

# Getting the green light: achieving sustainability at a local level

BRIEFING PAPER

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SMF

Social Market  
Foundation

By Scott Corfe, Research Director

This briefing is based on a roundtable event<sup>1</sup> held by the Social Market Foundation in May 2021, in partnership with DAC Beachcroft.<sup>2</sup> While this paper reports some of the views expressed at the event by attendees, the conclusions and recommendations made here are those of the SMF alone.

## FOREWORD FROM THE SPONSOR

Christopher Stanwell, Head of Planning, DAC Beachcroft

Supporting and taking part in SMF's roundtable was both instructive and inspiring as delegates discussed how to create greener and more sustainable urban centres. The size of the challenge and the investment required is considerable, but valuable achievements made to date still need to be scaled up and the pace of change accelerated.

Technology has a significant role to play as innovative ways are developed to use alternative power sources, to champion new forms of transport and measure effectiveness. What is though equally important is an evolution in the philosophy of our approach. Too often green initiatives make people's lives more difficult. Restraints and controls make no appeal to hearts and minds. Innovation also needs to be applied to create approaches that bolster local economies and build a sense of community and partnership. Rewards rather than penalties should inform our thinking, with green bonds, green related savings schemes and other financial incentives to use building products less damaging to the environment are just some of the suggestions made in the discussion.

Collaboration, support and clarity are also critical to making a leap forward, in what is a shared goal for private and public sector, communities and individuals. Local government has a critical role to play, but financial limitations impede progress and councils struggle to find common contact points and support in central government. Overly complex requirements can make it difficult for private developers to engage with the ambitions of local authorities. An increased number of green partnerships and green alliances would support locally based private/public associations that develop practical, popular approaches that meet green ambitions and help improve co-operation for harder to implement measures.

The report of the event outlines the very practical suggestions that the group made.

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## KEY POINTS

- **The transition to net zero carbon emissions, as part of efforts to avoid further global warming, will have significant implications for urban areas across the UK.** The built environment accounts for about 40% of the country's total carbon footprint
- **While local authorities are directly responsible for just 2-5% of local emissions, it has been estimated that they can influence around a third of emissions in their area through leadership and place-making.**
- **Despite the potential role that local authorities can play in delivering Net Zero, at our roundtable it was felt that councils faced challenges in turning this into reality.** Financial constraints remain a major issue, limiting the ability of councils to deliver on sustainability.
- **Siloed thinking and disconnected targets across government are undermining efforts to reach Net Zero.** For example, while the Department for Business, Energy and Industrial Strategy (BEIS) has a focus on energy and fuel poverty, the Ministry of Housing, Communities and Local Government (MHCLG) has a focus on house building in large numbers rather than supporting homes that are green, energy efficient, kitted out with energy systems fit for the future (such as heat pumps) and served by sustainable public transport.
- Private developers can play a key role in creating sustainable towns and cities, but more needs to be done to incentivise green construction, through carbon pricing along the construction value chain, and through green investment vehicles.

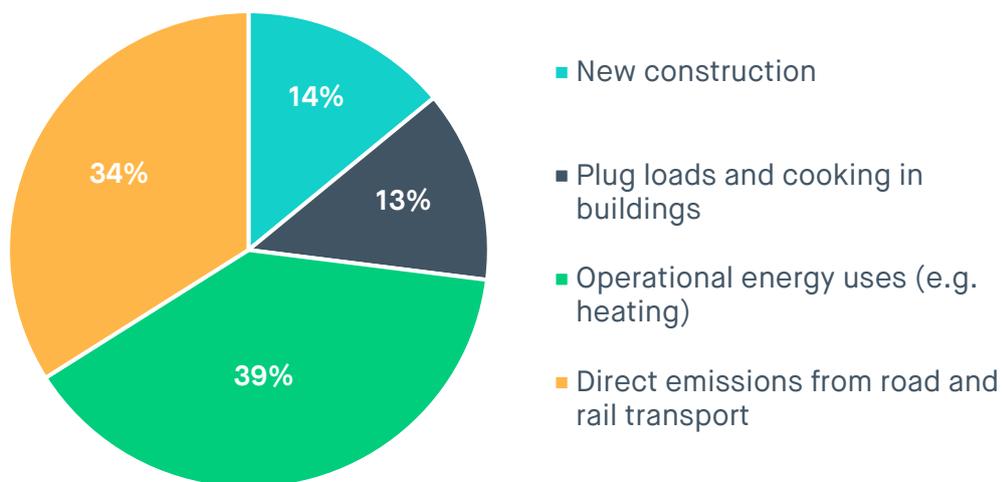
## RECOMMENDATIONS

- Local government in the UK should explore the potential of green bonds to finance investment in sustainable energy, transportation and building solutions, drawing on the success of Swedish municipal green bonds.
- Government should explore the potential role of construction and building carbon taxes and carbon pricing mechanisms to incentivise sustainable development.
- Local and central government should consider its own scope for driving sustainable construction through procurement rules and planning requirements. This includes demanding more of the construction sector in terms of quantifying the embodied carbon associated with development, and demonstrating efforts undertaken to minimise embodied carbon – for example, through choice of building material.
- Based on the principles of “mission-oriented innovation”, local authorities should set an ambitious but realistic target to address the “grand challenge” of decarbonisation, adopting a whole systems approach which encourages innovation across departments and within the wider community to meet the target.

## INTRODUCTION – THE SCALE OF THE CHALLENGE

The transition to net zero carbon emissions, as part of efforts to avoid further global warming, will have significant implications for urban areas across the UK. According to the UK Green Building Council, the built environment accounts for about 40% of the country’s total carbon footprint.<sup>3</sup> This includes carbon emissions tied to construction of buildings, heating, transport-related emissions, and those associated with use of electrical appliances.

**Figure 1: Distribution of carbon emissions from the built environment**

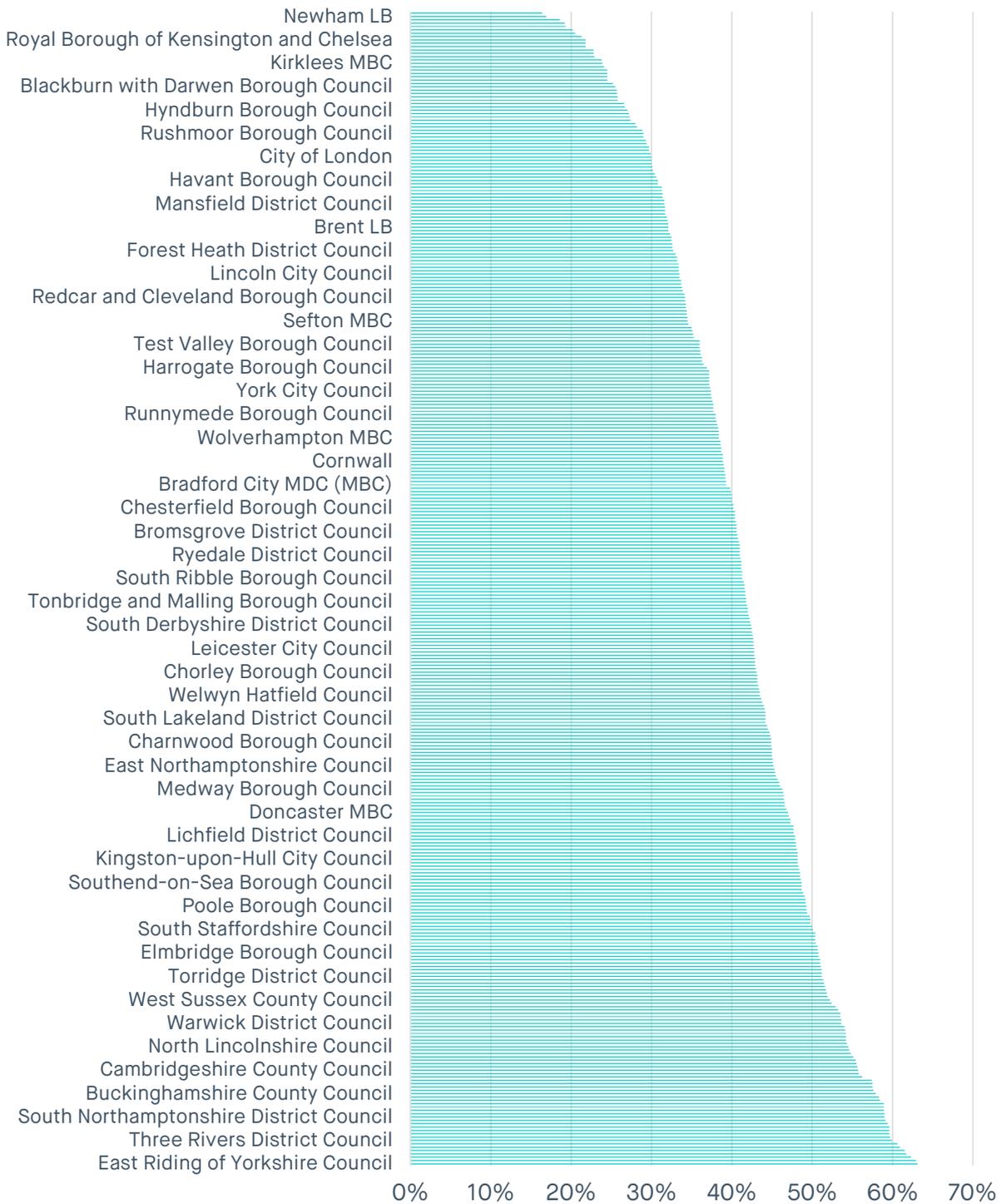


*Source: UK Green Building Council*

To decarbonise towns and cities – addressing these sources of emissions – we will need to transition away from gas heating, move towards greener forms of transportation, create buildings with low rates of “embodied carbon” and retrofit the existing stock of commercial and residential properties.

Communities also need to take steps to reduce waste and increase levels of recycling. As things stand, waste disposal, landfill and incineration account for 4% of greenhouse gas emissions and have a host of other negative environmental impacts. Recycling rates vary significantly across local authorities – from close to two thirds of waste recycled in the East Riding of Yorkshire to just 16% in the London Borough of Hammersmith and Fulham.

**Figure 2: % of local authority waste recycled, composted or reused, 2018/19**



Source: SMF analysis of Defra data

Achieving all of the above is no small feat; the Treasury and the Department for Business, Energy and Industrial Strategy (BEIS) has estimated that the costs of reaching Net Zero could stand at £70bn per year, or over £1 trillion by 2050.<sup>4</sup>

And, at present, it will be difficult for local authorities to meet the upfront and ongoing costs associated with decarbonisation. Despite being required to do more in light of the Net Zero agenda, local government lacks the financial ammunition required to enact deep change. Many authorities expect to cut – rather than expand – services over the coming years, even with increases in Council Tax.<sup>5</sup> They lack the resources to match ambitious targets on Net Zero, with the capabilities of most councils hollowed out over the past decade as a result of austerity measures which have left them deprived of expertise. Jobs in local government environment departments were often among the first to go over this period, with a severe skills shortage meaning councils lack the ability to, for example, do energy planning and design low-carbon transport systems.<sup>6</sup>

But difficult does not mean insurmountable, as we discuss in this briefing paper. There is scope to financially empower local authorities to meet their Net Zero commitments. And more can be done to channel private sector investment into the decarbonisation of our built environment, including through better “carbon pricing”. Breaking down silos between central government, local government and the private sector could also enable more effective and efficient Net Zero solutions.

## How much decarbonisation needs to be undertaken at the local level?

**“We need to permit and oblige local authorities to act on net zero”**

*SMF roundtable attendee*

It was generally agreed at our expert roundtable that local government had a significant role to play in helping the UK achieve Net Zero. While local authorities are directly responsible for just 2-5% of local emissions, it has been estimated that they can influence around a third of emissions in their area through leadership and place-making.<sup>7</sup> Authorities can take steps to reduce their own emissions, for example through operating council buildings in an energy-efficient way and investing in a low-emission/electric vehicle fleet. But they can also reduce emissions in the wider community through a range of channels such as:

- Using local planning policy to require Net Zero residential and commercial developments.
- Considering carbon emissions within procurement policies, and favouring suppliers that are taking steps towards Net Zero.
- Investing in green energy solutions, such as district heating networks. For example, the “Bunhill 2” district heating network, commissioned by Islington Council, which provides heat to 1,350 homes plus community buildings in north London, using unwanted heat from the London Underground.<sup>8</sup>
- Setting targets to “green up” the area, such as for planting additional trees.
- Forming “local climate partnerships” with local charities and businesses.
- Designing streets to encourage businesses and residents to act in a more sustainable way – for example, introducing cycle lanes and pedestrianizing town and city centres to reduce car use.

The Climate Change Committee has identified six “areas of influence” that councils have over carbon emissions, illustrated in Figure 3.

Despite the potential role that local authorities can play in delivering net zero, at our roundtable it was felt that councils faced challenges in turning this into reality. As mentioned earlier, financial constraints remain a major issue, limiting the ability of councils to deliver new initiatives, and even maintain existing services.

While local authorities are doing a range of good and innovative things with respect to Net Zero – such as supporting low-carbon district heat networks and installing solar panels, roundtable attendees felt that that the scale of existing schemes was often too small, due to financial constraints. Local authorities were “being ingenious because they have to be” and there has perhaps been an over-celebration of relatively modest schemes rather than focusing on how to scale interventions in a way that significantly decarbonises local communities:

**"Local authorities are being ingenious because they have to ... we cannot be celebrating Bunhill 2 [given the scheme’s relatively modest size]"**

**Figure 3: How local authorities control and influence emissions**



Source: Climate Change Committee<sup>9</sup>

Beyond finances, it was also felt that the actions of central government undermined the efforts of local authorities to drive sustainability agendas. In the words of one roundtable attendee:

*“The Whitehall megalomaniac attitude is unhelpful [for reaching net zero]”*

*“Local area energy planning is really important and needs to be designed locally and then aggregated at scale. We won’t fully decarbonise without this. Yet there is scepticism at HM Treasury about the efficiency of local energy (and local action generally) and that is where we need to provide evidence in a way that convinces them .... the current regulatory framework - involving the Distribution Network Operators and Ofgem - does not allow for the proper engagement of local authorities in the way plans are designed and delivered.”*

It has been argued that there is currently a disconnect between departmental priorities on the environment at a national and local level, which holds all departments and layers of government back. National policy mechanisms can work against local authorities making effective use of their potential to cut emissions, including “overriding national policy priorities that lock-in carbon emissions, funding models that hinder low carbon choices and siloed decision-making that pitches low-carbon options against other.”<sup>10</sup>

A recent report for the UK100 – a network for locally-elected leaders who have pledged to switch to 100% clean energy by 2050<sup>11</sup> – highlighted some of the disconnects that exist between central and local government. It noted that while BEIS has a focus on energy and fuel poverty, MHCLG itself has a focus on house building in large numbers rather than supporting homes that are green, energy efficient, kitted out with energy systems fit for the future (such as heat pumps) and served by sustainable public transport. There is no common Net Zero-aligned message from across government that reaches local authorities, nor a single common point of guidance and support for local authorities wanting to act.<sup>12</sup>

While BEIS leads on climate change, Net Zero is a whole-of-government target, with implications for almost every part of it. BEIS, the Department for Transport (DfT), MHCLG and Defra oversee sectors that are responsible for more than 80% of the UK’s current emissions.<sup>13</sup>

## FINANCING CHANGE

### Green bonds

To rise to the challenge of a transition to Net Zero, local authorities will need to be financially empowered. Given the fiscal challenges faced by councils, this must include new ways of generating tax revenues and raising capital. This is especially the case given recent changes to local authorities’ ability to take out Public Works Loan Board (PWLB) loans. PWLB interest rates were increased in 2019. In addition, loan terms have been tightened in a way which potentially limits the ability of authorities to make some investments, including investments in out-of-area renewable energy schemes.<sup>14</sup>

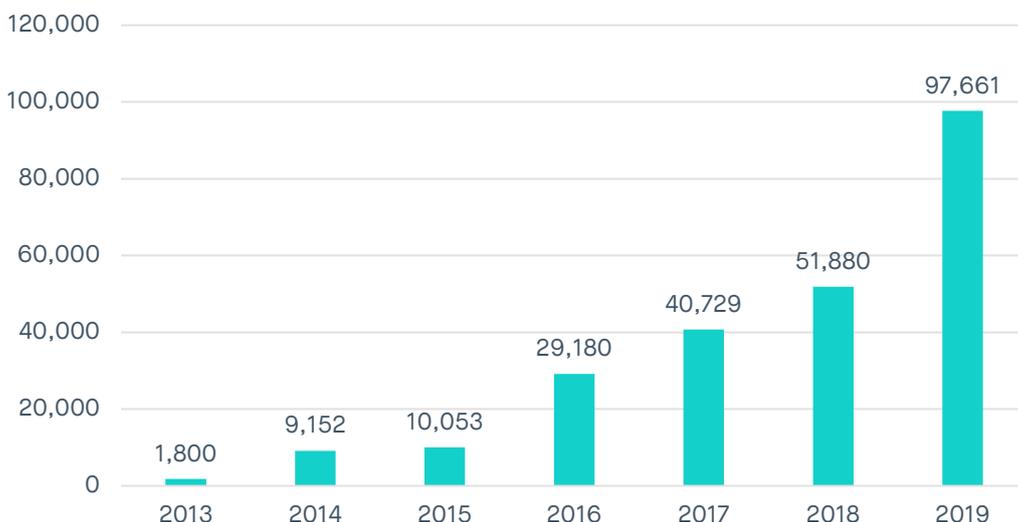
This could see growing local authority interest in alternative means of funding sustainability-related projects. One of the approaches to raising capital discussed at our expert roundtable was the issuance of “green bonds” by local authorities, with

Sweden highlighted as the world leader in this area and potentially an example for the UK to follow.

**Case study: green bonds in Sweden**

Green bonds are debt instruments linked to investments aiming to reduce impact on the climate and environment and contribute to sustainable development. This means that issuers of green bonds use the borrowed capital to finance specific projects or assets classified as green. The Swedish green bond market emerged out of demand from Swedish institutional investors, resulting in the World Bank issuing the first green bond for institutional investors in 2008. In 2013, the first green bonds were issued in the Swedish municipal and business sectors<sup>15</sup> and by 2018 green bonds accounted for 10% of the total Swedish krona bond market.<sup>16</sup>

**Figure 4: Green bonds issued in Sweden (million SEK)**



Source: Environmental Finance Bond Database

Between 2017 and 2020, green bond projects in the capital, Stockholm, have avoided almost 40,000 tonnes of carbon dioxide emissions, which corresponds to the emissions from over 100,000 single trips between Stockholm and Paris by airplane.<sup>17</sup> Of this 40,000 tonnes reduction in CO2 emissions, three quarters (76%) is a result of investment in clean transportation, such as an extension of the Stockholm Metro, and a quarter (24%) investment in green buildings such as new, sustainably-constructed hospitals.<sup>18</sup>

Central and local government in the UK is starting to take interest. The March 2021 Budget saw the Chancellor, Rishi Sunak, announcing that the Government will issue its first sovereign green bonds this year, with green gilt issuance for the 2021/22 fiscal year totalling a minimum of £15 billion. The Budget also announced the introduction of

a green retail savings product through National Savings and Investment, which “will give all UK savers the opportunity to take part in the collective effort to tackle climate change, benefiting from the innovative reporting standards planned for the green gilt programme.”<sup>19</sup>

Within local government, last year saw West Berkshire Council launching the first local government green bond, with a view to raising £1 million to fund solar panel installations on five council-owned buildings.<sup>20</sup>

West Berkshire’s green bond uses Community Municipal Investment (CMI), developed by Abundance Investment, which allows individuals to invest directly into councils and provide such investors with a low-risk return. With CMI, councils set out how they will use money raised for each investment, and the council is responsible for managing and delivering the project. Individuals’ and institutions’ investments then sit alongside other council sources of borrowing for infrastructure, such as HM Treasury’s Public Works Loan Board. The implication of this is that investments are not directly linked to the green project itself and instead linked to the wider financial position of the council, minimising risks to investors associated with a setback in the green project.<sup>21</sup>

The emerging evidence on green bonds suggests that the demand is there, with a “greenium” which sees these bonds having a lower yield than conventional bonds, reflecting demand for sustainable fixed income investments which, for now, is high relative to supply of such investment opportunities.<sup>22</sup> Investors are willing to accept weaker returns from green bonds than those they expect from comparable non-labelled bonds, which in turn implies reductions in the cost of capital for green bond issuers.<sup>23</sup>

Having said that, there are reasons to expect that the greenium could diminish in size over time, as the green bond market develops and the current undersupply of sustainable investment opportunities diminishes. The Local Government Association (LGA) has argued that, going forward, financial terms for the Public Works Loan Board and green bonds are likely to be similar. Further, the LGA argues that green bonds are unlikely to raise all of the funding necessary for larger projects.<sup>24</sup>

Given that green bonds tend to finance or re-finance projects that would have happened without this financial instrument, there has been a large debate on what ‘additionality’ or added value green bonds deliver.<sup>25</sup> One study looking at Sweden found that the incentives for engagement with the green bond market are dominated by “business-case” incentives rather than “financial” incentives. For example, organisations may issue green bonds to improve their reputation, attract staff and, in the case of private enterprise, attract customers.<sup>26</sup>

For local government in the UK, even if there are limited financial incentives, green bonds may hold an advantage over conventional means of raising capital. In particular, they could provide an opportunity to better connect local people to projects in their area – such as through a webpage outlining green bond issuances, investment opportunities and details of the projects green bonds are supporting. Given this potential to improve public buy-in, the LGA has suggested that optimal solution for

green projects may be a blend of green bond and Public Works Loan Board financing – particularly where both local connection and larger funding packages are required.<sup>27</sup>

### Recommendation

Local government in the UK should explore the potential of green bonds to finance and build local support for investment in sustainable energy, transportation and building solutions, drawing on the success of Swedish municipal green bonds.

Green bonds have potential, but there are also emerging risks in the market that threaten to tarnish their legitimacy – in particular, risks associated with so-called “greenwashing”. This is where allegedly sustainable activities, such as green bond issuance, are used by an organisation to make the public believe that the organisation is doing more to protect the environment than it really is.<sup>28</sup> It has also been claimed that some first-time green bond issuers are “opportunistically” issuing to take advantage of lower interest rates relative to conventional bonds, rather than out of a genuine desire to finance a sustainable investment.<sup>29</sup> Indeed, a study by the Bank for International Settlements (BIS), which looked at firms that had issued green bonds, found no strong evidence that green bond issuance is associated with any reduction in carbon intensities over time at the firm level.<sup>30</sup>

A “Wild West” green bond market, with a significant proportion of issuers doing so for opportunistic reasons, could undermine faith among investors, erode the “greenium”, and limit environmental gains – highlighting the need for effective regulation of the sector.

If UK local government is to venture more into this market, it needs to do so with good intentions – to genuinely shift the dial on sustainability at a local level, rather than as a headline-grabbing exercise which helps councils mask shortcomings in addressing sustainability issues in practice. And the local government community needs to audit each other’s rhetoric on green bonds. It only takes one bad apple to spoil the barrel, and discredit a sector which has potential for fund-raising and bolstering public buy-in.

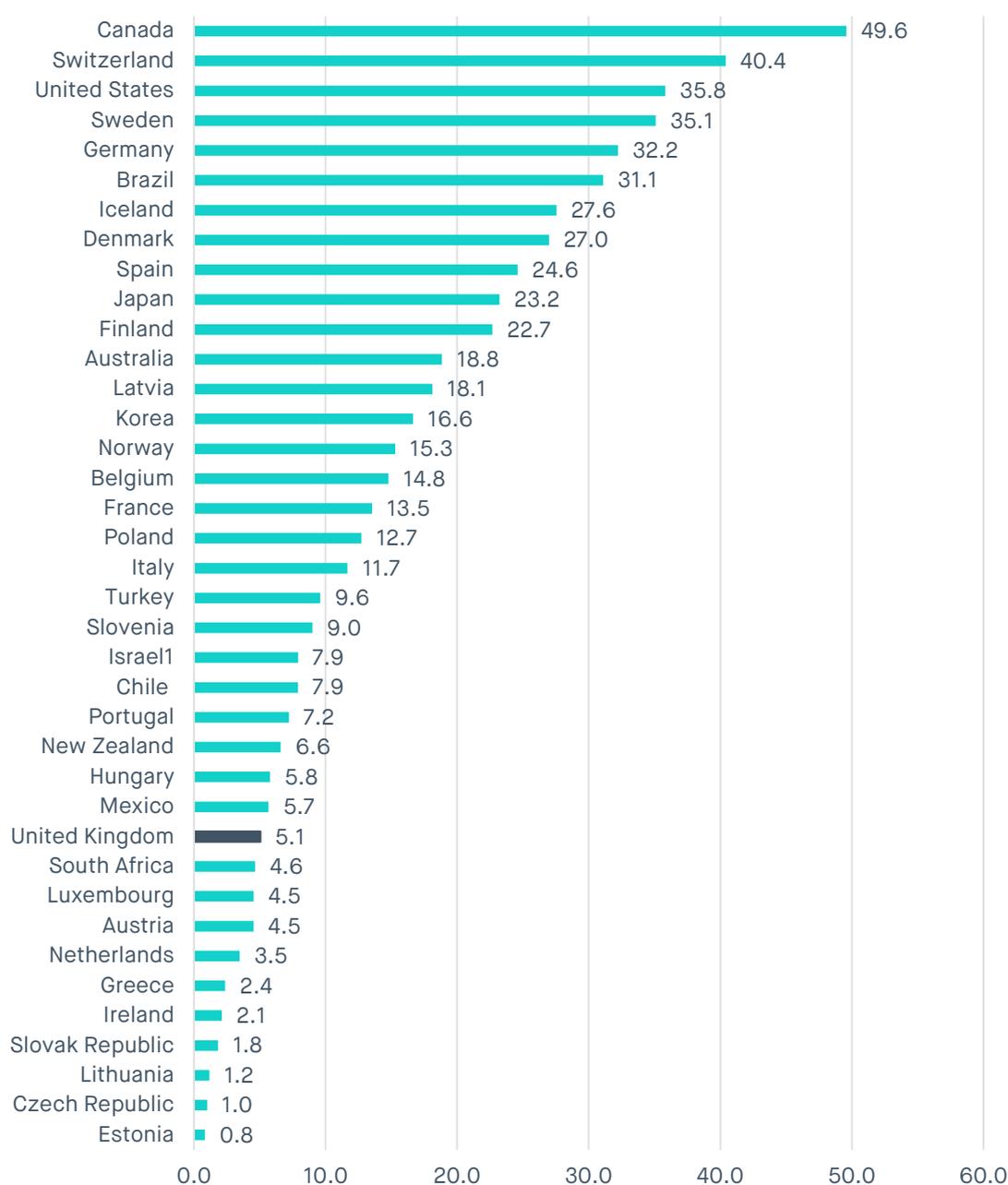
### Beyond bonds

Having discussed the potential role of green bonds, it is important to emphasise that they are far from the whole solution for empowering local government to deliver on Net Zero. Councils need to be able to collect additional revenues, yet at present their hands are tied; local government in the UK has very limited revenue-raising powers and the country is one of the most centralised in the developed world. According to Organisation for Economic Cooperation and Development (OECD) data for 2018, sub-central government accounted for just 5% of total tax revenues in the UK. As shown in the chart below, this compares with 14% in France, 32% in Germany and close to 50% in Canada.<sup>31</sup> While local authorities may have the power to spend on initiatives that

improve sustainability in our towns and cities, without the tax revenues to enable such spending they are in practice disempowered.

In our previous report in this series, the SMF recommended that local authorities should be granted new revenue-raising powers to support park maintenance, drawing on US “Park Districts” where additional property taxes can support park and trail maintenance.<sup>32</sup> Beyond the health benefits of parks and trails, which we explored in that report, they could play an important role in creating more sustainable communities, with urban green space sequestering carbon.<sup>33</sup>

**Figure 5: sub-central tax revenue, as a % of total tax revenues, 2018**



Source: OECD

## Carbon pricing and benchmarking

In addition to better enabling local councils to make the investments needed to reach Net Zero, more also needs to be done to incentivise private developers to construct more sustainable new buildings and retrofit existing ones in a green way.

As with councils, green bonds may be part of the answer here. In the words of one roundtable attendee:

**“money isn't funding sustainable development at the local-level because [investment] vehicles aren't there.”**

Green bonds could be an attractive way of allowing developers to raise capital and channelling investor money towards more sustainable projects.

Policy also needs to take further steps to discourage unsustainable development. To achieve this, we need to ensure that the environmental costs of construction-related carbon emissions – including the “embodied carbon” in buildings – is properly reflected in things such as the cost of construction materials, and indeed the price of existing properties on the market. Embodied carbon means all the CO<sub>2</sub> emitted in producing materials. It is estimated from the energy used to extract and transport raw materials as well as emissions from manufacturing processes. The embodied carbon of a building can include all the emissions from the construction materials, the building process, all the fixtures and fittings inside as well as from deconstructing and disposing of it at the end of its lifetime.<sup>34</sup>

Through effective “carbon pricing” which reflects embodied carbon, policymakers can help incentivise private developers to use more environmentally-friendly materials such as bamboo, limestone and cross-laminated timber (CLT). From an environmental perspective, wood-based construction is particularly attractive given that it can sequester carbon and thus be associated with a *reduction* in carbon emissions. This has seen increasing interest in CLT-constructed high rise development – for example, the Department of British Columbia in Canada recently doubled the height limits allowed for “timber towers”.<sup>35</sup>

**Figure 6: Carbon impact per cubic metre of material, measured in kg of CO<sub>2</sub>**



Source: Feilden Clegg Bradley Studios

Ensuring carbon is reflected in material costs, through for example a carbon tax, would deter developers from using materials that have high embodied emissions while also providing a source of revenue for government.

Having said that, while appealing in theory, measuring the embodied carbon of buildings is often difficult. The construction value chain (CVC) is complex, with large projects having long life cycles and multiple actors involved. The distribution of carbon emissions across the value chain – from raw materials to transportation to lifecycle energy costs of buildings – limits accountability and coordination to reduce emissions associated with the built environment.

The International Finance Corporation – a sister organization of the World Bank – has proposed a new integrated Carbon Pricing Mechanism (CPM) for the CVC. This would see a threshold or blanket carbon price covering supply chain construction activities and energy use. The CPM would account for whole-life carbon performance at the point of project-making, creating an incentive to tackle carbon at the beginning of the asset's life cycle by those charged with its design, thus cascading low-carbon objectives along the value chain.<sup>36</sup>

As well as a carbon tax, policymakers can create stronger incentives for sustainability elsewhere in the tax system – for example, through having lower rates of VAT for renovation and repair, or varying rates of corporation tax according to companies' sustainability credentials.

### Recommendation

Government should explore the potential role of construction and building carbon taxes and carbon pricing mechanisms to incentivise sustainable development.

### Getting ESG investors on board

Beyond tax, there is scope for the investment community to better scrutinise the environmental credentials of businesses, including those related to a company's development and use of the built environment, especially given growing interest in the ESG (environmental, social and corporate governance) agenda and the links between ESG and "responsible investment".

Indeed, investor rating and measurement indices are starting to include assessment of embodied carbon, such as<sup>37</sup>:

- The Dow Jones Sustainability Index (DJSI) now includes a section about the lifecycle assessment of building materials;
- The FTSE4Good Index asks questions on lifecycle studies and related carbon emissions reductions;
- Not-for-profit charity CDP includes voluntary reporting of Scope 3 emissions (defined as indirect emissions beyond building performance and materials);

- The Global Real Estate Sustainability Benchmark (GRESB) survey has a significant volume of questions on new construction and major renovations.

Ultimately, what gets measured, gets managed. The more information investors have on embodied carbon in buildings, the environmental impact of decisions along the construction value chain and the credentials of developers, the more likely we are to move towards a future with a more energy efficient and sustainable built environment - as ESG investors demand more of the construction industry.

With that in mind, the Carbon Leadership Forum, a non-profit consortium of construction-industry players, has developed the Embodied Carbon in Construction Calculator (EC3). EC3 is a free tool that uses data to inform material choices in developments and tackle “cradle-to-gate” embodied carbon.<sup>38</sup> The software provides access to a database of 16,000 materials that is searchable based on environmental performance requirements, design specifications, project location or global warming potential. Microsoft was the first to pilot the tool on a large project remodelling the campus of its corporate headquarters in Redmond, Washington. In a 2019 blog post, Bill Gates recognized EC3 as the type of technology that will aid us in getting to net zero emissions.<sup>39</sup>

In trials, EC3 enabled Skanska USA – a development and construction group - to reduce the carbon costs of designs by up to 30%, in most cases without increasing construction costs.<sup>40</sup>

### Recommendation

Local and central government should consider its own scope for driving sustainable construction through procurement rules and planning requirements. This includes demanding more of the construction sector in terms of quantifying the embodied carbon associated with development, and demonstrating efforts undertaken to minimise embodied carbon – for example, through choice of building material.

## BREAKING DOWN SILOS

As mentioned earlier, institutional silos are likely to be undermining efforts to decarbonise local communities, with a disconnect between department priorities at a national and local level. Furthermore, private developers and government are unlikely to be acting in a well-coordinated way when it comes to getting the built environment to Net Zero. At our expert roundtable, it was also noted that siloed thinking can undermine efforts to achieve sustainability *within* central and local government. By operating in isolation, local government departments may be missing opportunities to collaborate on Net Zero or decarbonise in a more efficient way.

Climate change has often been viewed as an isolated challenge that can be solved by one department within a government organisation or one sector in the economy. It has been argued that this confined frame of thinking has, in part, led policymakers to

design solutions that focus on addressing individual sectors such as transport or energy production. In addition, this prevailing approach often leads policymakers to focus on technological innovation – such as electric vehicles and renewable energy developments – as the primary solution to climate change. This leads to an under-focus on the role of changing the behaviours of businesses and households to reach Net Zero, such as discouraging car use, discouraging wasteful use of electricity and gas and tackling spending on products that are particularly bad for the environment.<sup>41</sup>

To create green towns and cities, siloes need to be broken down, and a “whole systems approach” to sustainability adopted, which addresses the entire system rather than considering its strands in isolation. Such an approach creates a whole range of opportunities; industry and local government could collaborate to identify new opportunities for district heat networks, which use the heat generated from industrial processes to warm homes. Better communication between on-the-ground waste collection teams and council officers focused on sustainability could identify localities where recycling rates are particularly low – providing insights for localised campaigns to encourage greater rates of recycling.

One approach local authorities can take to bring about systems change to reach net zero is through “mission-oriented innovation”. According to economists Mariana Mazzucato and George Dobb, missions address a specific ‘grand challenge’ – such as climate change and the need to reach Net Zero – and set a clear, time-bound target that inspires society to come together to create solutions. They set out five criteria for developing missions.<sup>42</sup> They should:

1. Be bold.
2. Set a clear direction and measurable target.
3. Be ambitious but realistic.
4. Encourage innovation across sectors and disciplines; and
5. Be open to being addressed by different types of solutions.

The approach produces solutions to grand challenges through ‘mission roadmaps’, blueprints that distinguish between ‘sectors’ that carry out innovation activities, and the individual ‘actors’ that steer and guide actions. Local authorities can use mission roadmaps as a tool for planning systems change by carefully designing a series of overlapping projects that bring multiple sectors together to act as a whole, cohesive group. Missions can enable communities to address climate change by bringing together a wide group of actors to create solutions collaboratively.

### Recommendation

Based on the principles of “mission-oriented innovation”, local authorities should set an ambitious but realistic target to address the “grand challenge” of decarbonisation, adopting a whole systems approach which encourages innovation across departments and within the wider community to meet the target.

## POLITICAL BARRIERS TO REACHING NET ZERO AT THE LOCAL LEVEL

Lastly, some remarks on the politics of sustainability.

Beyond the financial challenges associated with achieving Net Zero, there are also potentially significant political barriers to the implementation of green initiatives. A case in point is perhaps the vocal opposition to the rollout of more Low Traffic Neighbourhoods (LTN) over the course of the Coronavirus pandemic. LTNs involve, among other things, closing off some road entrances to reduce the flow of vehicles. While LTNs have the potential to reduce air pollution, make streets safer and encourage greener forms of transportation such as walking and cycling, their implementation has triggered acts of protest and road rage, for example with vehicles mounting the pavement to avoid blockades.<sup>43</sup>

And such public discontent has in turn led to politicians backtracking. In London, Ealing Council ended the trial of a LTN and has promised to give residents “the final say” on future schemes. In the London Borough of Harrow, the council recently removed its “Streetspace” cycle lanes, following residents’ concerns about the impact of such lanes on traffic flows and congestion.<sup>44</sup>

The reality is that sustainability can only be achieved through changes in our day-to-day lives, some of which will be unpopular with a portion of the population, at least in the short-term. Urban spaces will need to become less car dependent; while electric vehicles eliminate fuel-related emissions from driving, there are still environmental costs associated with vehicle manufacturing. There will also need to be changes to how commercial and residential buildings are heated, with a shift away from gas central heating to alternatives such as heat pumps and district heat networks. Heat pumps have been in the firing line recently both because of their cost<sup>45</sup> and concerns that they may not heat homes to as warm a temperature.<sup>46</sup>

There is a real need for politicians to hold firm in the face of opposition to measures such as LTNs. This is especially the case given that opposition will often be fleeting, with much greater public buy-in in the longer-term. This is particularly likely if “green” measures are complemented with efforts to bolster the local economy and a sense of community. Several of our expert roundtable attendees felt that pandemic-driven pedestrianisation of areas such as Soho in London showed how a reduction in car dependency could revitalise places, ushering in an outdoor “café culture” and helping grow communities:

*“[On LTNs] people need to hold their nerve as the issue will die down over time”*

*“We found that when talking to some ‘Shire Tory’ council members, their leaders were worried about lots of [the green] agenda, until we presented it as a way of them being able to do the things they have always wanted to do: grow communities organically, with walkable amenities (schools, doctors surgeries etc) and better public transport.”*

*“[Through re-greening], we can bring back lives to streets in a different way”*

Indeed, some thought the pandemic may change the politics around Net Zero, with the public now perhaps more open to sustainable measures which promote localism and greener forms of transportation:

*“During the pandemic, people have enjoyed spending more time in their local area, spending more time on the bike etc.”*

At the same time, it was noted that policymakers need to be careful in their dialogue with the public and avoid being too dismissive of the objections put forward to interventions such as LTNs. Collaborative events were seen as an opportunity to engage with the community in a constructive way and overcome political hurdles:

*“The key thing about building public consent and support is the psychology of loss that drives a lot of resistance, be that a car, a view, a parking space, or indeed a playing field .... so we need to understand how much we need to manage that. Simply saying ‘don’t look at that loss, look at this thing you never knew you wanted’ is counterproductive ...”*

*“We have found that starting with collaborative events involving the community - asking the question ‘how can we make our town better?’ - seems to work well. Sustainability issues always come up, people don't like air pollution, they want more trees and nature, want to create jobs, get it that we need to go net zero etc. And then the politicians have the permission and buy-in to take action and we have found that the community naturally just starts working together to create jobs, projects and opportunities”*

Having said that, while collaborative events and achieving public buy-in may be important, there are likely to still be instances where local government needs to listen less and lead more. Ealing Council’s promise to give residents a say in the establishment of new LTNs drastically increases the chance that they will not happen, regardless of the environmental, social and economic benefits. Humans are often averse to change and short-sighted – focused on the immediate inconvenience of LTNs (having to drive a different route or consider alternative transport) over the longer term benefits to the environment and street “ambience”.

As well as holding their nerve on issues such as LTNs, local government also needs to support residents to minimise the inconveniences associated with the shift to net zero – for example, through improving public transport networks, working with the private sector to roll out car-sharing clubs and cycle schemes, and improving the electric vehicle charging network to encourage more households to ditch petrol and diesel vehicles. Insofar as it is possible, “green” measures should not make the public’s day-to-day lives considerable harder – just different (e.g. in terms of mode of transport used).

Done right there is scope to greater greener towns and cities across the UK. Getting to Net Zero will not be easy, with local communities facing financial challenges and political hurdles. But these barriers can be overcome. Giving councils new revenue-raising powers. Green bonds. A carbon-pricing regime that incentivises more sustainable construction. Breaking down silos so government departments and businesses work effectively together. Demonstrating the ability of the green agenda

to revitalise local communities and economies. Collectively, these could go some way to getting us to where we need to be.

## ENDNOTES

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<sup>1</sup> The event brought together experts from local and central government, planning, development, real estate and the environmental sector to discuss the need for more sustainable towns and cities, and the means of delivering “Net Zero” communities.

<sup>2</sup> The views expressed in this publication are not necessarily the views of DAC Beachcroft. No liability is accepted to users or third parties for the use of the contents or any errors or inaccuracies therein. Professional advice should always be obtained before applying the information to particular circumstances. For further details please go to [www.dacbeachcroft.com/en/gb/about/legal-notice](http://www.dacbeachcroft.com/en/gb/about/legal-notice). Please also read our DAC Beachcroft Group privacy policy at [www.dacbeachcroft.com/en/gb/about/privacy-policy](http://www.dacbeachcroft.com/en/gb/about/privacy-policy). By reading this publication you accept that you have read, understood and agree to the terms of this disclaimer

<sup>3</sup> <https://www.ukgbc.org/climate-change/#:~:text=The%20built%20environment%20contributes%20around,do%20with%20their%20functional%20operation>.

<sup>4</sup> <https://www.instituteforgovernment.org.uk/explainers/net-zero-target>

<sup>5</sup> <https://www.lgcplus.com/finance/government-overly-optimistic-about-council-finances-mps-warn-04-06-2021/>

<sup>6</sup> <https://www.instituteforgovernment.org.uk/sites/default/files/publications/net-zero-government-climate-change-target.pdf>

<sup>7</sup> <https://www.local.gov.uk/publications/councillors-workbook-local-pathway-net-zero#3-opportunities-for-action>

<sup>8</sup> <https://uk.ramboll.com/projects/ruk/heating-up-london>

<sup>9</sup> <https://www.theccc.org.uk/publication/local-authorities-and-the-sixth-carbon-budget/>

<sup>10</sup> Power\_Shift.pdf (uk100.org)

<sup>11</sup> <https://www.uk100.org/about>

<sup>12</sup> Power\_Shift.pdf (uk100.org)

<sup>13</sup> <https://www.instituteforgovernment.org.uk/sites/default/files/publications/net-zero-government-climate-change-target.pdf>

<sup>14</sup> Power\_Shift.pdf (uk100.org)

<sup>15</sup> [https://www.riksdagen.se/globalassets/dokument\\_eng/debt/borrowing/swedens-sovereign-green-bond-framework.pdf](https://www.riksdagen.se/globalassets/dokument_eng/debt/borrowing/swedens-sovereign-green-bond-framework.pdf)

<sup>16</sup> Full article: Understanding the role of green bonds in advancing sustainability (tandfonline.com)

<sup>17</sup> Green bond impact report 2020 - Region Stockholm (sll.se)

<sup>18</sup> Green bond impact report 2020 (sll.se)

<sup>19</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/966868/BUDGET\\_2021\\_-\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/966868/BUDGET_2021_-_web.pdf)

<sup>20</sup> <https://www.localgov.co.uk/Council-launches-UKs-first-local-government-green-bond/50787>

<sup>21</sup> <https://www.abundanceinvestment.com/how-it-works/about-municipal-investments>

<sup>22</sup> Evidence of 'greenium' grows as demand for green bonds outstrips supply (institutionalassetmanager.co.uk)

- <sup>23</sup> Full article: Understanding the role of green bonds in advancing sustainability (tandfonline.com)
- <sup>24</sup> Financing Green Ambitions - Full report | Local Government Association
- <sup>25</sup> <https://www.tandfonline.com/doi/full/10.1080/20430795.2020.1724864>
- <sup>26</sup> <https://www.tandfonline.com/doi/full/10.1080/20430795.2020.1724864>
- <sup>27</sup> Financing Green Ambitions - Full report | Local Government Association
- <sup>28</sup> <https://dictionary.cambridge.org/dictionary/english/greenwash>
- <sup>29</sup> <https://www.internationalinvestment.net/news/4026272/bond-investors-risk-victims-greenwashing>
- <sup>30</sup> [https://www.bis.org/publ/qtrpdf/r\\_qt2009c.htm](https://www.bis.org/publ/qtrpdf/r_qt2009c.htm)
- <sup>31</sup> <https://www.oecd.org/tax/federalism/fiscal-decentralisation-database/>
- <sup>32</sup> <https://www.smf.co.uk/wp-content/uploads/2021/01/Health-on-the-high-street-January-21.pdf>
- <sup>33</sup> [https://ec.europa.eu/environment/integration/research/newsalert/pdf/281na1\\_en.pdf](https://ec.europa.eu/environment/integration/research/newsalert/pdf/281na1_en.pdf)
- <sup>34</sup> <https://www.ucl.ac.uk/engineering-exchange/sites/engineering-exchange/files/fact-sheet-embodied-carbon-social-housing.pdf>
- <sup>35</sup> <https://www.theguardian.com/cities/2019/jul/22/canadian-cities-take-wooden-skyscrapers-to-new-heights>
- <sup>36</sup> World Bank Document
- <sup>37</sup> UK-GBC EC Developing Client Brief.pdf (ukgbc.org)
- <sup>38</sup> Data to the rescue: Embodied carbon in buildings and the urgency of now | McKinsey
- <sup>39</sup> Buildings are bad for the climate | Bill Gates (gatesnotes.com)
- <sup>40</sup> <https://www.ribaj.com/products/open-source-embodied-carbon-construction-calculator-co2-emissions-stephen-cousins>
- <sup>41</sup> <https://www.ucl.ac.uk/bartlett/news/2021/apr/creating-green-cities-through-mission-approach?gridset=show>
- <sup>42</sup> [https://www.ucl.ac.uk/bartlett/public-purpose/sites/public-purpose/files/iipp\\_policy\\_brief\\_09\\_missions\\_a\\_beginners\\_guide.pdf](https://www.ucl.ac.uk/bartlett/public-purpose/sites/public-purpose/files/iipp_policy_brief_09_missions_a_beginners_guide.pdf)
- <sup>43</sup> Low Traffic Neighbourhoods: Anger, hate and the politics of the planter - BBC News
- <sup>44</sup> <https://www.mylondon.news/news/west-london-news/second-london-council-u-turns-20676473>
- <sup>45</sup> <https://www.thesun.co.uk/news/15068214/net-zero-boiler-ban-britains-poorest-cold/>
- <sup>46</sup> <https://www.telegraph.co.uk/environment/2021/04/04/home-radiators-will-have-ten-degrees-cooler-britain-reach-net/>