's homeownership rate is estimated to be around 44% (Kaas et al., 2019). The share of homeownership is much lower in big cities like Berlin where 85% of residents rent (Werner, 2017). According to analysts, historical factors such as a social housing sector with broad eligibility and high quality standards of housing, high transfer taxes on real estate over the years, and no mortgage interest deductions for owner-occupiers, partly explain the dominance of renting in Germany (Leo et al., 2020). Homeownership is seen to be a less favourable investment option, particularly in large cities.

How self-build housing came to make up a significant share of Germany's low homeownership rate has been linked to post-war government interventions and the historically restrictive planning system, which is still in place. In Germany, individually commissioned self-build or custom-build developments comprises over 60% of new property developed for private ownership (Hamiduddin and Gallent, 2016).

According to Hamiduddin and Gallent (2016), 20% of Germany's housing stock was destroyed as a result of wartime bombings, and a further 20% was severely damaged, placing immense pressure on government and regional municipalities to replace the lost housing. In response to this, federal housing laws enacted in 1950 and 1956 directly encouraged privately organised development by extending state subsidies to housing schemes that were compliant with minimum standards on space and fittings. According to Henderson (1999), self-building was the 'last resort' that the country could employ to build out of the dire economic crisis at the time, as the capabilities of large scale builders had been severely comprised during the war.

While the wartime bombings, and the earlier economic crisis of 1936, provided strong impetus for self-build, planning reforms played an equally significant role. According to Dol, Lennartz & De Decker (2012), Germany developed a strict planning system, directing house building to specific locations (p.314). Local authorities are empowered by law to expropriate land and designate it for development, irrespective of any existing uses. Thus, in addition to the demand for self-building, local authorities have been involved in land assembly on a scale not seen in the UK, preparing spatial plans to guide new construction projects and turning land deemed suitable for construction into building lots with detailed plans. The Bacon Review (2021) notes that many local authorities assemble housing land using formal 'land pooling' and 'reallocation' processes or through the use of Urban Development

Measures. Bacon further observes that while the land pooling strategy helps some rural authorities to bring forward affordable custom and self-building plots for local people, cities like Bonn, Frankfurt, Hamburg and Munich have used land pooling to bring forward sites for custom and self-housebuilding. For example, Stuttgart brought forward 45 sites for 14,000 homes in over 20 years (ibid).

Lennartz & De Decker (2012), further explain that after local authorities prepare these detailed planning schemes, the land is later returned to the original owners from whom it was initially expropriated, although in some cases, the land would be retained and used for public purposes like roads. Landowners whose lands are returned can then sell these well-planned plots for building. Dol et al. (2012) further add that German local authorities are sensitive to the longstanding tradition of self-provided housing and hence they effectively encourage this practice by designing plans with plots for detached dwellings.

Hamiduddin & Gallent (2016) observe that Germany has a system of public control of land, which is not the same as state land ownership. Municipalities are able to exercise a high level of control over planning permission and can freeze land prices through powers similar to compulsory acquisition. Plots of land are sold at a fixed price with infrastructure overheads incorporated in the price. Furthermore, city-wide design frameworks are often relaxed through an 'intelligent trial and error' programme to allow people to be creative in the design of their self-build houses.

In Germany, the quality of development proposals is given as much importance as the price of the land in the building process, and design competitions are frequently used to select successful bids. It is evident that the powers of local planning authorities to acquire land and freeze land prices (so that land values are not shaped by speculative housebuilders), and the clarity and certainty afforded by the restrictive local planning systems together encourage prospective housebuilders from different backgrounds and with different capabilities to access land and build for themselves.

In spite of the distinctiveness of the German housing market, Richard Bacon MP observes in his review (2021, p.52) that 'the German housing market is finding it increasingly difficult to deliver housing which meets demand and is affordable, particularly in urban areas, with key barriers including lack of housing land and complex regulations' which are being addressed through new laws recently approved by the German parliament.

5.3. Italy

Housing tenure in Italy is typically characterised by a very high proportion of homeownership (~73%) (Bronzini, 2017). The remaining tenures comprise market rent (14%) and reduced rent or rent-free (13%). There has been strong government support for 'homeownership for all' in Italy. This has been encouraged through direct interventions, such as income tax relief, and indirectly, through weak public controls over land development, bringing a significant boost to self-build housing. According to Bronzini (2017), in 2001, Italy's central government lacked the funding to deliver housing and delegated responsibility for housing policy to regional governments. Within this arrangement, collective self-building was viewed by local governments as an innovative programme able to improve access to affordable housing for people without access to traditional public rented housing or unable to afford a mortgage.

Bronzini (2017) also observed that collective self-building plays out differently in northern and southern Italy. In northern Italy, self-build housing is typically organised by local cooperative housing organisations that gather a few households together and help them put together a project proposition, secure the necessary permits, and lead the development project. In the south, self-building is more typically associated with building without, or sometimes beyond, building permits. Although a common national programme and institutional commitment for self-provided housing is missing in Italy, regional grants are available for project management and self-builders, as is access to public land at affordable prices. According to Bronzini (2017), the success of the self-build housing sector in Italy relies heavily on political support by left-leaning local governments who encourage responsible, cooperative and inclusive housing. Also, Bronzini (ibid) adds that, at the local level, it appears that planning officials are more accommodating of self-build homes developed outside the formal planning system, partly because of inefficient urban planning policies which have allowed speculative builders to build houses that largely remain vacant for the much of the year except for the tourism season, while citizens struggle to find places to rent.

5.4. Belgium

Belgium comprises distinct regional cultural groups and owning a house is an integral part of the Flemish culture in Belgium, as it is seen as the basis for family well-being (Treanor, 2015). Indeed, as far back as the 1960s, half of Belgians owned their houses (Saunders, 1990) and as of 2011, 66.6% of Belgians still owned their homes, while 6.7% and 19.2% of the population occupied social and private renting respectively (Treanor, 2015). In Belgium, home ownership is widely perceived as the sole sustainable housing alternative (De Decker, 2008). According to Treanor (2015, p.85), 'it is not easy to obtain housing statistics across Belgium because they are held regionally'. Statistics on self-built housing are similarly difficult to access.

However, when discussing why Belgium has a high rate of self-build housing, scholars often highlight three things: the influence of the teachings of the Catholic Church, government housing policy and subsidies, and a historically *laissez-faire* planning system.

The influence of the Catholic Church, particularly notable within the Flemish community, is seen particularly in the emphasis placed on the taught premise that promoting homeownership for workers guarantees emancipation for individuals and their families (Treanor, 2015). This view is strongly supported by the Christian Workers Movement, which is the largest trade union in Belgium, as well as among the Catholic political parties.

A ground-breaking housing law which sought to stimulate homeownership was passed in 1889 as part of Belgium's first labour law. Incentives, including the construction of cheap houses, tax exemptions and inexpensive social loans, were introduced by government and extended to families. In particular, families who were saving towards homeownership were given an extra vote during elections. Throughout the twentieth century, single family home ownership dominated the Belgian housing market and was sustained by government policy, which sought to support home ownership by issuing relevant policy instruments and offered subsidies and tax exemptions to single families who were self-building. A government housing fund was also extended to larger families who were considering self-building. For example, between 1948 and 1961, 400,000 grants of up to 15% of construction cost were allocated to individuals to help finance the purchase and construction of their homes (De Decker, 2008). De Decker (2008) concluded that successive Belgian governments have consistently promoted home ownership (and self-build) and neglected or ignored other alternatives.

It is argued that, until 1962, Belgium had no spatial planning (De Decker 2008; Treanor, 2015) in place. Prior to the introduction of the 1962 Law on Spatial Planning, residential developments in Belgium were not tied to building permissions, allotment permissions or spatial plans. According to De Decker (2008), district plans which could have a direct impact on the use of land were not adopted until the late 1970s, and post-war housing in Belgium was able to boom as there was no framework against which housing projects could be evaluated. Treanor (2015) also noted that, up until the 1970s, there were no restrictions on where new houses could be built. This led to the availability of building plots in places where people wanted to build. Additionally, the government deliberately kept land prices relatively low and stable so that the majority of the population could easily buy land and start building within this *laissez-faire* system (Treanor, 2015). Kol et al. (2012) confirm this by adding that, as part of a 'fair governance' principle, anyone who had a plot of land and who had filed a request for an allotment plan or a house building permit would get that permit. According to

the authors, this led to Belgium's unique ribbon development along roads with dispersed housing allotments. As a result of these 'fair governance principles', 80% of all plots of building land in Belgium now belong to private families who can either hold the land or pass it on to family members.

5.5. The Netherlands

The self-build sector in the Netherlands is widely celebrated and often cited as a good example for the UK to learn from (see Letwin, 2018a; Pickerill, 2016). It is, however, worth mentioning that, although the Netherlands is often singled out as one of the most advanced countries with a successful self-build sector, the share of its self-build market is either at par or below that of the UK, as we will show later. The city of Almere has, however, received most attention.¹⁰ Before turning to the specifics of Almere, it is worth sharing some key features of housing policies and spatial planning in the Netherlands as a whole.

In a comparative study on the self-build housing sector in England and the Netherlands, Lloyd et al. (2015) made a number of observations about the Netherlands. Unlike Germany and Belgium, where self-build is a long-standing part of housing culture, in the Netherlands, this culture has disappeared and a consortia of private developers developing large housing estates for profit came to dominate the market. In 1990, Dutch policymakers deemed it appropriate to revive the self-build tradition and limit the dominant practices of these large house builders: in 2001, the Dutch National Housing Report set out its goal of having a third of Dutch housing production come from self-build by 2040. Consequently, some local municipalities began to introduce initiatives aimed specifically at stimulating the self-build market. Municipalities were also given powers to buy and sell land as the majority of available land plots had previously been bought by large private developers. At that time, self-build housing made up only 15% of annual housing production in the Netherlands.

Notwithstanding the immense political support that self-build housing received nationally, the total number of self-build residential units in the Netherlands has been declining steadily from its peak in 1995, as shown in Figure 12. Since 2005, the percentage of self-build houses in Netherlands appears to have stabilised at a little above 10% (See Figure 12).

¹⁰ See Almere, Holland – Self Build Portal

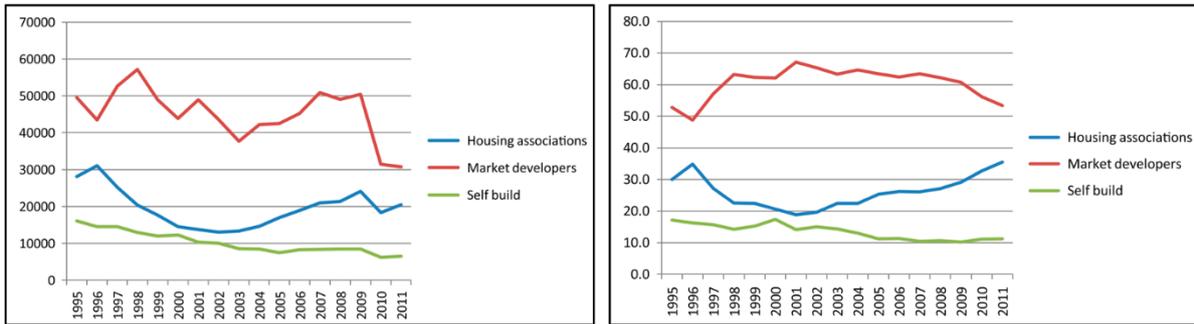


Figure 12 Annual completions of self-build houses and the percentage of self-build houses in the Netherlands.

Source: Originally from CBS (2013) taken from Llyod et al. (2016)

Self-build housing is more prominent in municipalities that are at a distance from larger cities like Amsterdam. In Amsterdam, the proportion of self-build housing has remained at around 5% over the decade 2000 – 2011 (see Figure 13).



Figure 13 Percentage of self build homes in Amsterdam (2000-2011)

Source: Originally from CBS (2013), taken from Lloyd et al. (2016)

From the statistics presented, Lloyd et al. (2015) concluded that the 'Dutch policy target to increase self-build has failed and has already been questioned' (p.28). Given this conclusion, and having regard to the fact that the UK's annual completion of self-build houses exceeds the levels in the Netherlands as per the above statistics, it is intriguing that the Netherlands is still considered as one of the best cases to learn from. This is perhaps because of the particular self-build economy found in the municipality of Almere, which we discuss below.

5.5.1. Municipality of Almere

Almere is a new town, built on land reclaimed from the sea in the Amsterdam Metropolitan Area, 25km east of the centre of Amsterdam (Bossuyt et al., 2018). Almere began as an experiment whereby self-build housing sat at the core of the overall development strategy (Lloyd et al., 2015), partly as a response to the new national political emphasis on consumer control and choice in house building, and partly as a means for people to express their democratic right (Bossuyt et al., 2018). Local political support was overwhelmingly in favour of the experiment: in 2007, the Alderman cancelled the existing local plan for large housing estates and implemented plans to promote self-build housing on a large scale (Lloyd et al., 2015). It is forecast that around 200,000 residents will live in the municipality when it is completed. The Homeruskwartier, a 106ha master-planned neighbourhood in Almere embraces a multifunctional mix of urban and suburban living environments and workspaces (Bossuyt et al., 2018). A total of 3,000 housing units will be built: 1,200 individual self-building units of housing, 600 collectively commissioned units, and the remaining 1,200 units built through various other forms of commission.

Municipal authorities own the land in Almere and this enables them to develop plans that embrace different building typologies, with plot sizes ranging from 94m² to 800m². All infrastructure is provided and financed by the council. Each home to be developed must have a 'passport' which acts as a building permit and specifies the main restrictions on the proposed building, including building height, gaps between homes and the building line (NaCSBA, n.d.). Other than this, residents have the freedom to build as they please, and there is ultimate flexibility in the 'I Build Free' zone, where there are practically no restrictions as to what and how one can build (NaCSBA, *ibid*). All plots in Almere are sold at a standard price of 375 Euros per m² (~£290), and the different models of self-build allowed in Almere have made it possible to integrate people across different income groups into the community.

5.6. What do we learn from European examples?

It is important to note that there may be more information about the self-build market in these four European countries than has been presented here. However, from the limited information available in English, it is clear that there are both country-specific factors that set each country on a unique trajectory towards having a higher share of self-build housing as well as factors that appear common to most of the case study countries.

Other country-specific factors play a part. In southern Italy, individuals and families can self-build outside the formal planning system or without permission from local planning authorities. This sets Italy apart from other advanced countries with a restrictive planning

system, where all building projects must first be granted planning permission before they can go ahead. Similarly, the fact that in Belgium religious doctrines intersect with political support to provide a strong impetus for homeownership, coupled with the late introduction of spatial planning and the ensuing laissez-faire nature of the planning system, makes the case of Belgium unique. Commentators (Dol et al., 2012; Julie, 2010) have argued that these country-specific factors form structural factors that become embedded and institutionalised as norms and rationales influencing policy thinking, and make it difficult for countries to alter, even when their outcomes are less desirable.

That said, there are also factors that seem common across some of the reviewed case study countries. For example, in all the case studies, strong government intervention in the housing market through housing policies that emphasise homeownership and offer financial assistance, such as low-interest loans, subsidies and reduced taxes, tend to encourage more self-building. It has become clear from the case studies that strong control over land prices and a planning system that offers certainty as to where self-building can take place and what conditions must be met, tend to encourage self-building. Also, it would seem that countries with planning systems that do not privilege large speculative housebuilders over other forms of building groups tend to encourage self-building.

Although there are valuable lessons for the UK from some of the European countries with higher rates of self-building, there are unique structural factors contributing towards the levels of self-building in some of the European case studies reviewed here that cannot be easily adapted and applied in the UK. Nevertheless, it is worth mentioning that the UK, in common with some of these case study countries, has a relatively high rate of homeownership, and it is now embarking on initiatives which, if sustained, will make its planning system more rule-based and less discretionary, potentially leading to more incentives for people to self-build.

6. Opportunities and constraints on the self-build and custom housebuilding market in the UK

6.1. The benefits of self-build and custom housebuilding

There are several benefits that have been linked with self-build and custom housebuilding. These are frequently discussed in terms of individual, community, market-wide and national benefits.

6.1.1. Individual benefits

Attention is often drawn to the fact that in liberal democratic countries such as the UK, the prevailing political ideology is to allow people to have an element of choice over where they want to live and what home they want to live in (Duncan and Rowe, 1993). Giving opportunity to prospective homeowners to make significant inputs into the design and building of their homes could potentially result in better quality housing, as the evaluation of cost benefits moves away from a short term financial or political asset value to a user-led, long term use value. This prioritises attributes such as identity, comfort and sustainability over cost savings (Ash et al., 2011), and is achieved through design customisation that pays attention to unique household attributes (Parvin et al., 2011) and selects materials and finishes that are energy efficient and environmentally friendly (Benson, 2017). Others (HM Government, 2011) emphasise the entrepreneurial opportunities associated with having a sizeable proportion of the population with the skills to build. It has also been suggested that in an increasingly financialised housing market, where the benefits derived from housing have come to be measured by how much equity can be released from the house or how it can act as a financial investment, self-builders discover other benefits. People who build their own houses generally feel fulfilled, are happier and develop positive affections towards different spaces in their homes because it objectifies their imagination, demonstrates their resilience and gives them the freedom to express themselves (Benson, 2017; Hamiduddin and Gallent, 2016).

6.1.2. Community benefits

It has been argued that group self-builds facilitate the formation of community friendships and strong ties (Hamiduddin and Gallent, 2016). Available evidence suggests that, unlike speculative housebuilding where community development is left to develop organically and only after the homes are occupied, community ties are often formed much earlier in self-build projects, either through the coming together of groups to initiate the project or throughout the development process (e.g., design selection, plot search, constitution of a development team, actual construction) (Bronzini, 2017; Hamiduddin and Gallent, 2016). The

group self-building process develops crucial social skills and values relevant for community development and solidarity, including, but not limited to, mutual support, compromise, tolerance, empathy and fellow-feeling (Hamiduddin, 2017). These characteristics later become useful social capital for general wellbeing in a neighbourhood, particularly for the elderly and those with childcare needs (Parvin et al., 2011). A thriving self-build sector brings employment and business opportunities to the local area and supports communities to flourish (HM Government, 2011).

6.1.3. Housing market and wider economy benefits

It is argued that there is a lack of diversity in the UK housing market (Letwin, 2018a) as it is dominated by a few large-scale speculative builders (HM Government, 2011; Morton, 2013), leading to a slow build out rate on larger sites (Letwin, 2018a) and a housing market vulnerable to external shocks (Parvin et al., 2011). Increasing housing output from the self-build sector could lead to a more sustainable housing supply, even during periods of economic decline (Ash et al., 2013), as self-builders frequently rely on their own capital to construct their home rather than borrowing from financial institutions to finance their housing project (Parvin et al., 2011, Duncan and Rowe, 1993). In periods of economic crisis, large-scale construction projects by speculative builders tend to decline, whereas construction within the self-build sector continues to grow or at least remain stable, thereby sustaining local and national economies (Duncan and Rowe, 1993). The UK government has recognised the importance of the self-build and custom housebuilding industry to the wider economy, estimating that it is worth almost £4.5 billion to the UK economy (MHCLG, 2020b) and that it creates and safeguards new jobs for several thousands of people, thereby strengthening the construction supply chain and the local economy. It is also argued that increasing the market share of the self-build and custom housebuilding market will not reduce the volume of construction by speculative builders (Parvin et al., 2016).

6.2. Barriers and constraints to self-build and custom build housing in the UK

In spite of the purported benefits of self-build and custom housebuilding in the UK, the sector faces significant barriers and constraints. These generally relate to access to serviced land, difficulties in accessing capital, uncertainties in the planning system and an undeveloped culture of self-building.

6.2.1. Access to serviced plots

Until the Self-build and Custom Housebuilding Act 2015 mandated local planning authorities to compile and publish the number of serviced plots on which they have granted planning permission in their local areas, prospective homebuyers found it challenging to identify land

available for self-building in their local area. This generated significant transaction costs for prospective self-builders who spend time and money looking for suitable sites (Sadler and Shahab, 2021), and discourages them from considering self-building. Even where suitable lands exist, some local authorities deliberately choose not to publicise them widely (Gingell and Shahab, 2021; Sadler and Shahab, 2021) in order to avoid being overwhelmed with applications (Gingell and Shahab, 2021). Prospective self-builders compete with large-scale speculative housebuilders for the same land (Ash et al., 2013) - it is said that self-builders have to either settle for the 'leftovers' or foreclose their desire to self-build altogether (Ash et al., 2013).

6.2.2. Difficulties associated with raising development finance and residential mortgages for self-building

HM Government (2017) identifies access to land and finance as the two main barriers to self-build and custom housebuilding. Financial challenges often take two forms – the challenge of raising development finance and the challenge of securing a residential mortgage (Wallace et al., 2013). The development finance needed to fund the cost of a land search, planning application, infrastructure provision and construction is substantial and easily deters potential self-builders. According to Wallace et al. (2013), development finance approaches often used by some group self-build schemes have involved reliance on assistance and donations from volunteers and corporations. These usually come in the form of one-off or ongoing cash donations, materials or services in kind in order to keep the projects viable. This approach is, however, unsustainable and uncertain.

For residential mortgages, HM Government (2017) observes that mortgages for custom and self-built homes represent a very small proportion of the overall lending market: in 2016, lending on custom and self-build projects amounted to less than £1 billion, compared to £10 billion in mortgage lending in just one month (HM Government, 2017). Parvin et al. (2013), quoting data from a 2009 report on self-build by BuildStore, observe that, while most high street lenders offered mortgage finance up to 70 to 85% of the loan to value ratio for houses built by large-scale builders, self-builders mostly face a lower capital threshold of just 62% of their project. This is despite the fact that lending for self-build and custom housebuilding is perceived to be less risky than most lending for two primary reasons. Firstly, it is argued that self-builders tend to be high-income earners and high-equity households and hence mortgages can be secured against their properties and assets, thereby reducing lenders' risk (Morton, 2013). Secondly, in terms of the land price, self-builders do not factor in developer profits in the price of land purchased and therefore, in the absence of being charged for development gain, there are likely to be substantial differences between the final values of the developed properties and their corresponding build costs, thereby reducing both builder and lender risks (Morton, 2013).

According to some commentators (Wallace et al., 2013; Morton, 2013), there is a knowledge gap found among lenders, banks and other financial institutions as to the different models of self-build and custom housebuilding (Ash et al., 2013). This limited knowledge has resulted in the absence of financing options tailored to meet the demographic profile and risk profile of people or groups aspiring to self-build their homes, the majority of whom are first-time buyers or lower- to middle-income households (Parvin et al., 2013). As a result, it is mostly households with high incomes and/or existing assets who are actually able to self-build. Wallace et al. (2013) add that medium to large lenders view self-build lending to individuals as administratively burdensome as their bespoke appraisal and staged payments make the origination of loans unfit for the usual automated lending systems. Some lending institutions also take issue with the unique properties produced through self-build as they have been found to present difficulties in terms of valuation (Wallace et al., 2013).

6.2.3. Uncertainties in the planning system

There is a view that, when compared to restrictive planning systems in other developed countries such as Germany and the USA, the discretionary planning system in the UK significantly hinders the self-build and custom housebuilding market (Toms, 2016). According to Toms (2016), although historically Britons have always self-designed the interior of their homes and, sometimes, their house frontage, the lack of constitutional rights of landowners to develop their own land and the weaknesses of local plans to control what can or cannot be built results in increased planning risk for self-builders. Morton (2013) contends that the planning system is to blame for the limited share of self-build and custom housebuilding in the UK as planning authorities often release limited serviced plots which are easily captured by large developers who, according to Morton (ibid), 'are land speculators as much as builders'. Although the Self-build and Custom Housebuilding Act 2015 now mandates local planning authorities to publish a register of people seeking to self-build, the fees charged for registration can serve as a disincentive to people considering self-build (Sadler and Shahab, 2021). Likewise, local planning authorities have been found to fail to widely publish details of available serviced plots in their area, potentially resulting in the under-reporting of the demand for self-build and custom housebuilding (Gingell and Shahab, 2021).

6.2.4. Undeveloped culture of self-building

Compared to European countries like Belgium, Italy and Germany with well-established cultures of self-building, the culture of self-building in the UK can be considered undeveloped. The evidence from countries with a significant market share of self-provided housing (Crabtree, 2018; Mullins and Moore, 2018) suggests that the more self-building becomes a key aspect of a country's housing market, the more a culture of self-build deepens and preferences are passed from generation to generation. Older generations of

self-builders frequently pass on their skills to the next generation and offer them the familial support to self-build their homes (Bronzini, 2017). This intergenerational link deepens the culture of self-build.

In the UK construction industry, however, there is a lingering perception that working with self-builders can be difficult, with a tendency for self-builders to know what they don't want from a self-build rather than what they do want (Parvin et al., 2011). This could partly be attributed to the undeveloped culture of self-building in the UK and the prevalence of turn-key housing supply models which leaves little or no room for homeowners to have input into the design of the homes.

Legal, financial, institutional and other practice barriers prevent the adoption of self-build and custom housebuilding as a viable housing procurement strategy for the UK (Ash et al., 2013). Key industry players fail to recognise the social and economic benefits of working with prospective residents and the potential for procurement and customisation of homes (Wallace et al., 2013). Currently there is insufficient supportive infrastructure and insufficient professional services for self-builders from developers, manufacturers and contractors. Changes are needed in the industry culture in order to diversify housing procurement and financial models and support self-provision of housing (Parvin et al., 2011).

7. Recommendations

The recommendations that follow derive from both our analysis of the secondary information reviewed in this report and the relevant recommendations gathered from existing reports. It is organised into four main categories to reflect the respective parts of the report: estimations of the size and market share of the self-build and custom housebuilding in the UK; policies to support the sector; lessons from the European case studies; and ways to overcome the barriers and constraints of self-build and custom housebuilding.

7.1. Estimating the size and market share of the self-build and custom housebuilding in the UK

Our findings showed that, in addition to the local Self Build Registers mandated by the Self-Build and Custom Housebuilding Act, 2015, there were four other approaches for estimating the number of the self-build or custom build dwellings completed annually. These include the VAT reclaim approach, the data pool approach, the opinion polls and population data approach, and the new single dwellings approach. Each of these approaches focuses on slightly different variables to arrive at the number of self-build and custom housebuilding units completed annually, resulting in slightly different estimates. Despite the shortcomings of each approach, their respective estimates of the number of self-build and custom housebuilding completed annually are reasonably close and multiple approaches should be encouraged.

It is recommended that the Department for Levelling Up, Housing and Communities (DLUHC) partner with the bodies who collect the data in order to create a central database in which the different datasets are pooled, validated and published. Improving data sources to give a more accurate depiction of the self-build sector will bring credibility and a degree of authority regarding the actual size of the self-build and custom housebuilding sector in the UK. This is in line with recommendations from Richard Bacon MP (2021). He argues that government should introduce a commitment to publish annual monitoring data of demand on Self-build and Custom Housebuilding Registers and delivery against the demand. A further recommendation echoed in the Bacon Review (2021) is for government to mandate relevant authorities to widely promote their statutory Self-Build and Custom Housebuilding Registers and to share demand data and information on suitable development permissions between willing people on the register and landowners and project promoters. Also, developing a more robust approach to measuring the demand for self-build and custom housebuilding is needed (Wallace et al., 2013).

There is little systematically documented evidence held on companies offering specialised services to individuals or groups intending to self-build, and equally little is known about the profile of these companies and the physical features of the houses they help to construct using self-build and custom housebuilding approaches. Although television programmes such as *Grand Designs*¹¹ have educated the public about the self-build market over a number of years by profiling different types of projects across the UK, it is believed that the show does not fully capture the diversity of self-build projects completed across the UK, nor does it fully capture the demographic characteristics of individuals, households and groups who self-build (Benson, 2017). The current evidence regarding the demographic features of people who self-build is heavily skewed in favour of 'asset rich' baby-boomers, and under-represents the many young and single adults who are interested in self-build (Parvin et al., 2011).

In order to better understand the supply side of the self-build market, it is recommended that DLUHC considers calling for evidence as to the types of housing developed, the tenures of completed self-build and custom housebuilding homes, and the regional distribution of supply. This will provide a better understanding of not just the number of self-build and custom houses being produced, but also the demographic and geographic diversity to be found in this sector of the housing market.

7.2. Policies to support self-build and custom housebuilding in the UK

This review has shown that, although substantial efforts were made by the government to encourage and support the growth of the self-build and custom housebuilding since 2011, it is still far from becoming 'a mainstream housing option' (HM Government, 2011). Allocation of funding, efforts in planning and land release, the creation of self-build and custom housebuilding registers, and the support of lobbying organisations have all contributed to the development of the sector, but not at rates that would ensure the delivery of the government target of 100,000 new homes a year (ibid). The recently published Action Plan (MHCLG, 2021b) states that 'self and custom build could deliver 30-40,000 new homes a year' (MHCLG, 2021c), and the independent review by Richard Bacon MP (Bacon, 2021) indicates how the sector can achieve this target and scale up from the current 15,000 homes a year. The recommendations of the Bacon Review aim to support competition and innovation within the housebuilding industry, as well as Net Zero housing ambitions, and the core recommendation is for the government to establish a Custom and Self-Build Delivery Unit within Homes England with a mandate to deliver required changes to kickstart the custom and self-build market.

¹¹ See *Grand Designs - On Demand - All 4* (channel4.com). Accessed on 04/04/2021.

One of the approaches to scale up the share of the self-build and custom housebuilding market is to bring the sector under the Affordable Homes Programme as this would ensure consistent financial and institutional support for the sector and would allow the application of the respective planning regulations for 'affordable' housing (Wallace et al., 2013). This recommendation is also reflected in the Bacon Review which proposes to allocate 10% of annual Affordable Homes Programme funding to empower low income and often marginalised communities and make Community-led housing an integrated part of the programme (Bacon, 2021, p. 14).

It is recommended that more effort is made by government bodies and relevant housebuilders and manufacturers to generate and establish information and support schemes for potential self-builders. The Department for Levelling Up, Housing and Communities, local authorities and NaCSBA should strive to publicise the National Self Build and Renovation Centre in Swindon, which organises three-day workshops at a fee to assist self-builders and renovators on how best to go about self-building and renovating. We also support the recommendation of Richard Bacon MP that the government, working through partnership with industry players, should create a custom and self-build Destination Show Park and Hub to showcase manufacturing and assembly capabilities of the sector, including show homes with information on where the public can find self-build and custom build homes and how to book a visit (Bacon, 2021, p.13). The government could foster more opportunities for sharing evidence of good practice in self-building and custom build housing, particularly in relation to local government (Ash et al., 2013).

In addition, it is recommended that self-builders should be encouraged to use offsite build components in constructing their homes, as better integration of the self-build and custom housebuilding market with pre-manufacturing could provide quick and flexible solutions for layout and fitting, to more readily address the needs of the self-build customer. This is in line with Richard Bacon MP's recommendation (Bacon, 2021) to government to ensure that custom and self-build is embedded in the work of new Modern Methods of Construction Task Force and its actions.

A further recommendation can be made with regard to government efforts in supporting collective self-build and custom housebuilding projects (as also argued by Ash et al., 2013). Types of collaborative housing where residents actively participate in the design and operation of their neighbourhood and commit to living as a community, known as cohousing, should be considered as part of efforts to support collective self-build and custom housebuilding (ibid). As proposed in the Bacon Review (2021), the creation of accessible opportunities for communities to self-build is recommended, along with a Self-

Help Housing Programme and a Plot to Rent Scheme, as well as the reignition of the Community Housing Fund.

Additionally, identifying and establishing partnerships and networks between organisations that provide support to self-builders should be encouraged, as collaboration and exchange of best practices could help to overcome barriers related to securing suitable plots, accessing finance and others.

7.3. Learning from other advanced countries in Europe

In our evidence review, we found that some countries had unique historical and structural factors that provided impetus for the establishment of a strong culture of self-building, and resulted in a path-dependency which continues to sustain this culture. However, despite unique structural factors in each country, it emerged that different forms of government interventions, including tax exemptions, subsidies and low-interest loans to households and groups engaged in self-building, played a crucial role in sustaining the culture of self-building. Notably, it was found that a land use planning system that does not privilege speculative large-scale builders over individuals and groups, but rather makes land readily available to all through master plans that clearly designate areas for self-building and internalises the cost of infrastructure, plays a key role in enabling self-building.

Many analysts (Morton, 2013; Ash et al., 2013; Toms, 2018) recommend that the UK planning system becomes less discretionary and moves closer to a model of legally binding master planning, as practiced by European countries with a significant market share of self-build housing. This recommendation is in line with recently announced proposals in the 2020 White Paper, 'Planning for the Future' (MHCLG, 2020a), and the House of Commons 'Planning for the Future' briefing paper (Grimwood, 2021), in which government signals to reduce the time it takes to produce local plans from 7 years to 30 months, ensure that every area has a local plan, and overhaul and replace the planning process with a rule-based system. In light of this, the government should give careful consideration to the two models proposed by Oliver Letwin (2018b) through which local planning authorities can encourage diversity on large development sites and move planning decision-making much closer to a rule-based approach. In the first model, the Local Development Company (LDC) model, a local authority relies on the LDC to carry out the development role by establishing a master plan and design code for the site, and then bringing in private capital through a non-recourse special purpose vehicle to pay for the land and to invest in the infrastructure, before parcelling up the site and selling individual parcels to particular types of builder/providers offering housing of different types and different tenures (ibid., p.23). The second model, the Local Authority Master Planner (LAMP) model, involves local authorities establishing a Local

Authority Master Planner (LAMP) to develop a master plan and full design code for a site, and then enable a privately financed Infrastructure Development Company (IDC) to purchase the land from the local authority, develop the infrastructure of the site, and promote a variety of housing similar to that provided by the LDC model (ibid., p.23).

Given the lack of an up to date, systematically documented evidence base of why the rate of self-build and custom housebuilding is higher in the European countries reviewed (excluding the Netherlands), it is recommended that government, NaCSBA and other parties interested in self-build and custom housebuilding commission an empirically-grounded international comparative study to gather nuanced insights into self-building in the leading European countries. Such a study should pay attention to the different approaches used in estimating the number of self-building units, the tenure distribution of self-build housing, the geographical distribution of self-building in selected countries, the demographic profile of self-builders, and the models of self- and custom-build delivery, so that transferable lessons can be learned (see also Wallace et al., 2013).

7.4. Overcoming the barriers and constraints to self-build and custom housebuilding

We identified that access to serviced plots, difficulties in securing capital, uncertainties in the planning system and an undeveloped culture of self-building were the most cited barriers and constraints to the self-build and custom housebuilding market in the UK.

7.4.1. Access to serviced plots

Our analysis of recent data from MHCLG (now DLUHC) showed that progress is being made, and there has been a considerable increase in the number of planning permissions granted for serviced plots between the end of October 2017 and October 2019. However, there are still concerns that local authorities are not bringing forward enough serviced plots suitable for self-building, and that some continue to fail to publish a list of serviced plots with granted planning permission (NaCSBA, 2019; Gingell & Shahab, 2021). The reasons for this include both disregard for the legislation and practical operational difficulties (Sadler & Shabab, 2021).

It is recommended that measures are introduced in order to support LPAs currently struggling to adhere to the legislative requirement. Local authorities should encourage officers and councillors to become familiar with existing schemes of self-build and custom housing, providing staff training and selectively visiting schemes in order to understand how they operate and what they can deliver, to better understand the barriers to their delivery (echoed in Ash et al., 2013). Providing greater guidance to local authorities on how to fulfil

their new duties towards self-build and custom housebuilding could facilitate greater access to serviced plots (Wallace et al., 2013). We further support Richard Bacon's (2021, p. 15) recommendation for minor changes to be made to the Self-build and Custom Housebuilding Act 2015 through secondary changes to how the 'duty to provide' is measured, removing the use of fees and eligibility criteria in order to get on the register, obligating local authorities' annual monitoring of self-build and custom housebuilding, and clarifying how planning obligations can be used to secure custom and self-build development in planning terms.

7.4.2. Difficulties in securing capital

The majority of banks and financial institutions are unfamiliar with the different models of self-build and custom housebuilding and therefore find it difficult to assess the corresponding risk profiles of would-be borrowers (Wallace et al., 2013). Insufficient authoritative information about the self-build and custom housebuilding market is available.

To tackle the difficulties in raising development finance, lenders interviewed by Wallace et al. (2013) suggested that the government should consider covering the development costs of self-build projects so that lenders could focus attention on offering normal loans upon completion of these projects. This support could be modelled around a government revolving loan fund, extending access not just to small developers but to individuals considering self-building. Short term, government-backed funding could cover a period of development to convince lenders that self-build projects can be viable. On completion of their project, the owners of these self-build projects would then obtain traditional mortgages from lenders to repay the government loan.

In addressing lenders' limited information about the self-build and custom housebuilding market, it is recommended that key stakeholders (e.g., government or industry associations such as NaCSBA) collate up to date, robust information about the different models of self-build and custom housebuilding and make it easily accessible to banks and funding bodies. This information should highlight, among other things, how the development process is executed in each model, including the search for land, application for planning permission, constitution of the design and building team, etc.

To de-risk the self-building process, we re-echo recommendations made by Parvin et al. (2011), namely that individuals and groups with no prior knowledge of self-building looking to secure private sector funding are more likely to succeed if they solicit the help of experienced companies that specialise in self-build and custom housebuilding and have been successful at helping people secure capital from funding bodies. Hence, it would be useful if financial institutions compiled and published a list of self-build and custom housebuilding companies they have been working with, and vice versa. This way, individuals

and groups with no experience or assets can work with those more experienced to secure funding. This will achieve the twin objectives of overcoming barriers to securing funding while still giving individuals and groups the opportunity to have significant input into the design and build of their dwellings.

There have also been suggestions that taking out build out insurance could help lenders to de-risk against investment in self-building projects where the self-builder defaults on a loan while the property against which the loan is secured remains uncompleted (Wallace et al., 2013). With build out insurance cover, the lender, upon recovering possession, can engage a contractor to complete the project for sale. It is recommended that lenders keen on supporting self-build explore the feasibility of build out insurance. Following the Bacon Review (2021), this will also require raising awareness among lenders and insurers of the environmental benefits of self-build and custom build housing compared with existing housing stock.

7.4.3. Uncertainties in the planning system

Although LPAs now maintain lists of serviced plots with planning permission, those registering on the local self-build register are unclear as to their next steps. In line with other analysts (see Sadler and Shahab, 2021), we recommend that the government publishes secondary legislation or guidance notes that make clear what must happen after people have registered their interest in self-build and local authorities and LPAs have published the list of serviced plots with granted planning permissions. Also, in line with the Building Better, Building Beautiful Commission (2020), we recommend that LPAs should help reduce planning risk and permit a greater range of small firms, self-builders, custom housebuilders, Community Land Trusts and other market entrants and innovators to enter the housing market by ensuring that there are sites that are designated for self-build with clearly specified basic requirements. This further complements the recommendation from the Bacon Review (2021) for the creation of a Small Sites Programme for small and often overlooked sites owned by housing associations to facilitate easy access by community groups, co-operatives, co-housing groups and individuals.

Also, following insights from the Letwin report (2018b, 6), it is recommended that new planning rules target large development sites in areas of high housing demand and require 'those developing such sites to provide a diversity of [housing] offerings, in line with diversification principles' which would include a share of self-build and custom build housing,] as the new planning policy document encourages.

7.4.4. Under-developed culture of self-building

The UK lags behind Belgium, Germany and Italy which all have an established culture of self-building. Developing a culture is both a function of time, deliberate policy and sustained actions from national and local governments and the wider industry. There is already evidence that self-build and custom housebuilding appears to be increasing and this means that there is scope to develop the culture of self-building. It is therefore recommended that the ongoing government commitments, including legislation, funding, and partnerships with industry, be scaled up. We suggest that it would be useful (perhaps conducted by DLUHC in partnership with NaCSBA) to develop strategic public communications that can challenge existing stereotypes about the self-build and custom-housebuilding market. This could include commissioning short videos that showcase the more diverse demography of people and groups who embark on self-build, as well as the experiences of young people and less affluent households who self-build their homes.

Developers, registered providers, manufacturers and contractors all need to be involved in changing the culture of housebuilding towards the build-it-yourself model, recognising the benefits of working with prospective residents and enabling them to procure and/or customise their homes (Wallace et al., 2013). They could collaboratively provide packaged solutions of professional services that could help self-builders and speed up the construction process.

Wider promotion of self-build and custom housebuilding, easier access to authoritative information to guide potential self and custom builders, support for finance options, and greater supply from the construction industry of packaged solutions of professional services could all help to develop a greater culture of self-build and custom housebuilding in the UK. The clear evidence of demand for and aspirations towards self-build and custom housebuilding are opportunities to both increase and diversify new housing supply.

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9. Appendix 1

Breakdown of new single dwellings completed across UK regions per month (2016-2019)

| 2016 | Total | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------------|---------------|-------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| East Midlands | 1,307 | 9% | 114 | 104 | 109 | 120 | 101 | 91 | 141 | 113 | 99 | 90 | 103 | 122 |
| East Of England | 1,722 | 12% | 102 | 148 | 155 | 124 | 166 | 121 | 169 | 133 | 149 | 115 | 156 | 184 |
| London | 934 | 6% | 74 | 64 | 76 | 61 | 70 | 73 | 75 | 96 | 77 | 96 | 78 | 94 |
| North East | 300 | 2% | 18 | 26 | 18 | 32 | 22 | 18 | 39 | 27 | 23 | 30 | 29 | 18 |
| North West | 1,054 | 7% | 72 | 75 | 86 | 74 | 113 | 78 | 104 | 76 | 94 | 69 | 105 | 108 |
| Northern Ireland | 1,302 | 9% | 45 | 76 | 89 | 88 | 68 | 108 | 104 | 107 | 186 | 43 | 196 | 192 |
| Scotland | 1,575 | 11% | 82 | 113 | 140 | 119 | 162 | 139 | 146 | 140 | 138 | 132 | 130 | 134 |
| South East | 2,284 | 15% | 103 | 210 | 179 | 181 | 197 | 160 | 199 | 214 | 204 | 191 | 209 | 237 |
| South West | 1,959 | 13% | 138 | 135 | 173 | 143 | 157 | 141 | 179 | 188 | 183 | 173 | 183 | 166 |
| Wales | 523 | 3% | 24 | 26 | 42 | 21 | 44 | 51 | 52 | 50 | 48 | 49 | 54 | 62 |
| West Midlands | 1,086 | 7% | 99 | 68 | 77 | 79 | 79 | 123 | 90 | 86 | 97 | 93 | 92 | 103 |
| Yorkshire & Humber | 906 | 6% | 58 | 61 | 87 | 61 | 75 | 81 | 72 | 89 | 64 | 102 | 73 | 83 |
| Total | 14,952 | 100% | 929 | 1,106 | 1,231 | 1,103 | 1,254 | 1,184 | 1,370 | 1,319 | 1,362 | 1,183 | 1,408 | 1,503 |

| 2017 | Total | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------------|---------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| East Midlands | 1,142 | 8% | 97 | 89 | 90 | 102 | 104 | 82 | 99 | 77 | 92 | 89 | 112 | 109 |
| East Of England | 1,653 | 12% | 133 | 129 | 121 | 151 | 140 | 138 | 150 | 117 | 129 | 143 | 162 | 140 |
| London | 810 | 6% | 66 | 46 | 68 | 71 | 72 | 65 | 74 | 72 | 57 | 78 | 65 | 76 |
| North East | 312 | 2% | 13 | 33 | 33 | 25 | 37 | 26 | 27 | 19 | 25 | 15 | 22 | 37 |
| North West | 934 | 7% | 59 | 92 | 84 | 85 | 71 | 73 | 66 | 97 | 65 | 82 | 94 | 66 |
| Northern Ireland | 1,092 | 8% | 134 | 100 | 117 | 110 | 77 | 113 | 122 | 58 | 42 | 60 | 106 | 53 |
| Scotland | 1,518 | 11% | 117 | 107 | 99 | 127 | 104 | 135 | 171 | 132 | 139 | 127 | 127 | 133 |
| South East | 2,125 | 15% | 192 | 144 | 166 | 161 | 197 | 180 | 179 | 176 | 150 | 177 | 181 | 222 |
| South West | 2,126 | 15% | 193 | 175 | 166 | 156 | 222 | 141 | 195 | 183 | 185 | 162 | 165 | 183 |
| Wales | 542 | 4% | 40 | 30 | 35 | 48 | 60 | 47 | 43 | 54 | 42 | 47 | 41 | 55 |
| West Midlands | 1,033 | 7% | 59 | 90 | 83 | 64 | 87 | 93 | 95 | 82 | 90 | 79 | 113 | 98 |
| Yorkshire & Humber | 825 | 6% | 62 | 66 | 92 | 62 | 64 | 58 | 60 | 66 | 56 | 77 | 78 | 84 |
| Total | 14,112 | 100% | 1,165 | 1,101 | 1,154 | 1,162 | 1,235 | 1,151 | 1,281 | 1,133 | 1,072 | 1,136 | 1,266 | 1,256 |

| 2018 | Total | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------------|---------------|-------------|--------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| East Midlands | 1,364 | 9% | 185 | 83 | 116 | 93 | 147 | 106 | 106 | 109 | 109 | 119 | 95 | 96 |
| East Of England | 1,843 | 12% | 142 | 116 | 193 | 161 | 169 | 161 | 149 | 144 | 144 | 163 | 145 | 156 |
| London | 894 | 6% | 67 | 70 | 78 | 80 | 63 | 72 | 84 | 81 | 73 | 62 | 96 | 68 |
| North East | 310 | 2% | 25 | 20 | 36 | 25 | 22 | 26 | 30 | 19 | 28 | 32 | 26 | 21 |
| North West | 1,145 | 7% | 122 | 80 | 115 | 90 | 95 | 96 | 74 | 85 | 89 | 117 | 97 | 85 |
| Northern Ireland | 1,197 | 8% | 72 | 79 | 95 | 87 | 93 | 117 | 100 | 108 | 122 | 123 | 117 | 84 |
| Scotland | 1,626 | 10% | 116 | 109 | 108 | 178 | 139 | 150 | 159 | 125 | 151 | 147 | 111 | 133 |
| South East | 2,270 | 15% | 176 | 171 | 192 | 202 | 188 | 190 | 209 | 189 | 184 | 194 | 183 | 192 |
| South West | 2,216 | 14% | 188 | 97 | 220 | 170 | 160 | 194 | 190 | 175 | 186 | 211 | 196 | 229 |
| Wales | 533 | 3% | 47 | 33 | 53 | 36 | 49 | 38 | 43 | 63 | 38 | 44 | 47 | 42 |
| West Midlands | 1,188 | 8% | 94 | 72 | 124 | 95 | 104 | 86 | 106 | 106 | 96 | 110 | 96 | 99 |
| Yorkshire & Humber | 907 | 6% | 63 | 41 | 63 | 82 | 68 | 87 | 88 | 81 | 61 | 98 | 68 | 107 |
| Total | 15,493 | 100% | 1,297 | 971 | 1,393 | 1,299 | 1,297 | 1,323 | 1,338 | 1,285 | 1,281 | 1,420 | 1,277 | 1,312 |

| 2019 | Total | | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--------------------|---------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| East Midlands | 1,297 | 8% | 102 | 117 | 100 | 107 | 105 | 108 | 101 | 106 | 130 | 110 | 105 | 106 |
| East Of England | 1,828 | 11% | 134 | 134 | 162 | 138 | 152 | 143 | 158 | 193 | 150 | 143 | 167 | 154 |
| London | 911 | 6% | 63 | 66 | 78 | 79 | 77 | 66 | 75 | 96 | 87 | 80 | 75 | 69 |
| North East | 291 | 2% | 17 | 20 | 21 | 20 | 21 | 26 | 31 | 30 | 27 | 21 | 31 | 26 |
| North West | 1,061 | 7% | 91 | 78 | 106 | 92 | 91 | 73 | 91 | 79 | 79 | 91 | 81 | 109 |
| Northern Ireland | 1,516 | 10% | 108 | 102 | 136 | 106 | 135 | 134 | 113 | 155 | 137 | 117 | 151 | 122 |
| Scotland | 1,601 | 10% | 88 | 133 | 120 | 137 | 149 | 151 | 133 | 154 | 143 | 118 | 149 | 126 |
| South East | 2,422 | 15% | 179 | 167 | 218 | 186 | 246 | 185 | 194 | 219 | 223 | 199 | 204 | 202 |
| South West | 2,227 | 14% | 148 | 147 | 157 | 203 | 162 | 193 | 205 | 202 | 241 | 174 | 223 | 172 |
| Wales | 560 | 4% | 49 | 39 | 47 | 39 | 54 | 41 | 44 | 45 | 54 | 49 | 52 | 47 |
| West Midlands | 1,127 | 7% | 102 | 78 | 91 | 92 | 84 | 106 | 88 | 94 | 99 | 96 | 98 | 99 |
| Yorkshire & Humber | 1,061 | 7% | 73 | 74 | 93 | 75 | 105 | 76 | 95 | 101 | 94 | 67 | 101 | 107 |
| Total | 15,902 | 100% | 1,154 | 1,155 | 1,329 | 1,274 | 1,381 | 1,302 | 1,328 | 1,474 | 1,464 | 1,265 | 1,437 | 1,339 |

Source: NaCSBA (n.d.)

This research was led by Dr Gemma Burgess, Director of the Cambridge Centre for Housing and Planning Research in collaboration with Places for People. Places for People is a property management, development, regeneration and leisure company based in the UK that exists to create places that work for everyone. CCHPR's team of researchers are dedicated to carrying out innovative research that is relevant for policy and practice, and to providing an evidence base for making positive change with a view to reducing inequality, and improving housing supply and affordability.

Employed at the Cambridge Centre for Housing and Planning Research in the Department of Land Economy at the University of Cambridge, Dr Richmond Ehwi and Dr Sabina Maslova are postdoctoral researchers funded by the Centre for Digital Built Britain (CDBB). CDBB is a core partner of the Construction Innovation Hub, funded by UK Research and Innovation (UKRI) through the Industrial Strategy Challenge Fund (ISCF).