Mapping the Big Green Challenge

Appendices to the Report

Fred Steward, Sonia Liff & Marilyn Dunkelman

With support from Jayne Cox and Sara Giorgi

appleby
BROOKLYNDHURST

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1 Comparative Analysis of Characteristics of Proposal Types

Section 7.12 of the main report *Mapping the Big Green Challenge* highlighted the main issues of comparison between the proposal types into which applications to the BGC were grouped.

It compared types of 3rd sector organisations involved; carbon reduction and innovation goals; and innovation processes.

The purpose of this appendix is to provide this information in greater depth for those interested in pursuing particular dimensions.

It begins with comparative overviews of each type and then moves on to present data and analysis along particular dimensions.

Reference is made to sections of the main report where the definition of the concepts, their significance and findings for the sample as a whole are discussed.

Details of the classification used appear in appendix 3.

1 Comparative Analysis of Characteristics of Proposal Types

1.1   Proposal Types: Main Characteristics

The dominant characteristics are detailed for each proposals type – there are applications in each category which do not match all these factors.

Category / No. of Proposals	Groups	Carbon Reduction Goals	Openness and Networks	Process	Sustainment & Transferability	Common Strategies
Low Carbon Zones Geographical communities as a whole 44 applications	36 are grassroots, the majority of which are informal groups 8 are externally initiated, professionally led, majority are charities/ registered companies 60% energy/ sustainability focus 26% economic development & community services groups	Multiple measures, all include residential energy All practice; 27 also include product Also frequently mentioned: reducing car use, eating locally grown food, recycling, reducing waste & packaging Half regime-only, half niche plus regime (only 2 niche-only)	Largely open Grassroots groups have closer ties with target audience Professionally led tend to use community activists as intermediaries	Multiple activities Highly systemic – at community & household level rather than individual High level of action/ values/ understanding combined Very high on Understanding (above Action & Values), especially 'providing information'	Professionally led expect community groups to maintain the change, more likely to be directed Grassroots – highly undirected	Mixed packages of activities Information, advice: how to make easy energy savings in the home Neighbour networks Transition Town models Public meetings and events Carbon measurements by households Group purchasing Car share schemes Shared allotments Pledges and commitments
Low Carbon Local Projects Focussed projects within a geographical community 47 applications	More informal grassroots (33) than professionally led (14) Fewer non-environmental groups More non-energy environmental, esp transport	More focussed – fewer measures, but range of measures similar to Zones More likely to include Product than Zones, and 9 are Product only Mix of regime & niche	Less open than Zones Network ties as for Zones	Fewer, more focussed activities. Less systemic High on behavioural measures in general but lower level of action/ values/ understanding combined Higher on Action, lower on Understanding – more emphasis on people taking part in the project	Change more likely to be maintained by challenger group or intermediary group than with Zones, but this is primarily dependent on whether grassroots vs professionally led	Often an extension of an existing project (e.g. Zones) Online carbon footprint measurement/recording tools Grow locally, use locally - food, biomass fuel... Community action Community champions Self-sufficiency (food, energy) Group identity: weight watchers, loyalty cards, energy clubs

| Category / No. of Proposals	Groups	Carbon Reduction Goals	Openness and Networks	Process	Sustainment & Transferability	Common Strategies
Low Carbon Youth Schemes Aimed at schools, youth groups and children 39 applications	More professionally led (27) than grassroots (12) High number of partnerships Some involving children in planning, many not	Almost all practice (37) Some also with product Grassroots more likely to include product Highest proportion of regime over niche measures Highest proportion of general awareness raising rather than specific measures	More likely to use networks and be working with partners - esp. professionally led working with school and network of parents Ave. openness – professionally led more open than grassroots in this proposal type	Highly systemic High ratings for behavioural measures – higher than most on Values, but also high Understanding Use of networks, community action, and enabling through provision of skills	As before, professionally led more likely to be directed, e.g. learning programmes, or growth if schools are the challengers Schools maintaining the change themselves	Pester power Children are Our Future Measuring devices: tools providing feedback on energy use Games and competitions Relating climate change to other parts of the curriculum Making and doing Growing your own: school vegetable patches and orchards Making connections: e.g. fashion show to climate change Learning programmes: for teachers and children
Low Carbon Public Buildings Special buildings with historic or cultural significance, or functional buildings of value because of their use 35 applications	Many submitted by owners/occupiers of the buildings – not energy/sustainability focussed. Highest proportion of registered charities Few informal groups	All include product, and 13 are product only Energy use in the building, often coupled with transport (to/from) High niche content – largely renewable energy sources & biofuels	Have strong, existing ties with local community Average openness but more at extremes, i.e. very open or completely closed	Mostly systemic Higher on understanding and action rather than values Exemplars – use of building to demonstrate carbon reduction to rest of community	Mostly undirected: (project seen as focusing on specific buildings rather than a transferable idea)	Fitting out buildings as exemplars Supplementing demonstration with advice and information Measuring and reporting results Heritage, culture and history of iconic buildings: civic pride Niche measures and new techniques Providing local resources and services: reducing the need to travel Community centres as a focus for networking and social bonding

Category / No. of Proposals	Groups	Carbon Reduction Goals	Openness and Networks	Process	Sustainment & Transferability	Common Strategies
Low Carbon Enterprises Not-for-profit companies with a trading model as well as a social objective 46 applications	Social enterprises aiming to trade, and co-operatives Some charities converting to different funding model	All product, 46% product only Focussed, more often on single goals Energy supply, waste, re-use/recycling most common, also food growing / retail Both niche and regime (niche mostly energy supply & biofuels)	More speculative than established. Aim for close ties, especially one to one (with customers) Tend to be closed & independent. Higher tech schemes (e.g. energy) open at top end - need technical help	Tendency to be singular but many vertically systemic over supply chain Less behavioural measures (product focus). High on Action (e.g. in co-ops)	Most likely to go for organisational growth (of business), or in some cases transfer to a community group. Few undirected	Providing training and qualifications Cooperative buying and working Using profits to fund other activities Using available local resources: local waste as biofuel, canals for transport, energy from wind and water, food from the land, re-use of waste products Providing work & work experience for disadvantaged groups Paid workers as well as volunteers
Low Carbon Services Finance, advice, network support, training provision 34 applications Network proposals have different characteristics to other services	More professionally led (except for networking proposals) Mostly energy/ sustainability groups incl. Regional Energy Agencies Network proposals more likely from informal unconstituted groups	All practice, with some product Focussed Mostly awareness raising Mostly regime, high on home energy and transport (lifestyle changes & simple measures)	High level of speculative relationships over existing, and use of intermediaries to reach target audiences Networking services are very open; others are average	Mostly systemic Average level of action/ values/ understanding combined Higher on information, skills, networks and forums	Most likely category to consider transferability: registered companies offering finance/ advice/ training are mostly directed; informal groups (mostly networking) aiming for growth	Training courses Supporting other organisations; providing expertise Communication; meetings, conferences, CRAGs and Carbon Cafes, web forums Support tools: e.g. bike loans, energy measuring devices Helping to find funding; credit loan schemes, local offsetting Using the web & developing web2 tools; wikis, social networking, second life, carbon measuring, data collection and aggregation

Category / No. of Proposals	Groups	Carbon Reduction Goals	Openness and Networks	Process	Sustainment & Transferability	Common Strategies
Low Carbon Connections The target audience is a sector or groups with a specific interest, rather than a geographical community 25 applications Work place based have different characteristics	Many from within the sector ('grassroots' in this sense, but not geographical) High proportion of registered companies/ charities 9 work-place based looking inward at their own organisations	Multiple measures, often systemic vertically along a supply chain, as well as horizontal Diverse mix of product & practice Approximately even mix of regime and niche	Strong existing relationships with their targets – established from within the sectors Tend not to use intermediaries Mostly very open & collaborative (except work place based – more closed)	Very high level of action/ values/ understanding combined (highest of all categories) High on providing incentives, media campaigns and forums Tend to match activities to interests/attributes of their target audience	High number of growth rather than directed or undirected – setting up core groups that will continue after project Exceptions are work place based – undirected (do not extend beyond their own organisation)	Measures along the supply chain Capitalising on the value of existing networks Putting one's own house in order: making changes at work places and within one's own circle Greening the industry from within Collaboration within a business sector; open source Match the method to the audience (action for activists, understanding for academics...)
Low Carbon Inventions Products that are in the idea or research & development stage 15 applications	Mix of highly informal (family & friends) and 'experts' (academics, environmentalists, practitioners) Many 'new groups'	All product, very little practice Majority are in the long term feasibility range, many niche Evenly distributed over all carbon reduction goal categories	Highly open – all looking for collaborators and customers	Singular Very few behavioural measures. 3 products intended to support behaviour change	Where considered, looking for takeover (esp. Informal groups) or growth into a social enterprise (experts)	A good idea looking for a backer Research and development aims Strong product focus, weak on process

Category / No. of Proposals	Groups	Carbon Reduction Goals	Openness and Networks	Process	Sustainment & Transferability	Common Strategies
Low Carbon Originals Proposals that cannot be allocated to one of the proposal categories: goals that cut across categories, or different ideas that do not fit into other categories 35 applications	Small groupings evident but sample sizes too small to generalise. Include: Mobile exhibition/advice centres – 3 proposals New settlements using eco-building principles – 2 proposals Campaigns to bring about specific changes – 7 proposals					

1.2 Challenger Group Formality

See section 3.3.1 of the main report
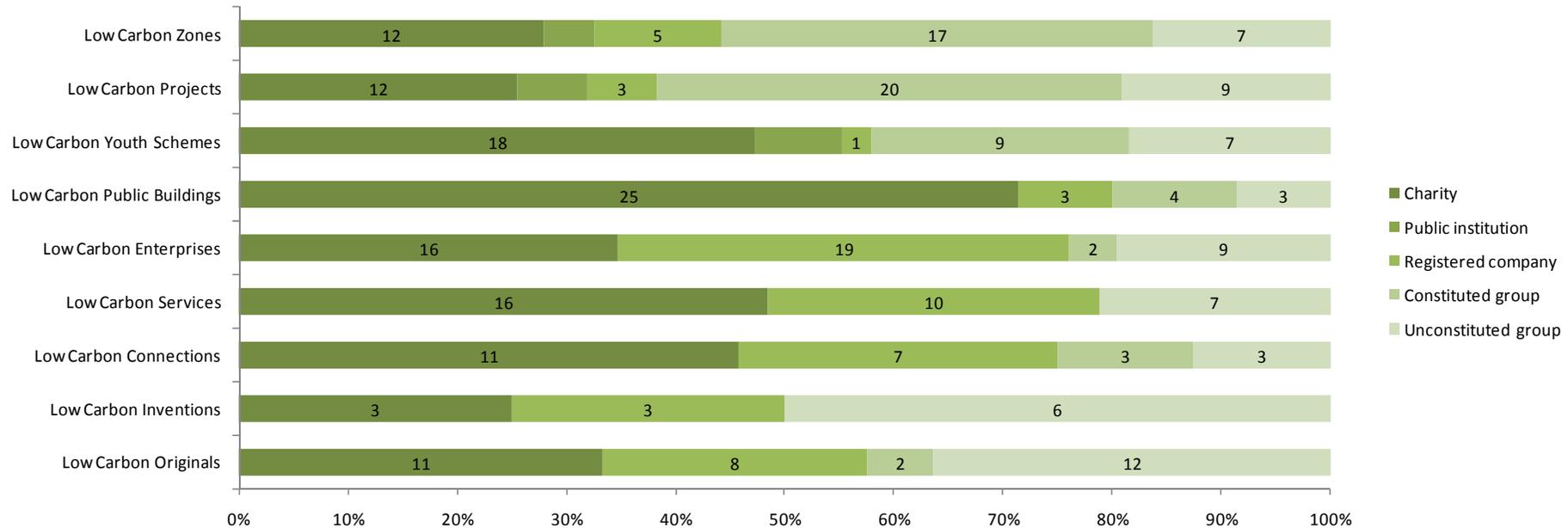
Informal groups (constituted and un-constituted) tend to focus their proposals within clear geographical areas - the Zones and Local Projects proposals. Charities feature prominently in the Public Buildings proposals, largely because they are the owner/occupiers of the buildings, and many of these organisations have a non-environmental focus. These include charities relating to arts, crafts and heritage, and the provision of local services.

Formal groups (charities and registered not-for-profit companies) are more likely to propose Youth Schemes or Services offering advice and financial support. This is where the Regional Energy Agencies and Rural Community Councils and other service organisations tend to focus their proposals. However there are a number of externally driven (professionally led) proposals from formal organisations within the Local Projects. These include some Regional Energy Agencies (a combined heat and power scheme and a project to reduce car emissions), Parish Councils and local branches of national charities such as Groundwork and the Royal Horticultural Society.

The Enterprise category is also mostly comprised of proposals from registered companies, as would be expected, with some informal groups intending to set up as social enterprises.

There are also more formal groups in the Connections proposals category, but this is skewed by the inclusion of the work-place based proposals which are all from charities aiming to reduce emissions within their own organisations. Without these, the Connections category is more evenly split between formal and informal groups, with most being created from within their business sector and therefore less likely to have an energy/sustainability focus.

1.3 Challenger Group Focus
See section 3.4 of the main report
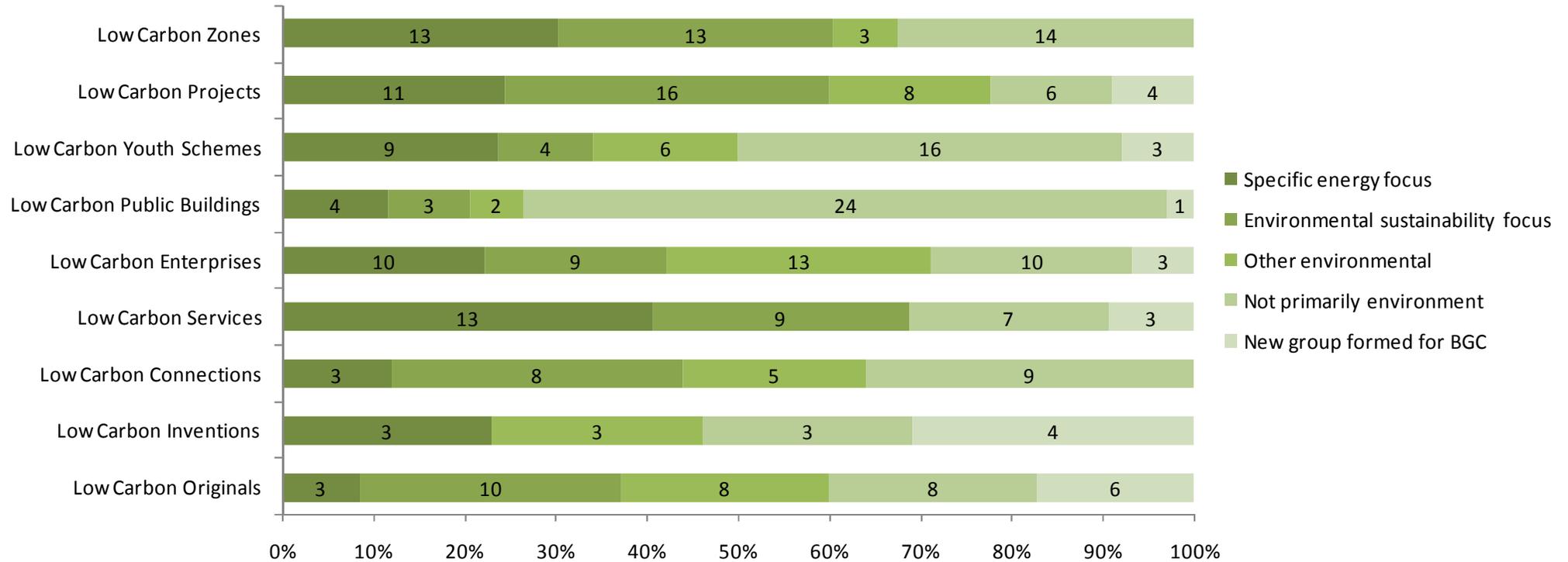
Zones, Local Projects and Services had a majority of proposals coming from groups with a specific energy or sustainability focus. Public Buildings had the largest proportion of proposals coming from groups with no environmental focus and for Youth Schemes it was the largest category. These included ones proposed, for example, by groups involved in arts and design.

However many of the types did have a significant number of proposals from groups which are not primarily environmentally focussed including Connections and Zones.   The Zones proposals from non-environmental groups are mostly from organisations involved in the provision of community services or economic regeneration and so have a strong interest in that particular geographical area. These include development trusts, community associations and parish councils.

1.4   Challenger Group Origins

See section 3.3.2 of the main report
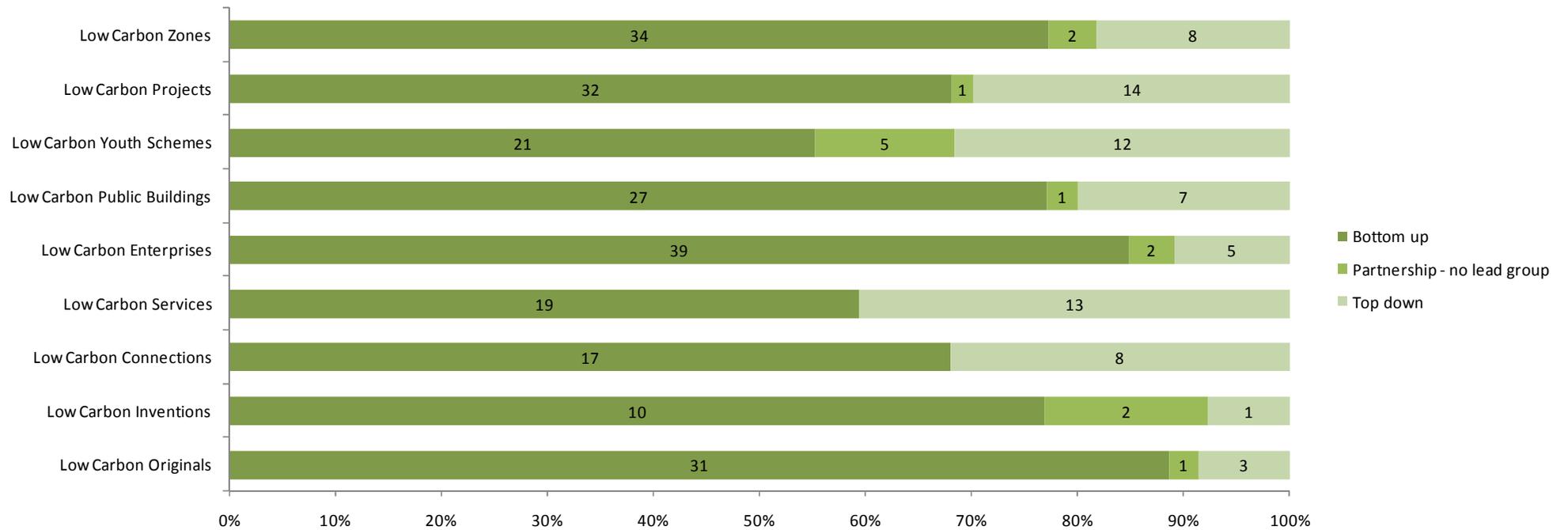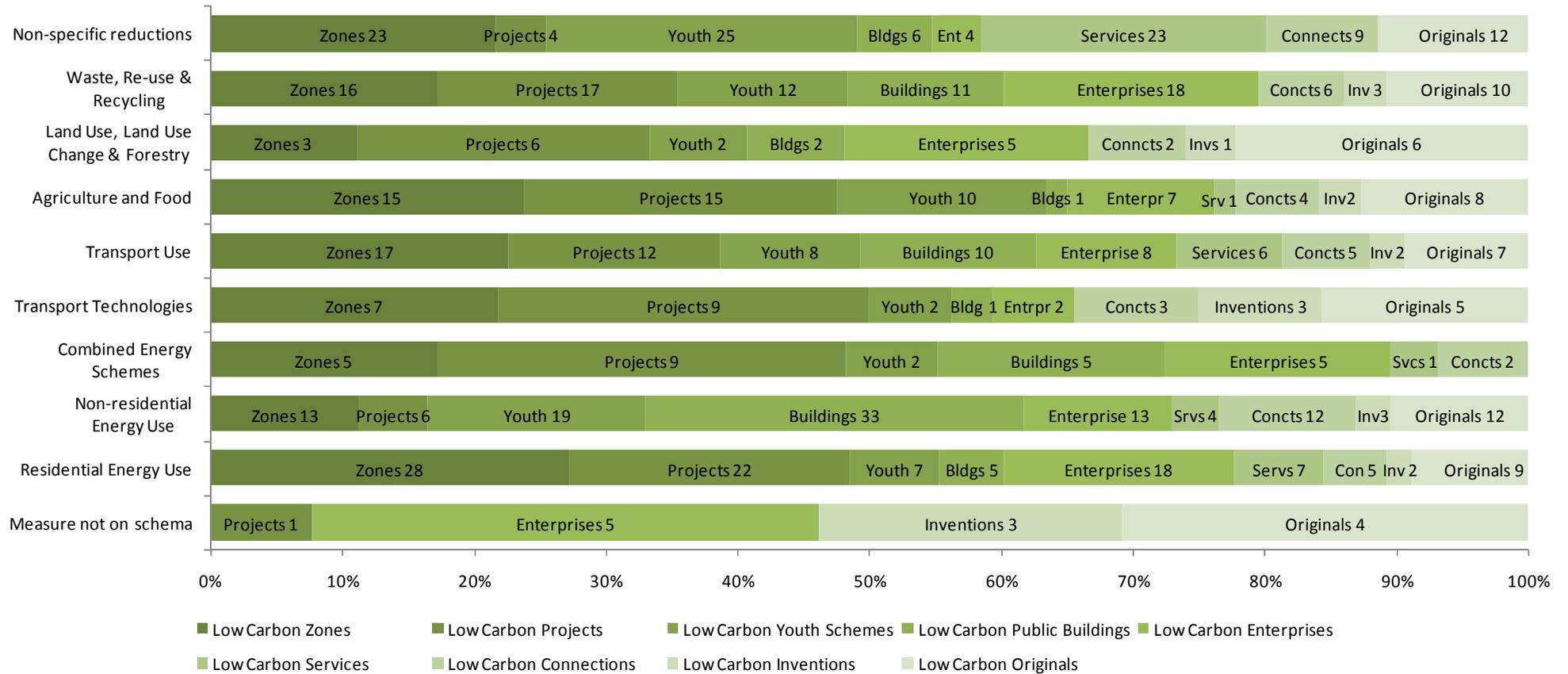

Only Services were proposed by a substantial proportion of top down groups (that is groups established by another body rather than having been created independently). However such groups were also present in significant minorities in Local Projects, Youth Schemes and Connections.

1.5 Carbon Reduction Goals

See section 4.1 of the main report

Top Level Carbon Reduction Goals	No. of Mentions across all Proposals	Low Carbon Zones	Low Carbon Local Projects	Low Carbon Youth Schemes	Low Carbon Public Buildings	Low Carbon Enter-prises	Low Carbon Services	Low Carbon Connec-tions	Low Carbon Inven-tions	Low Carbon Originals
Measure not on schema	13		1			5			3	4
Residential Energy Use	103	28	22	7	5	18	7	5	2	9
Non-residential Buildings Energy Use	115	13	6	19	33	13	4	12	3	12
Energy use in Industry	2					1			1	
Combined Energy Schemes	29	5	9	2	5	5	1	2		
Transport Technologies	32	7	9	2	1	2		3	3	5
Transport Use	75	17	12	8	10	8	6	5	2	7
Agriculture and Food	63	15	15	10	1	7	1	4	2	8
Land Use, Land Use Change & Forestry	27	3	6	2	2	5		2	1	6
Waste, Re-use & Recycling	93	16	17	12	11	18		6	3	10
Aviation & Shipping	6					2	1		1	2
Non-specific Reductions	106	23	4	25	6	4	23	9		12
Total	**664**	**127**	**101**	**87**	**74**	**88**	**43**	**48**	**21**	**75**
Number of proposals	320	44	37	39	35	46	34	25	15	35
Average no. of measures per proposal	2.1	2.9	2.7	2.2	2.1	1.9	1.3	1.9	1.4	2.1
Proportion of non-specific measures	16%	18%	4%	29%	8%	5%	53%	19%	0%	16%

Top level Carbon Reduction Goals – breakdown by Proposals Type (based on data in table above)

	Low Carbon Zones	Low Carbon Projects	Low Carbon Youth Schemes	Low Carbon Public Buildings	Low Carbon Enterprises	Low Carbon Services	Low Carbon Connections	Low Carbon Inventions	Low Carbon Originals
Non-specific reductions	Zones 23	Projects 4	Youth 25	Bldgs 6	Ent 4	Services 23	Connects 9		Originals 12
Waste, Re-use & Recycling	Zones 16	Projects 17	Youth 12	Buildings 11	Enterprises 18		Concts 6	Inv 3	Originals 10
Land Use, Land Use Change & Forestry	Zones 3	Projects 6	Youth 2	Bldgs 2	Enterprises 5		Conncts 2	Invs 1	Originals 6
Agriculture and Food	Zones 15	Projects 15	Youth 10	Bldgs 1	Enterpr 7	Srv 1	Concts 4	Inv 2	Originals 8
Transport Use	Zones 17	Projects 12	Youth 8	Buildings 10	Enterprise 8	Services 6	Concts 5	Inv 2	Originals 7
Transport Technologies	Zones 7	Projects 9	Youth 2	Bldg 1	Entrpr 2		Concts 3	Inventions 3	Originals 5
Combined Energy Schemes	Zones 5	Projects 9	Youth 2	Buildings 5	Enterprises 5	Svcs 1	Concts 2		
Non-residential Energy Use	Zones 13	Projects 6	Youth 19	Buildings 33	Enterprise 13	Srvs 4	Concts 12	Inv 3	Originals 12
Residential Energy Use	Zones 28	Projects 22	Youth 7	Bldgs 5	Enterprises 18	Servs 7	Con 5	Inv 2	Originals 9
Measure not on schema		Projects 1			Enterprises 5			Inventions 3	Originals 4

Apart from the obvious connections between non-residential energy use and Public Buildings and Schools proposals, and a focus on residential energy in the local Zones proposals, the spread of carbon reduction measures is fairly evenly distributed across the proposal types. There is one other significant deviation from the average: the professional energy organisations (particularly in the Services category) are more likely to follow the official line on carbon reduction measures, and as a result the Services proposals contain no measures relating to waste and recycling, and fewer measures than average relating to eating locally grown food – two of the most popular measures in other proposal categories – but they feature nearly twice as many transport measures, mostly relating to reducing car use.

Profile of proposal types within each main carbon reduction measure (mid level measures)
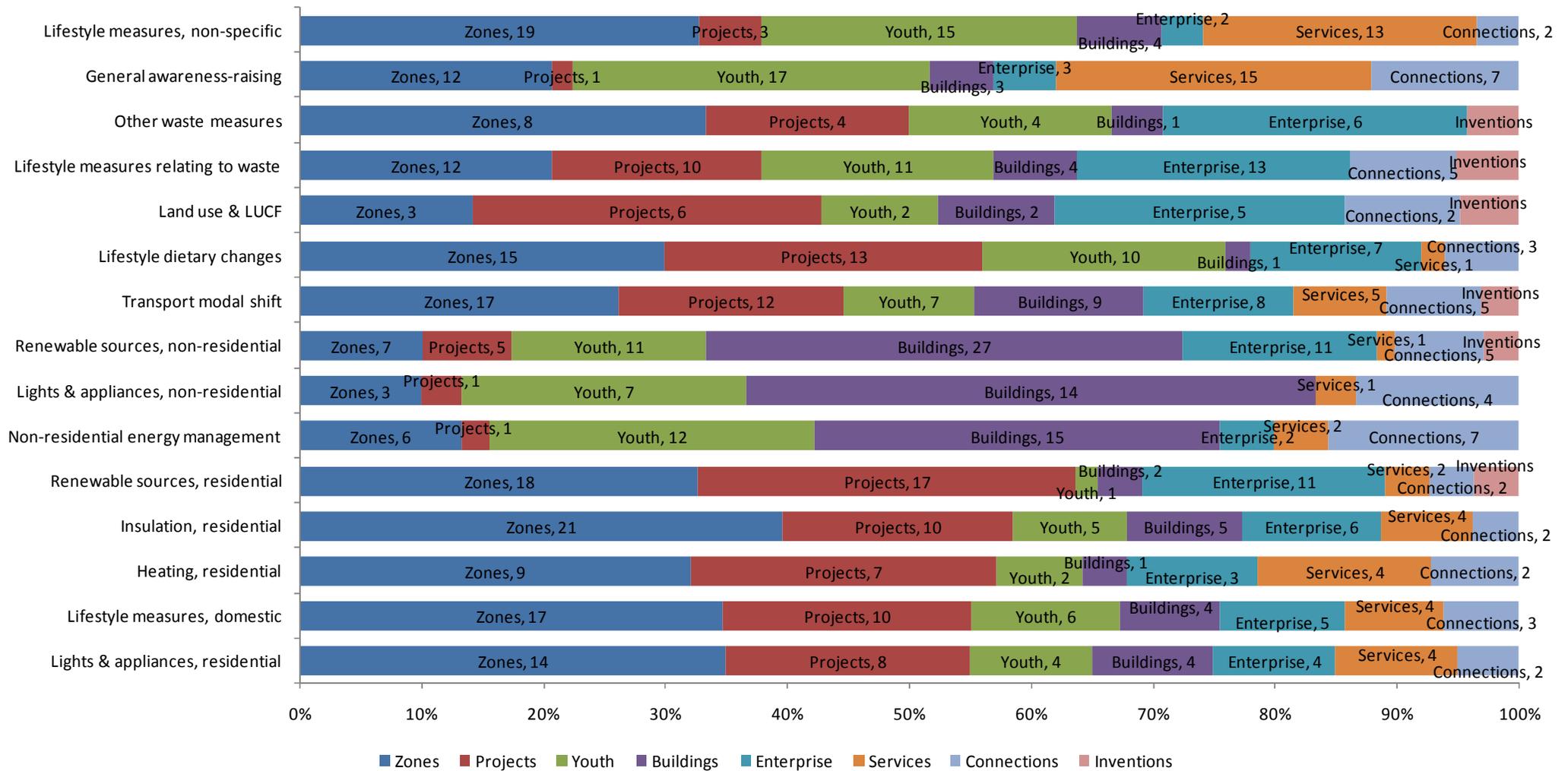
For the relationship between top and mid level see Chart 12 in Chapter 4 of the main report. The number of different measures depended not just on how focussed the project was, but also how specific they were about what they intended to tackle. The Services proposals in particular, all based around behaviour change, tended to present their aims in general terms ('raising awareness' and 'promoting carbon reduction'). The basic number of measures also hides the weight given to each measure. Project proposals tended to have one strong focus (usually energy, transport or waste) with supporting measures from other categories (e.g. using low carbon transport to deliver the fuel or waste products), whereas in Zones the measures tended to have more equal weight.

1.6 Regime / Niche

See section 5.1 of the main report
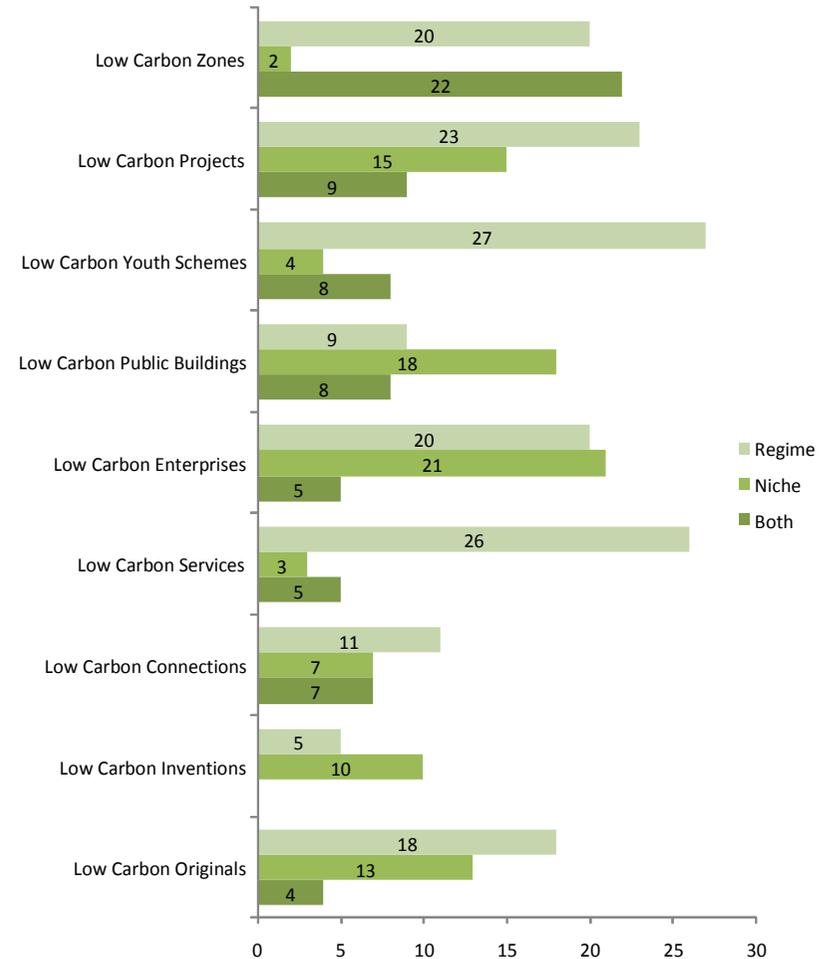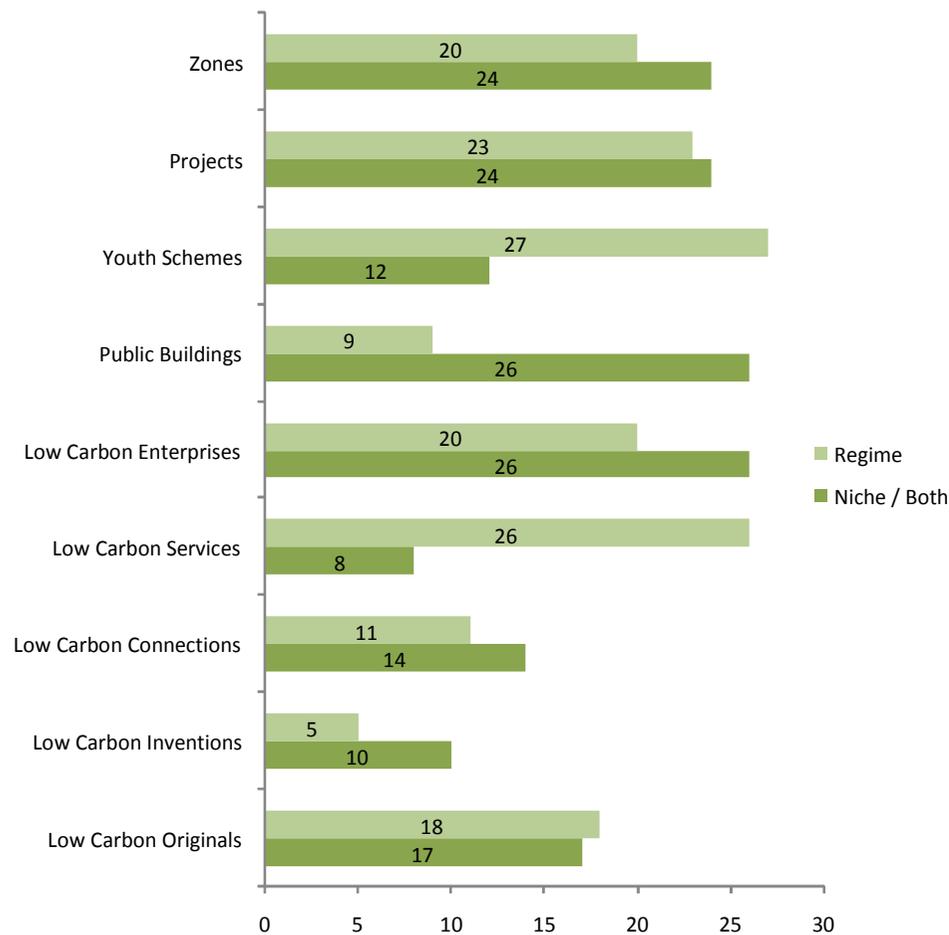
Youth Schemes and Services were the types which had the highest proportion of regime only measures. Zones proposals are evenly divided between those classified as regime and those with a niche element, which were thus generally add-ons to more conventional regime reduction methods rather than exclusively niche measures. Exclusively niche measures feature in Enterprises (focussed around renewable and transport fuel technologies) and Public Buildings (largely renewable energy). At the far end of the scale, Inventions are looking to the future and devising new tools and products, mostly likely outside the current carbon regime.

1.7 Feasibility Timescales

See section 5.2 in the main report

**Relating to timescales and willingness/ability of the MACC and Defra Behavioural Measures**
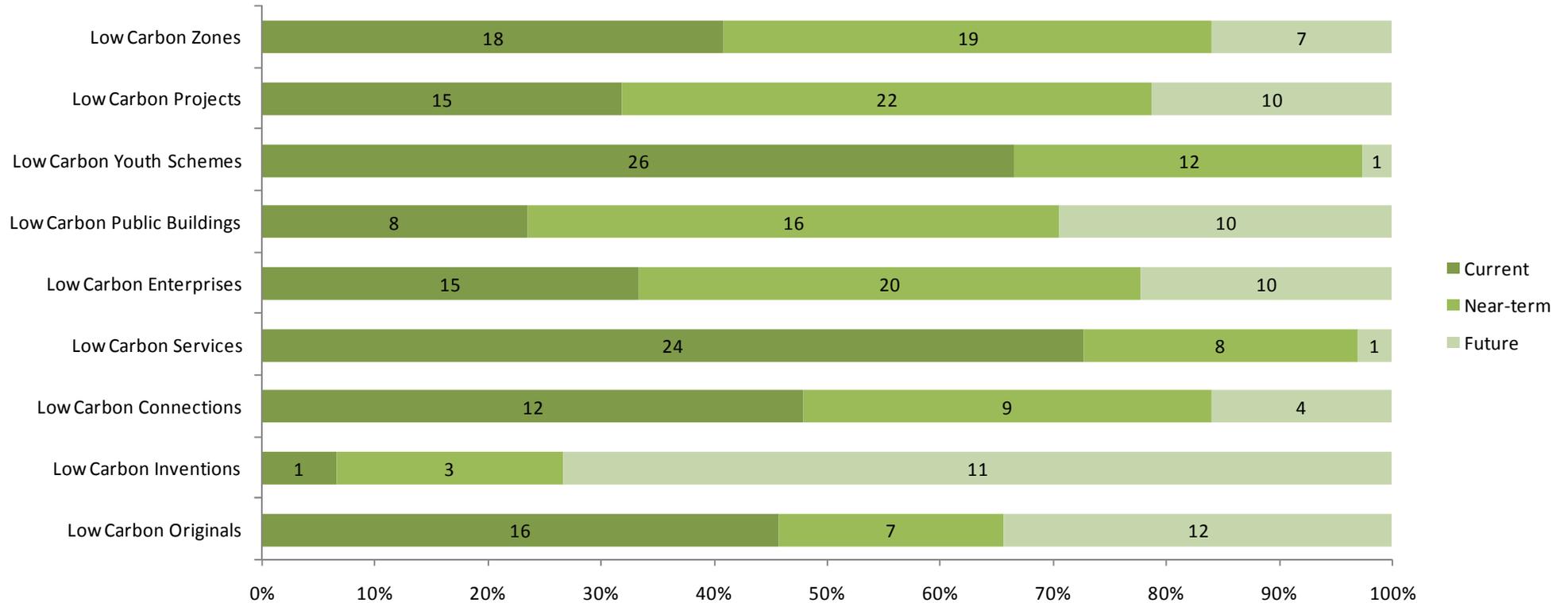
Youth Schemes and Services (which tend to be externally initiated and professionally led) are more likely to focus on measures that can be implemented relatively quickly and easily without too much change of lifestyle or introduction of expensive technology. On the whole, these are within the current carbon regime and, in Defra's behavioural terms, tend to fall into the more 'willing and able' categories.

1.8 Systemic / Singular

See section 5.3 in the main report

Comparing singular, multiple, horizontally systemic and vertically systemic proposals for each proposal type
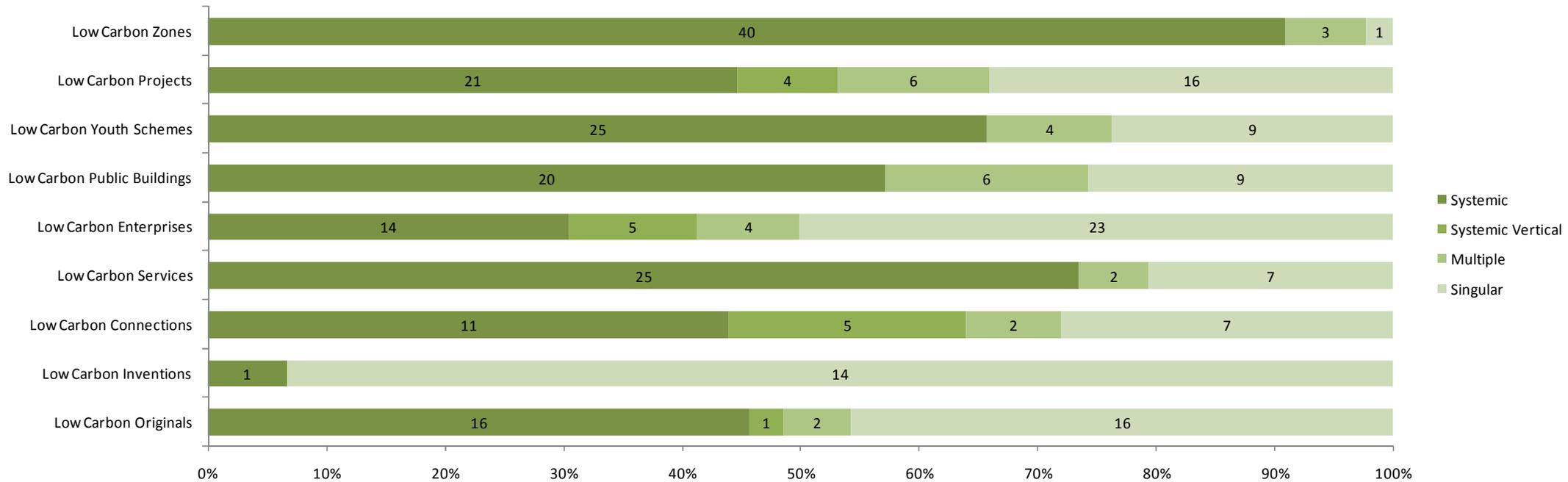
There was some correlation between the number of carbon reduction measures and the systemic nature of the proposals, but the effect is masked by the number of non-specific, general awareness statements. Although Services show the lowest number of measures per proposals, these were mostly highly systemic. Over half of the Services proposals contained general descriptions which implied that they wished to change people's lifestyles to impact on all the sources of their carbon emissions in a very systemic way, without detailing what these carbon emissions were.

In contrast Zones, which have the highest proportion of systemic proposals, were more specific in their aims to introduce a large number of measures, mostly interlinked, to change people's actions across all their activities. At the other extreme, Inventions were highly singular, and Enterprises were focussed on their core business activities and as a result also tended to be singular.

Systemic level within systemic proposals (non-systemic proposals are omitted)
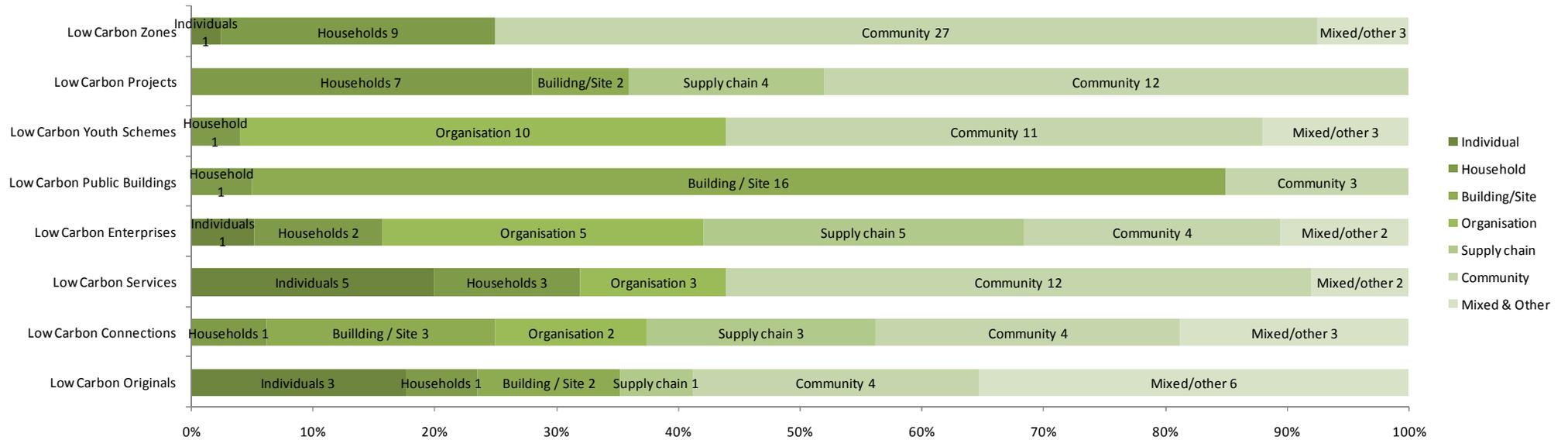
Where the proposals are systemic, the majority are aimed at their community level (where the community varies according to the proposal type and target audience – geographical, community of interest, organisation), with relatively few aimed at the level of the individual. This is clear in the geographically based proposals (Zones and Local Projects) which either target communities as a whole, or households.   In most cases systemic levels have been categorised as they apply to the main target audience. In some cases the target audience is mixed, particularly in Connections which are often aimed at both horizontal and vertical systemic changes (a combination of the community of interest and their supply chain).

1.9 Product / Practice

See section 5.4 of the main report
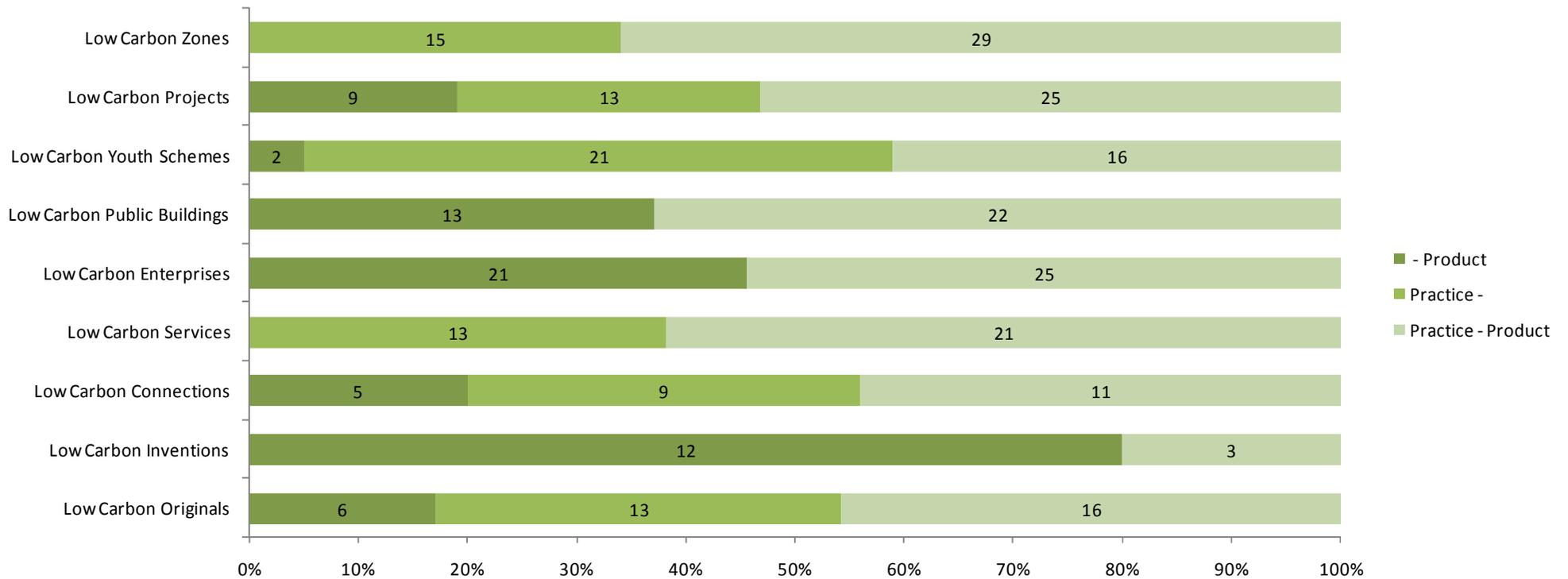
The predominance of practice measures (which require behaviour change) across the applications as a whole has been discussed in the report. There are some categories where this is less prominent than others. All the proposals in the Zones and Services categories and most of the Youth Schemes feature behaviour change measures and are coded as Practice. Public Buildings, Enterprises and Inventions are about carbon reduction Products, but in both Public Buildings and Enterprises there is still a majority which also incorporate elements of Practice. Only Inventions (the smallest category with only 15 proposals) tend to focus solely on the Product.

1.10 Openness
See section 6.3.1 of the main report

Legend: ■ No external input ■ Limited input ■ Significant input ■ Dispersed, on-going
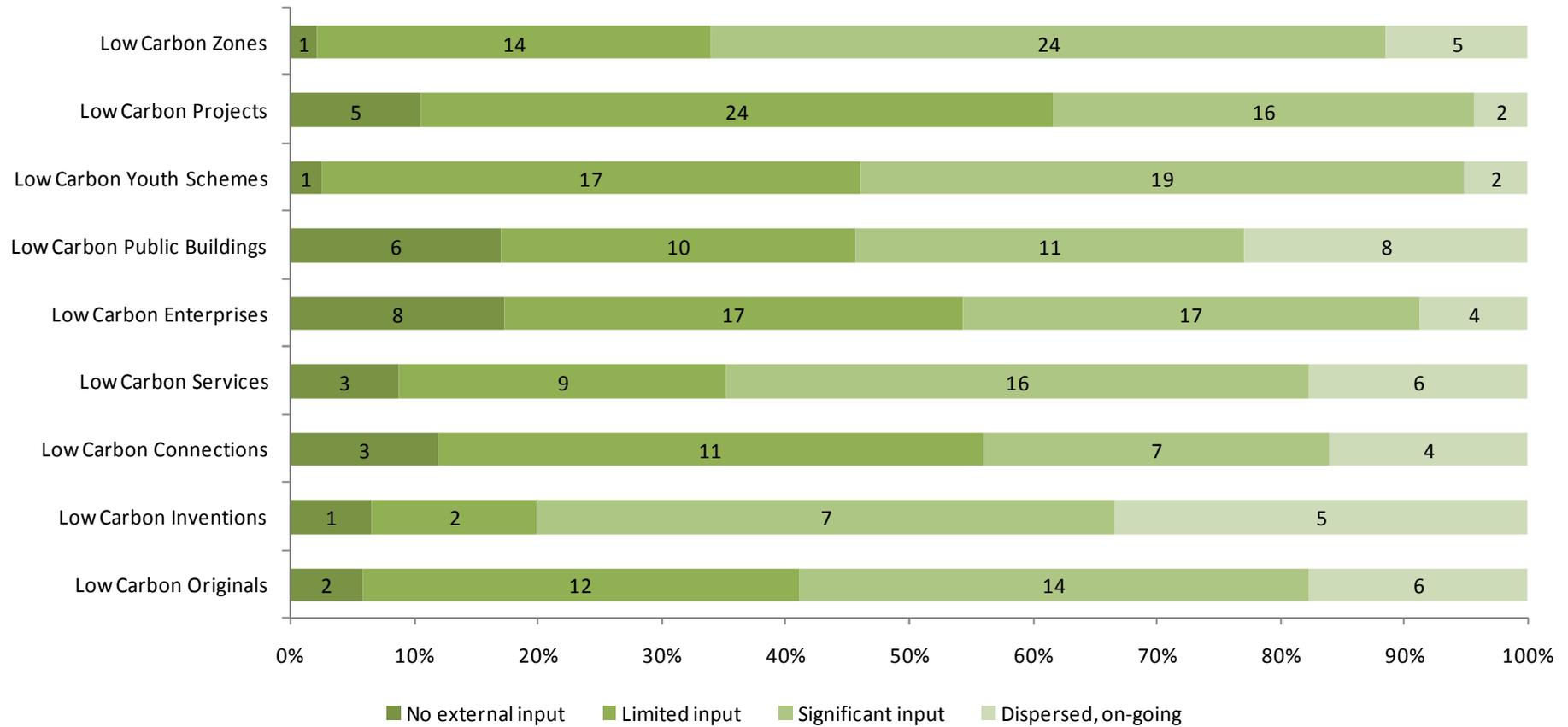
The most open of the proposals were those in which the Challengers were specifically looking for assistance to fill a skills gap – Local Projects requiring technical assistance, and Inventions requiring marketing and development support. Otherwise Zones and Services were rather more open than closed, the former predominantly grassroots led and the latter more professionally led. In Zones, openness was often related to the sheer number of different activities that were proposed, involving many different people and agencies. There were a number of rather closed, professionally led Local Projects where the Challengers had a clear idea of what to do, and the skills and experience to carry it out, and so presumably did not feel it necessary to involve other agencies or groups.

1.11 Behaviour Change

See section 6.4.1 in the main report

Comparing approaches which target combinations of action, understanding and values as ways to change behaviour (Practice proposals only)

Excludes 'Product Only' proposals
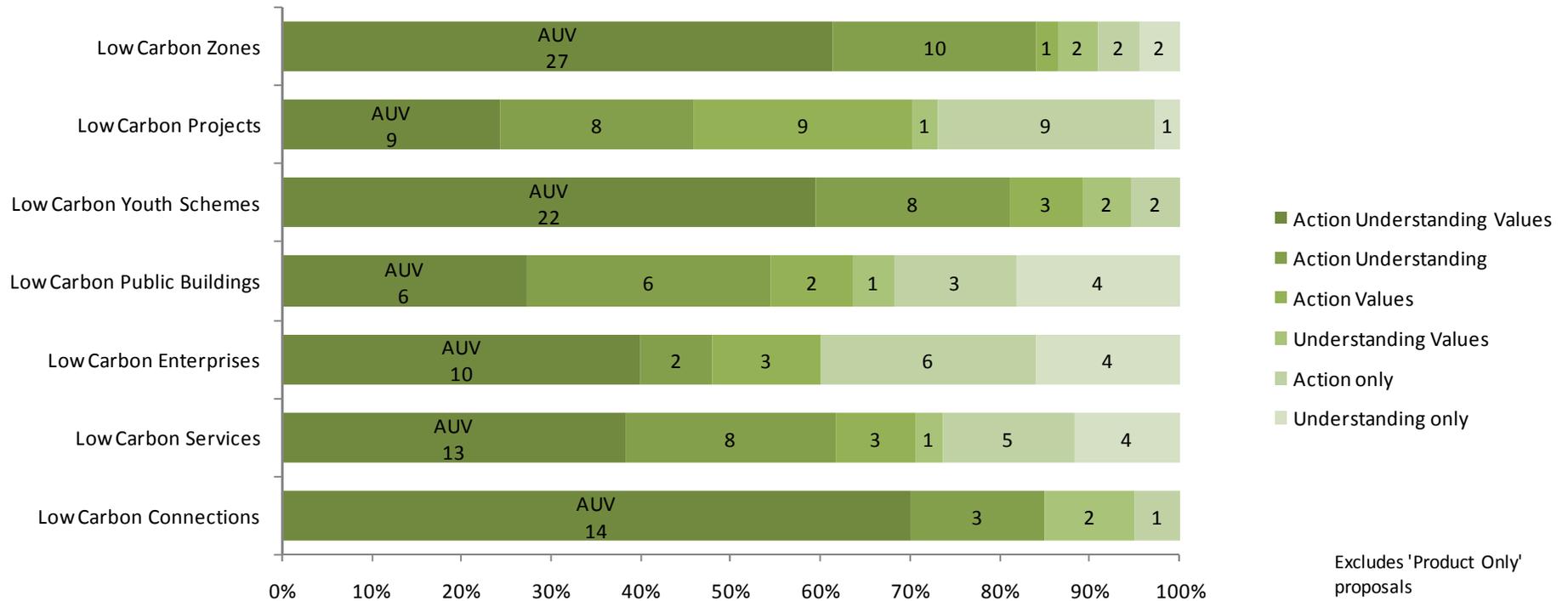
Proposal types	AUV combined		Total of proposals
Low Carbon Zones	27	61%	44
Low Carbon Local Projects	9	24%	37
Low Carbon Youth Schemes	22	59%	37
Low Carbon Public Buildings	6	27%	22
Low Carbon Enterprises	10	40%	25
Low Carbon Services	13	38%	34
Low Carbon Connections	14	70%	20
Low Carbon Inventions	0	0%	3
Low Carbon Originals	9	31%	29
Total	**110**	**44%**	**251**

The table shows the number of proposals that included all three approaches - action, understanding and values - and the total number of practice proposals in each proposal type
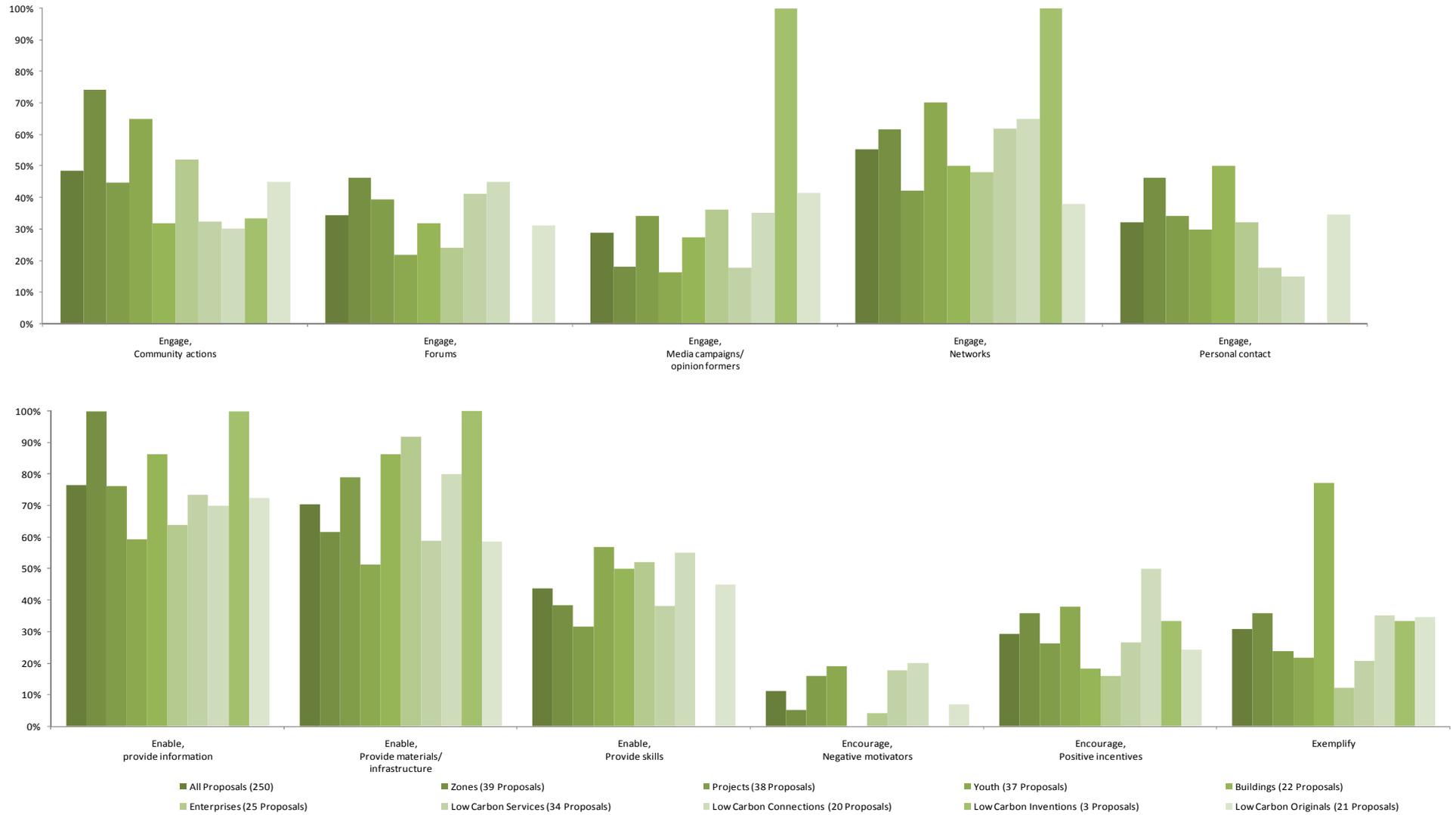
Proportion of Action, Understanding & Values within the Practice proposals for each proposal type
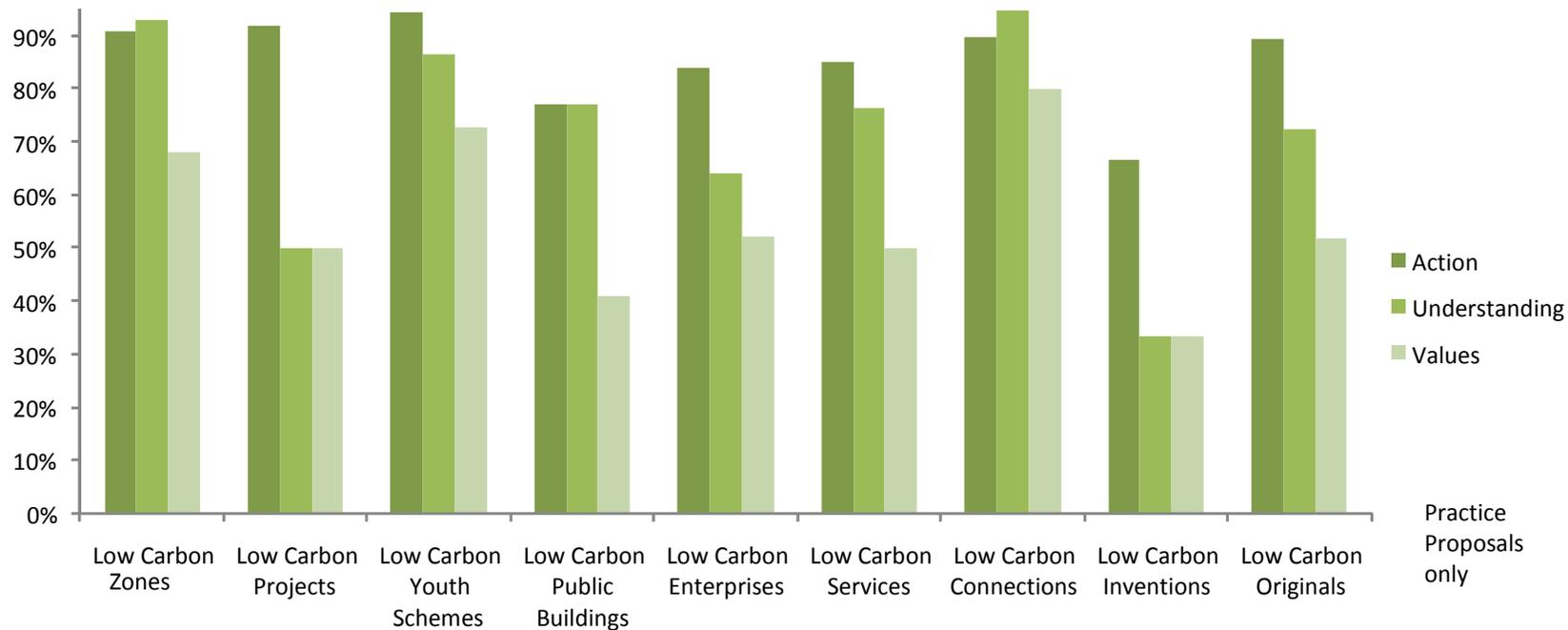
The tables above show the two ways of looking at these factors the number combining two or all three factors, and the number of proposals including each individual factor. Zones, Connections and Youth Schemes have high numbers of proposals combining all three. In the Zones proposals this is probably a result of the number and variety of the activities planned. With Connections proposals it is a result of the different approaches used for the variety of actors involved, both within the community and along their supply chain. In the Youth Schemes proposals, it seemed to result more from their culture and experience working in and with the education sector, and taking a more informed learning approach.

Comparing Action, Understanding and Values as individual factors within each proposal type, it can be seen that Action is by far the most popular measure overall.   This reflects the majority of proposals which were seeking to involve their communities in doing something rather than being passive recipients of information. This is particularly the case in Local Projects, which had the highest proportion of Action over other factors. However in two categories, Zones and Connections, Understanding is higher than Action, and in the Public Buildings category, Actions and Understanding are present in equal measures.   The only proposal types to feature Values highly are Connections, where it relates to the stronger community identity found in this category, Youth Schemes, and, to a slightly lesser extent, Zones. It is perhaps surprising that Public Buildings have a relatively low number of Values proposals given the stress placed in these proposals on providing an exemplar for how energy saving measures can be implemented in buildings. These proposals are well placed to build on the close community ties and affection for the building within their target audiences, but they focus on the practical side of how carbon emissions can be reduced.

The Four E's, comparing behavioural change approach profiles across proposal types (see chapter 6 figure 4 in the main report)

Legend:
- All Proposals (250)
- Zones (39 Proposals)
- Projects (38 Proposals)
- Youth (37 Proposals)
- Buildings (22 Proposals)
- Enterprises (25 Proposals)
- Low Carbon Services (34 Proposals)
- Low Carbon Connections (20 Proposals)
- Low Carbon Inventions (3 Proposals)
- Low Carbon Originals (21 Proposals)

Looking at a more detailed breakdown of behavioural factors, based on the Four Es approach, the following key points can be identified:

Zones have the highest level of providing information, which features in every Zones application among a variety of other measures (which accounts for its high Understanding rating). Zones are also high on engagement through community actions and personal contact, and higher than average in engagement through forums (usually public meetings). They are significantly lower than average on negative motivators and media campaigns, preferring a positive approach and more personal methods of providing information.

Local Projects are much closer to the average profile, but slightly higher on enabling through provision of materials and infrastructure (reflecting the Action focus of these proposals), and lower on providing skills and engagement through networks (despite the close geographical nature of the proposals).

Youth Schemes rate highly on enabling by providing skills (possibly a result of being largely from educational organisations), but lower than average on providing information, materials and infrastructure. They are also high on engagement through community actions and networks, but low on using forums (meetings) and media campaigns. This is one of the highest categories for negative motivators (shaming) as well as positive incentives (awards and prizes) – it is not clear whether this is also related to the educational background of the Challengers.

Public Buildings is the highest category for exemplification, using their structures as examples for others to follow, and is also high on engaging through personal contact (their users and visitors), demonstrating the value of a tangible, physical focus for community action.

Enterprises are the most enabling by providing materials and infrastructure, relating to the businesses they are developing which in general are providing a carbon reduction service for their customers.

Services include a number of proposals specifically aimed at facilitating networking, so it is not surprising they are the highest category for engagement through networks and forums. They are lower than average on community actions, engaging through personal contact and running media campaigns. They are just above average on providing information, and it is perhaps surprising that they are not the highest category for this measure, given they are mostly offering advice services, but these tend to be rather more than simply passing on information and have been classified as the provision of skills, either by training courses, or through conferences and other informal learning activities.

Connections exhibit particularly high levels of encouragement through incentives (sector awards and peer recognition, for example). They are higher than average in engagement through networks, forums and media campaigns but low on the use of personal contact, which is not surprising bearing in mind that these distributed communities that tend to come together at meetings and conferences. For similar reasons they are low on community actions, which are harder to accomplish when the group is geographically separated.   They compensate for geographical distance by a higher than average rate of enabling through the provision of infrastructure and skills.

1.12 Networks: Relationship with Target Audience

See section 6.4.2 in the main report

Intended relationship models – how the Challengers will relate to their target audiences during their projects
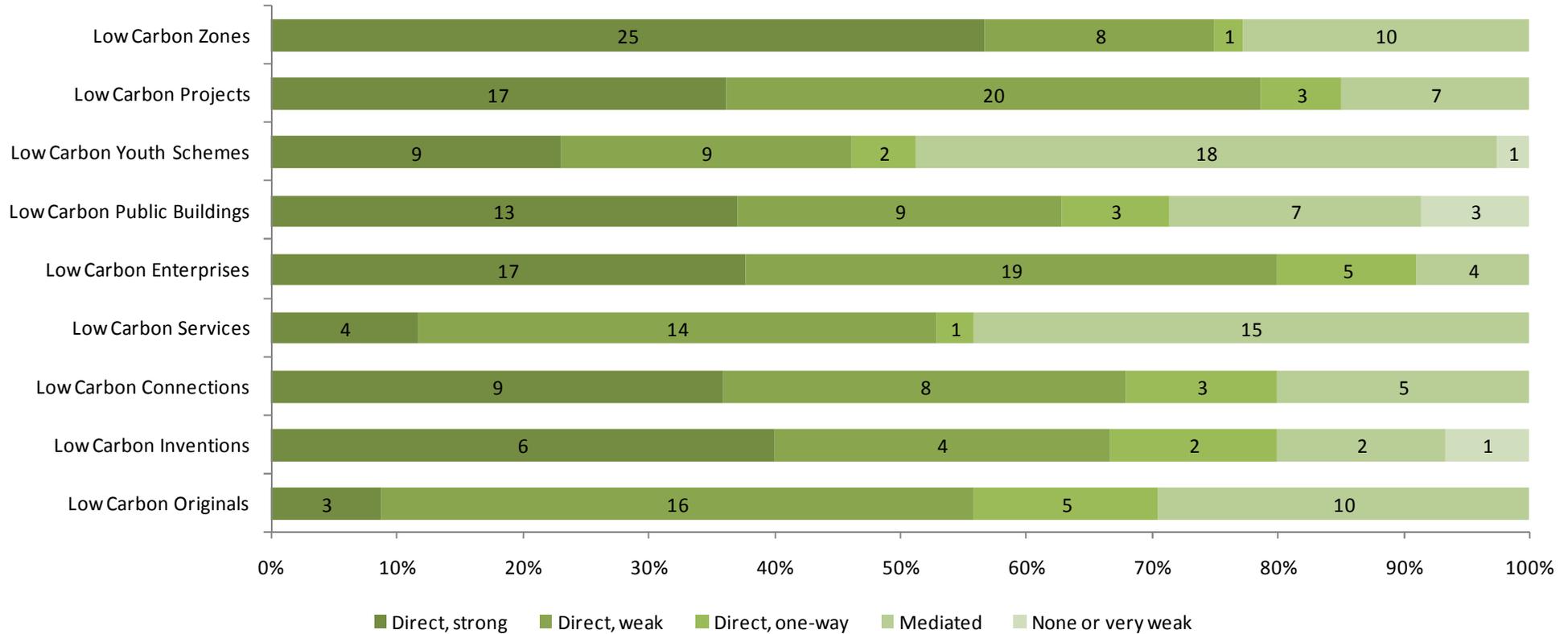

Professionally led projects within the Youth Schemes and Services proposals were often based on an indirect model, where the Challengers would work with a community group to reach their intended final audience. In Youth Schemes, this was usually the staff of the school, or the children themselves taking the message to their families. The geographically based Zones were mostly planning to work directly with their target audience – often these Challenger groups were embedded within the community they were targeting, and often saw themselves and their targets as part of the same group, implying that the applicants felt they were representing the whole of their community.

The proposals with mediated relationships can be further broken down to show the strength of the two component parts: Challenger to mediating group, and mediating group to eventual target audience. This shows that in most cases the relationship between the intermediaries and the target community is strong. With just a few exceptions, the reason for using intermediaries is because these are people in a better position to reach the community than the Challenger group. The Challenger to intermediaries relationship is more variable and here the numbers become too small to support any general conclusions.

Mediated relationship showing the strength between Challengers and mediators, and between mediators and the target community
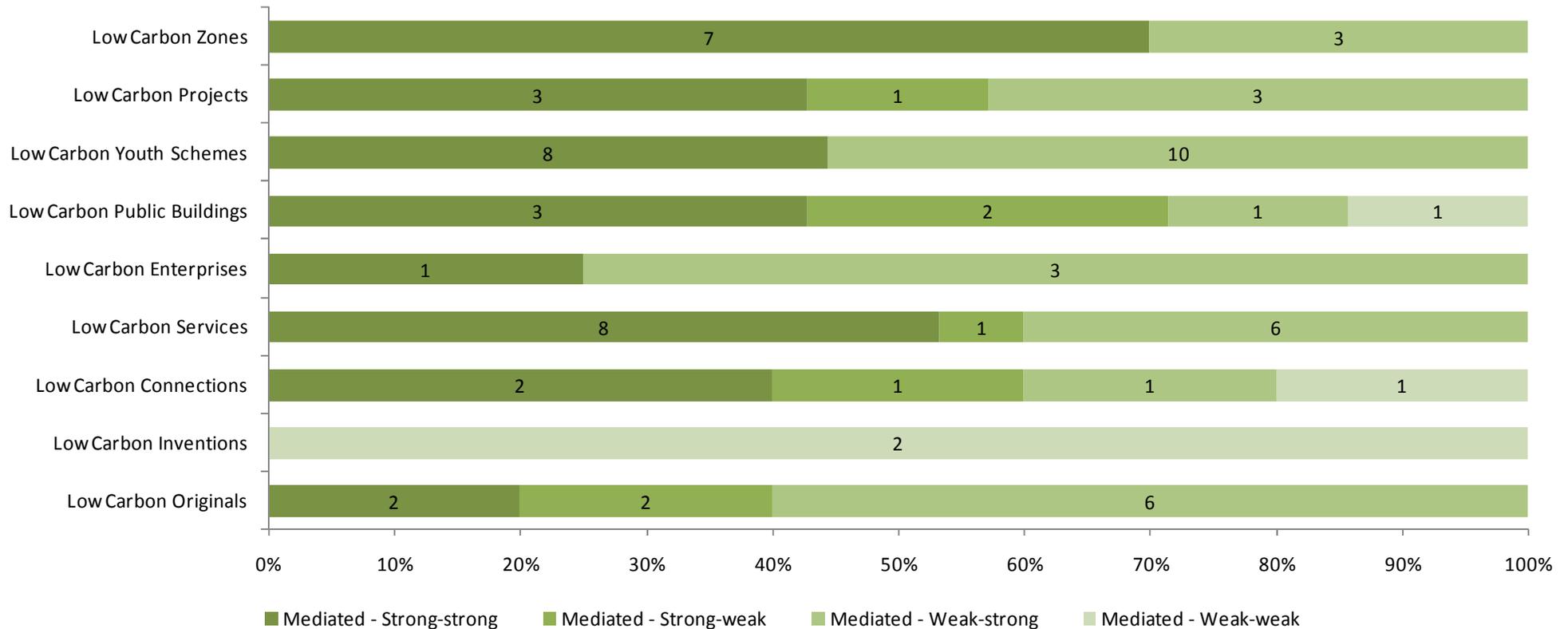
Comparing established and speculative target audience relationships for proposal types
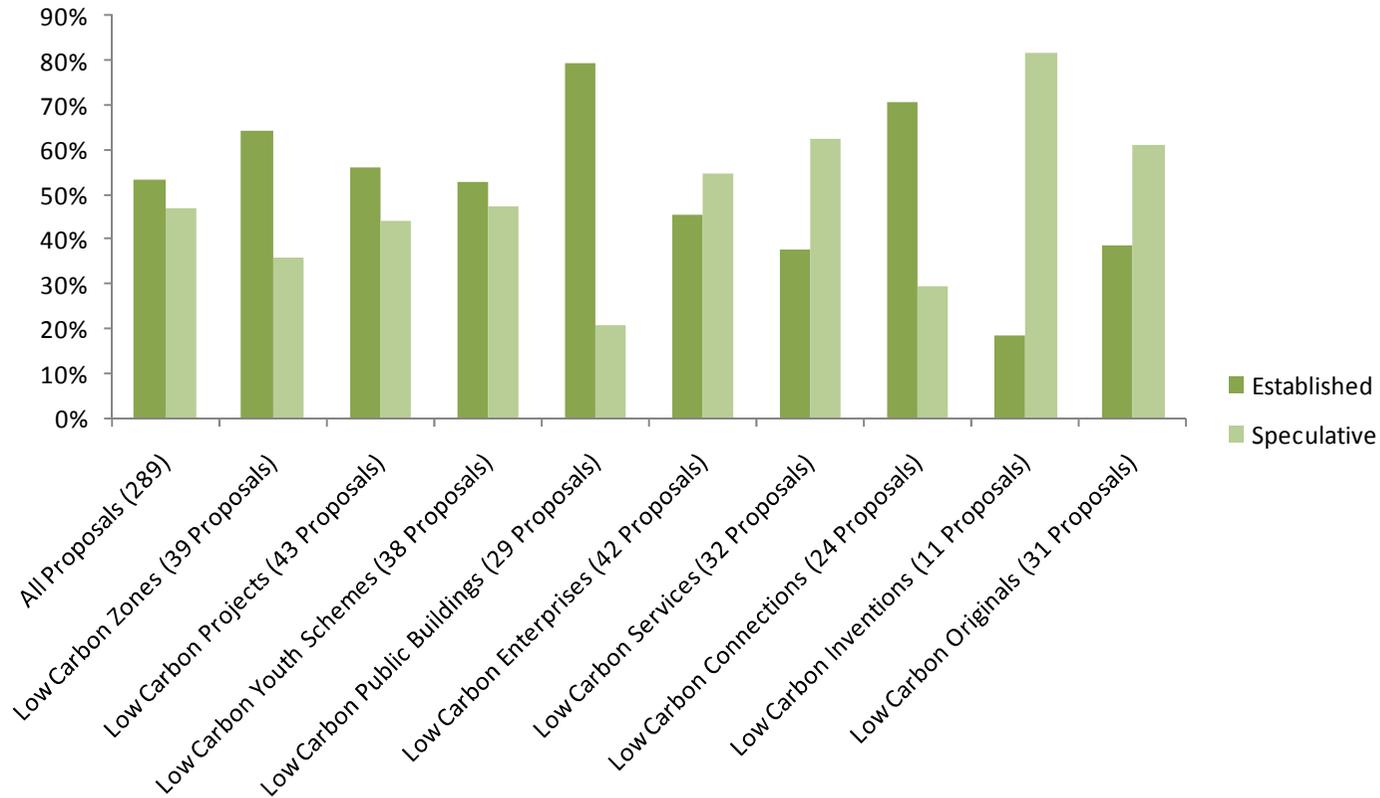
As regards the strength of the relationships between Challengers and target communities at the start of the projects, the analysis shows that Public Building, Zones and Connections proposals are most likely to have an existing relationship with their intended target audience, with their organisations already well embedded in their respective communities. Proposals requiring 'customers' (Enterprises and Services) and Inventions are least likely to have existing relationships.

Strength of Existing Relationships
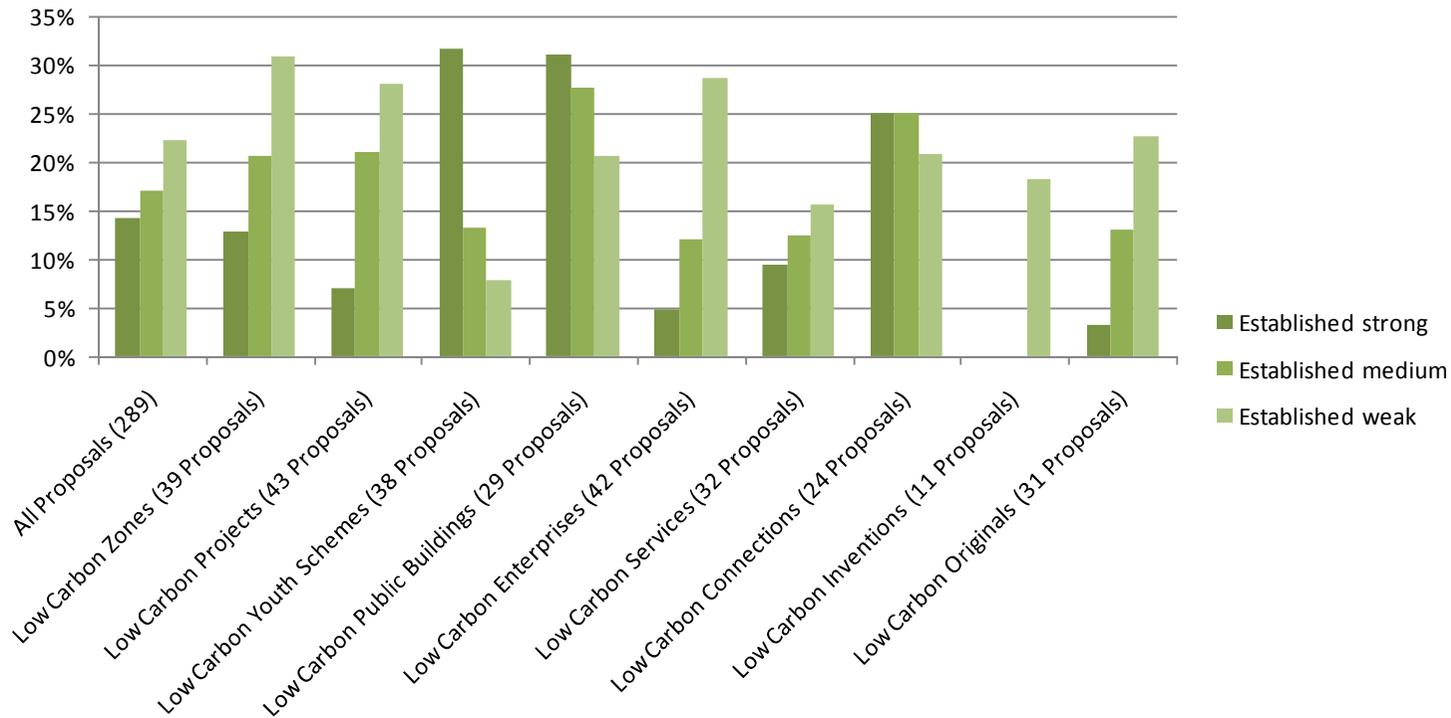
Looking more deeply into the existing relationships reveals that while Zones challengers have a relationship (in that they are all from the same geographical area), this is actually quite likely to be a relatively weak relationship. Youth Schemes and Buildings have much stronger ties – the staff and children with their pupils and families, and public buildings with their users. This distinction reflects the Zone proposals' intentions to work across a whole geographically defined community whereas the direct target for Youth Schemes and Buildings was their existing members. Customer based proposals (Enterprises and Services) have a mixture, depending on their relationships with any existing customers (cooperatives are much closer than advice services, for example)

1.13 Maintaining the Change
See section 6.4.3 of the main report
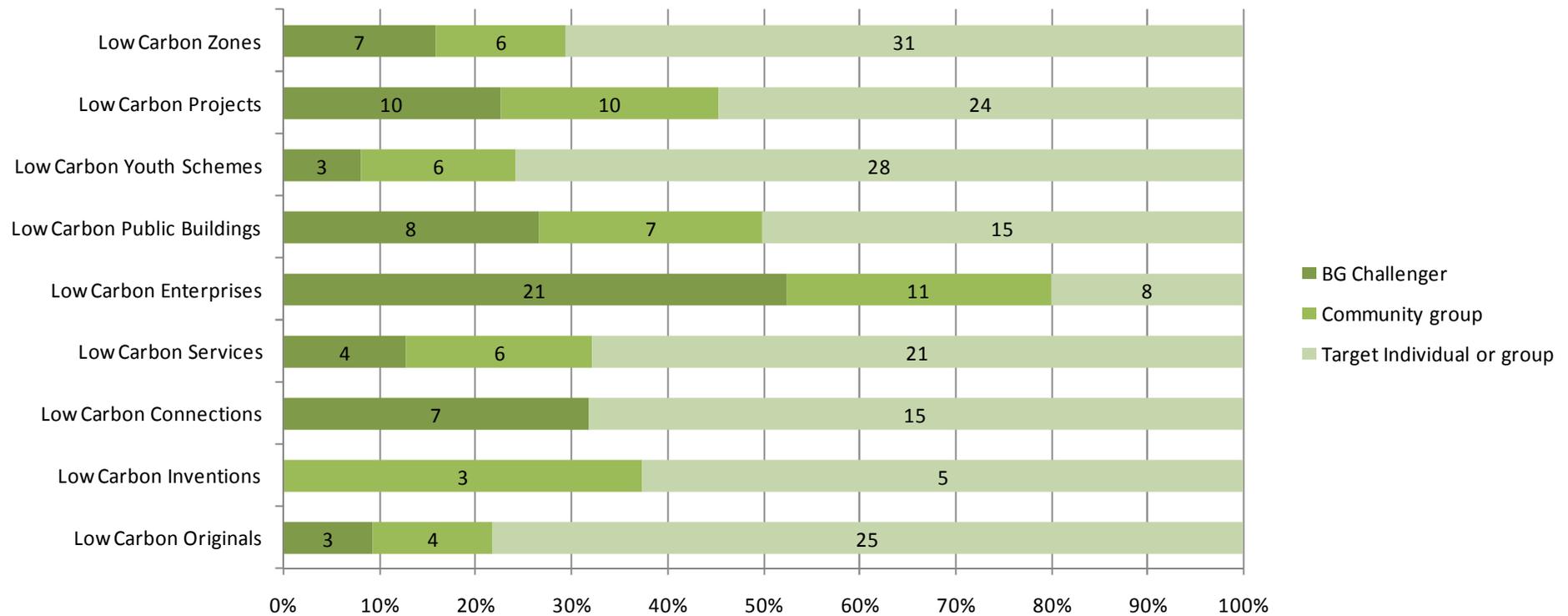
Where proposals were aimed at behaviour changes, most felt that their activities would embed the change sufficiently so that it could then be maintained by the target individual or group. However for 50% of Public Buildings proposals and 45% of Local Projects there was the intention that either the Challenger or another Community Group would stay involved in maintaining the change. Enterprises, which were developing businesses with a sustainable funding model, were most likely to consider it their responsibility to maintain changes as part of their continued delivery of their services.

1.14 Mode of Transferability

See section 6.4.4 of the main report
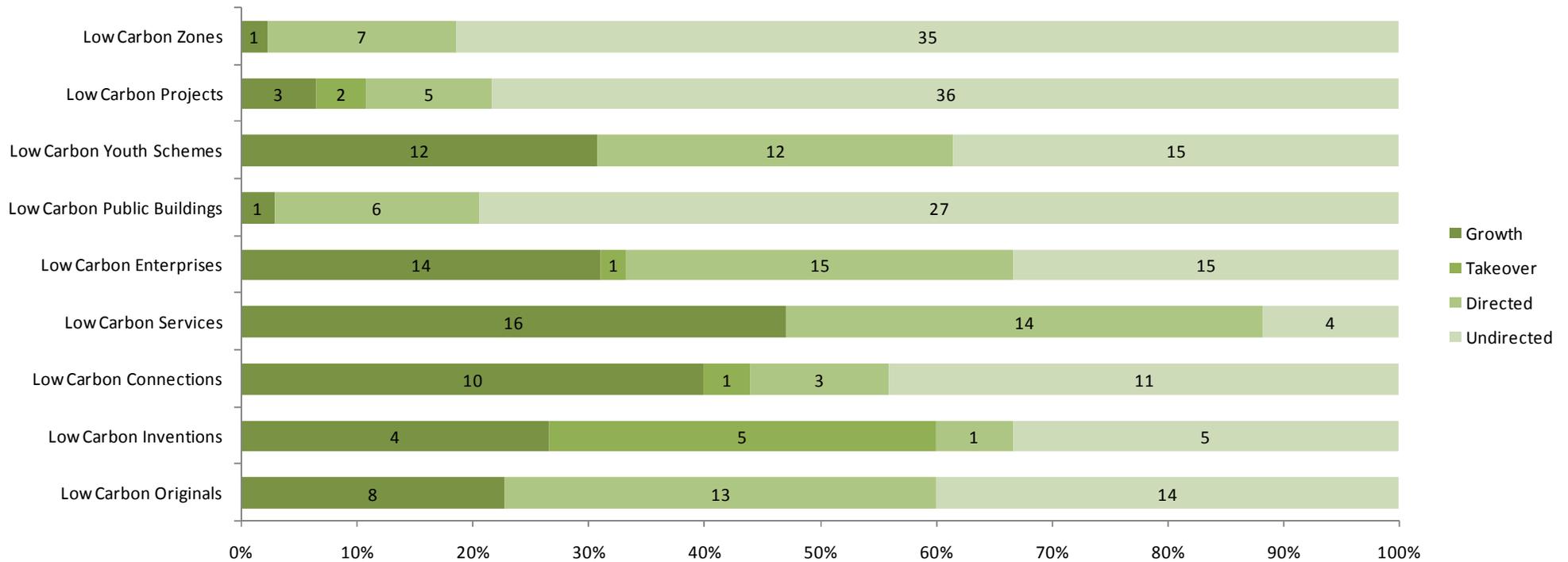
In the categories where informal groups predominate, Zones, Local Projects and Public Buildings, there was less strategy for diffusing or replicating the ideas. More formal groups offering professionally led Services and Youth Schemes were looking for growth or had built in plans for a directed diffusion of their ideas. Services in particular saw the potential for growth of their provision. Enterprises as the type closest to a conventional business model also had a relatively clear strategy for transferring their approach. Only the Inventions had a significant proportion hoping for a takeover of their idea.

2 Data Sources

2.1 Information Submitted by Applicants

QUESTIONS FROM BIG GREEN CHALLENGE INITIAL WEB BASED APPLICATION FORM (COMPLETED BY ALL APPLICANTS) WITH GUIDANCE

Eligibility Criteria

The Big Green Challenge from NESTA is for not-for-profit groups or organisations, eg. voluntary or charitable (third-sector) organisations, and you will need to prove that you fulfil this requirement before you are accepted as a finalist. You do not need to be formally constituted as a not-for-profit group for the initial application stage, so you may consider forming a new group to compete for the prize, if no suitable group exists at present.

Who can't enter?

- Public bodies, except for Parish, Town and Community Councils'
- Individuals
- Groups based primarily outside the UK

You can register more than one organisation and can submit more than one application on behalf of each group or organisation. If you submit multiple applications they must be genuinely different – duplicate applications will not be considered.

If you want more information on eligibility, or have any specific questions, please contact us on 0845 850 1122.

The application form is in two stages:

Section One asks a few questions about you and your group or organisation. This is to make sure we can contact you about your application to the Big Green Challenge, and give us a picture of who is applying, and will also help us understand where your ideas are coming from.

Section Two asks about your idea. This is the section we'll concentrate on when deciding which applications have the most potential to be successful against our judging criteria. It's important that you tell us clearly what your ideas are, that you read each question and the help text before filling it in, and that you remind yourself of our judging criteria.

The judging criteria for the Big Green Challenge are:

- Achieve measurable levels of carbon saving - to go towards or even beyond a 60% reduction of C02 emissions in your community;
- Be innovative - new approaches, or existing ideas implemented in new ways;
- Demonstrate sustained commitment and durable impact - we want these ideas to continue flourishing after the Challenge is over;
- Be one or more of the following:

    - Replicable - can it be repeated?
    - Transferable - can it be used in a different context?
    - Scalable - can it grow?

- Involve your community in developing and delivering the idea.

About you and your group or organization

About You

First name	
Surname	
Address	
Post Code	
Email address	
Phone	

Please tick the following box if you wish to receive any of the following:

I would like to receive email alerts about the Big Green Challenge	☐
I would like to sign up to the monthly NESTA e-bulletin, with information on all of NESTA's activities	☐
I am happy to receive email from NESTA's partners on related issues that may be of interest to me	☐

How did you first hear about the Big Green Challenge from NESTA?

NESTA website	☐	Radio	☐	Through UnLtd	☐
Other website	☐	Television	☐	Don't know	☐
Daily Mirror	☐	From a friend	☐	Other	☐
Other newspaper	☐	Through a group or organisation	☐	Please specify	☐

Had you ever heard of NESTA before the Big Green Challenge?			
Yes	☐	No	☐

About your Group or Organisation

Name of group	
Address	
Town / city	
County	
Postcode	
Contact number	
Contact email	
Group website	

This part of the application gives us a picture of your group or organisation. We're looking for eligible groups and organisations that have great ideas with the potential to really work.   So please don't assume we're looking for particular answers here.

Which of the following describes your group or organisation? (select all that apply)

Charity	☐	Shared interest group	☐
Community Association	☐	Social Enterprise	☐
Community Council	☐	Tenants or residents association	☐
Community Development Trust	☐	Town Council	☐
Community Interest Company	☐	Trades union	☐
Co-operative	☐	Voluntary group/organisation	☐
Faith group	☐	Youth Council	☐
Local branch of a national organisation	☐	Youth group	☐
Parent Teacher Association	☐	Other	☐
Parish Council	☐	Please specify	

What is your group or organisation set up to do? (max 500 words)

Help: Very briefly describe your mission, aims and/or main activities

Are the activities of your group or organisation mainly (select one only)

Local	☐	National	☐	Regional	☐	Global	☐

If you are part of a group, how many members does your group have? If you are part of an organisation, how many staff or volunteers work in your organisation?

1-5	☐	31-50	☐
6-15	☐	51-80	☐
16-30	☐	80+	☐

When was your group or organisation set up?

Brand New	☐	11-20 Years	☐
0-5 Years	☐	21 Years +	☐
6-10 Years	☐		

About your ideas

Before beginning this section please select which of the following statements best applies to you and your group/organisation:

We have an idea that we've been waiting to developing but have never had a good opportunity	☐
We've been meaning to do something on climate change for a while	☐
We hope to adapt/extend an existing project/programme	☐

The remaining sections of your application form will be assessed, so please think carefully about your answers and make sure you read the help text.

Please give us a summary of your idea, including a description of the community you will be working with (max 500 words)
You might find it easier to fill this section in last. To help us understand your project, please include a description of the wider community you will be working with.
Communities vary - both in size and what brings them together e.g. friendship, culture, faith, ethnicity, political commitment, colleagues or interests. Communities may be based around your local area or equally may be spread across large areas. Your application also needs to include details of how the community uses energy - so you will need to consider, and potentially include, the activities, people, buildings and equipment that are used by, and are part of, that community.

How will your idea(s) reduce CO$_2$ emissions in your community? (max 300 words)

Help: Please explain how your proposed activities will reduce CO$_2$ emissions. You don't need to use technical or scientific language to describe this.

Please tell us how you think your ideas are innovative. (max 300 words)

Help: We want to encourage fresh thinking about the way we live our lives, in order to find new and better ways to tackle climate change. This might involve coming up with a brand new idea, it might involve combining things in a new way, or finding new ways of making existing solutions work better. We look at innovation very widely. The best innovations need not be technical or scientific - they might involve re-organising processes or the way people interact for example

How could the activities you are proposing be sustained and developed in your community in the longer term? (max 300 words)

Help: Please tell us why you think your approach has the potential to continue to be successful after the Big Green Challenge is over. Consider the following when thinking about your answer: Will people continue to get involved? Will it be possible to find the funding, skills and other resources to keep the activities going?

How could the activities you are proposing be taken up by others, or benefit a wider community? (max 300 words)

Help: Please tell us why you think your approach has the potential to be replicable (it can be repeated), transferable (it can be used in a different context) and/ or scaled up (it can grow).

How will your group or organisation work with others in your community to develop your ideas and make them happen? (max 300 words)

Help: We are looking for ideas that are led by or actively involve communities. Communities can vary - both in size and what brings them together, e.g. friendship, culture, faith, ethnicity, political commitment, colleagues or interests. Communities may be based around your local area or equally may be spread across large areas. Please describe how you will involve people from your community in the planning and delivery of your ideas, and how you plan to achieve and demonstrate buy-in from people in your community.

2.2 Note on Data used for Mapping Analysis

The questionnaire above was the primary source of data for the analysis undertaken for this project. Where necessary and available this was supplemented with limited web searches on the group or the idea. More detailed information was available for those applicants that reached round 2 but since this was only available for around a quarter of the sample it was not generally used.

A small number of the variables completed by applicants were used directly in the analysis. However most of the variables we use involved recoding the data, for the most part drawing on the text answers given to the questions above. For the most part this was treated in the round to get a sense of the idea envisaged by the applicant. There was considerable variation in the length, focus and detail given by applicants.

No reference was made to the coding made by those judging the Big Green Challenge.

The variables used and the way they were coded is described in appendix 3.

3 Database Classification Schema

3.1 Summary

3.1.1 BG Challenger Groups

- *Newgroup*[*]: 'yes' if created specifically for the BGC

- *Age*[*]: banded

- *Membership*: Size[*] and size definition (2 fields)

- *Postcode*[*]

- *Scope*[*]: Geographical reach (local, regional etc)

- *Formality*: legal status

- *Type*: broad definition derived from combination of the group's autonomy, whether created top down or bottom up, and some indication of funding mechanisms

- *Sub-type:* where possible a filtering field to select all examples of a particular group such as all Transition Towns, all Regional Energy Advice groups, all Wildlife Trusts etc

- *Profile:* of the group members, e.g. staff, youth, older people etc

- *Focus*: the main purpose of the group (grouped by *Focus Group* for analysis purpose)

- *Character*: intended to convey the nature of the group, e.g. campaigning, business, philanthropic, but not enough information to complete this field in many applications

- *Filter*: an extra filter field, available if required

3.1.2 Proposals

- *Stage*[*]: whether the proposal is already in the planning stage, or if it is a completely new proposal thought up for the BGC

- *Category*[†]*:* The analysis category used by BGC assessors (recorded but not used in this analysis)

- *Proposal Type:* Filtering field to group similar projects, e.g. Low Carbon Zone

- *Proposal Type Group:* Grouping of related Proposal Types to assist analysis

3.1.3 Carbon Reduction Goals

- *Detailed Measure:* For each proposal, each carbon reduction measure has been identified and classified according to the scheme derived from a combination of the Committee on Climate Change report, *Building a Low Carbon Economy* (Dec 2008), and Defra's behavioural measures as identified in *A framework for Pro-environmental Behaviours* (2008) . There is a one-to-many relationship between Proposals and the Reduction Measures. These detailed measures are part of a three tier hierarchy that groups measures under main Carbon Reduction Goals, e.g. Energy Reduction in Domestic Buildings.

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[*] Field completed by BGC applicant

[†] Field completed by BGC assessors

The remaining classification fields have been used at the Proposal level, rather than classifying each reduction measure. These categories refer to the main reduction goal, or the overall combination of reduction measures if the innovation is a package.

- *Product or Service*: Yes/no – carbon reduction goals are based on technical measure(s) and equipment to be installed or a specific service that is being offered

- *Practice*: Yes/no –the reduction goals involve behavioural change

- *Singular/Systemic/Multiple/Systemic Vertical:* A single measure, a set of linked measures, or a set of single measures which are not linked ('multiple').

- *Systemic Level:* A subsidiary field indicating the level of systemic measures (household, community, building, site etc)

- *Feasibility*: a measure that relates to the government's agenda for carbon reduction and whether it is considered to be a measure that will give reductions within the 2020 timeframe. It is important to note that this does not indicate how feasible the project is in the sense of how well planned it or whether it meets the applicants capabilities. Rather it relates to technical, economic and 'behavioural' feasibility.
  A numeric scale is used where 0=not applicable, 1=current, 2=near-term, 3=future

- *Regime/Niche*: Is it part of the existing carbon regime (e.g. more efficient cars or light bulbs, turning off lights) or moving away from the carbon regime to new technologies. In some cases the measures include 'both'

3.1.4 Proposal Process

- *Change Sustained By:* Innovator, Community group, Target (Individual or group), or not required (i.e. discrete rather than continuous)

- *Approach:* Based on Defra's Four E's model, Enabling/Engaging/Exemplifying/Encouraging subdivided further by the main features of each, covering the learning dimension (practice based or by 'transfer of information'). More than one approach can be allocated to each innovation

- *Behavioural change based on:* Action/Understanding/Values or a combination

- *Transferability:* Undirected/directed/takeover/growth

3.1.5 Challenger Networks

- *Openness*: A numeric scale from 0 to 3 *that* indicates the openness of the innovation, applied at proposal level, where 0=no external input, 1 = limited input, 2 = Significant input, 3 = Dispersed, on-going

- *Audience Relationship Model*: an overall indication of the nature of the intended relationship between the applicants and their target audience, and whether these are direct or indirect (mediated by another group)

The remaining categories are applied for each actor with a relationship to the innovating group (this classification incomplete but provision made for these if required):

- *Name*: of networked group or individual (actor)

- *Sector:* of actor - public, private, third, individual

- *Type:* of actor, e.g. business, CVO, school, local council, funding body

- *Actor Role*: broadly the relationship in relation to the challenger group group, eg target, partner, part of wider network. In each case a Primary Target has been identified to facilitate top level analysis of the type of existing relationship (established or speculative) with the main audience

- *Relationship Nature:* in more detail, how the challenger group interacts with the networked actor, eg as customer-supplier, as charity-target. Also indicates the direction (one-way, two-way asymmetric etc) and whether it is a trading relationship, social etc. This also indicates whether it is upstream or downstream

- *State of Relationship*: Established or speculative (eg target groups not yet contacted), and if established if it is a strong, medium or weak relationship. This is based on the **existing** relationship (in contrast to the audience/relationship model which is the **intended** relationship during the project itself

- *Geographical:* Intended to indicate if the physical location of the actors was a main factor in the relationship

- *Media:* to indicate the method of communication, e.g. face to face, web based, formal meetings etc

3.1.6 Database Entity-Relationship Diagram

Primary relationships and attributes

Challenger Group
Formality Focus: Focus Group Type: Autonomy, Origin, Description Membership profile Size Age Scope Location: Post code Character

Proposal
Proposal Type Product Practice Regime/Niche Feasibility Singular/Systemic Systemic Level Openness Audience Relationship Maintenance of Change Mode of Transferability Action Understanding Values

Carbon Reduction Measure
Carbon Reduction Measure Group Climate Change Goal

Behavioural Approach (Four Es)
Approach Group Description of Activity

Networked Actor
Relationship Type Relationship State Role in Project

3.2 BG Challenger Groups

3.2.1 Summary

Classifications from application forms:

    Age
    Size
    Scope (geographical, eg local, regional etc)
    Description (a multi-choice list)

Classification codes added:

    Formality
    Group Type
    Sub-type
    Member profile
    Focus
    Character
    Size qualifier (i.e. whether the 'group size' is a core committee, includes staff & volunteers, or includes members who may be supporters but not actively involved)

Many of the applications are from partnerships, but with a clear leader. In these cases the classification is based on the lead organisation.

Groups change as they mature. The classification is based on the state of the group at the point it entered the BGC.

3.2.2 Formality

Formality	Notes	Includes Group Types
Public institution	Schools, universities, government bodies	Of levels of government only parish and town councils were eligible
Charity	Registered charities (If also a registered company then Charity used)	Not for profit enterprises (independent); Local group established by national organisation; Public supported body (e.g. Development Trusts), or established by a public body Constituted community groups (other charities that rely purely on fund raising with no associated enterprise)
Registered company	Other legal status: CIC, Ltd by guarantee, co-operative	Not for Profit Enterprise
Constituted group	Not registered with legal status but has a written constitution	Any group type except 'informal group'
Un-constituted group	Informal	Group formed within existing organisation Group formed by an existing organisation Autonomous informal group (un-constituted)

The formality is hierarchical – charities can also be registered companies, but the charitable status indicates the highest level of formality and external control applicable to the group

3.2.3 Group Type

The nature and identity of the group: this is based on inter-related characteristics of groups and therefore hard to separate into discrete codes. Clusters of groups have been identified based on a mix of attributes, i.e.:

- Top down or bottom up *origins*. Top down = established by an external organisation, e.g. a council, a parent charity or company, a local strategic partnership. Bottom up = grew from within the community, usually starting with a few activists (note: *not* an indication of mode of operation).

- Independent/dependent/constrained independent. Their relationship with other associated groups (completely independent, formed within another group, sub-group), which also indicates their degree of autonomy and their place in a wider recognised network. Constrained independent = independently constituted but following some externally determined rules or direction

- Funding characteristics – not definitive but indicative of the nature of the group, e.g. are they based on a trading model, do they receive core funding, membership fees etc

Type	Description	Origin	Dependency	Notes
A	Independent not-for-profit enterprise	Bottom up	Independent	Good proportion funded by trading income. May be charity, more likely C.I.C., co-operative - ltd by guarantee (based on DTI definition below)
B	Informal group formed within existing organisation	Bottom up	Autonomous sub-group	Informal, self-funded or local fund-raising. Common interest link so not completely autonomous, e.g. church luncheon group, group of university students
C	Informal group formed by an established organisation	Top down	Dependent sub-group	School, church groups etc partially funded/supported by parent organisation. Informal but not autonomous – led by parent institution
D	Group supporting an organisation	Bottom up	Partnership	PTA, Friends of…. Usually exist to fund-raise for the associated organisation.
E	Statutory body	Top down	Constrained independent	Parish or town council, youth council
F	Public supported or core grant funded body	Top down	Constrained independent	Some public funding, semi-official status. May be charitable, e.g. Local Strategic Partnerships, Regional energy centres with strong element of government funding

Type	Description	Origin	Dependency	Notes
G	National organisation, grant/donation/membership funded	Debatable are most are long-established	Independent	Mixed funding models. Head offices and national charities, parent organisations. Maybe charitable (RHS) or campaigning (FoE).
H	Local group established by national organisation	Top down	Dependent sub-group	Parent supports local group, and/or local group fund raises to support national body. Usually local branches of charities (CAB, Age Concern, trade union branches)
I	Community group or charity affiliated to national organisation	Bottom up	Constrained independent	Locally formed and directed, but choose to affiliate themselves for identity/ networking/support purposes. Fund raising or membership fees. Includes some charities and campaign groups (Branches of FoE, CPRE), Scouts, Transition Towns
J	Constituted independent community group	Bottom up	Independent	Fund raising and membership. Often a stage in development – may become a registered company or a charity, or stay as an independent campaign/common interest group
K	Informal group (unconstituted)	Bottom up	Independent	Ad hoc. Usually new groups, which may develop to constituted. Could be local, or formed from a partnership from other organisations (higher level)
L	Partnership crossing classes		Partnership	Where there is no clear lead partner
M	Local charity not primarily an enterprise	Bottom up	Independent	Mixed funding models. Often older, more established charities that are being encouraged to become more entrepreneurial
N	Local enterprise set up by parent organisation	Top down in local sense	Dependent on local parent body	Trading arm of a local charity or a subsidiary charity set up by a consortium, local and enterprising but not independent
O	Local charity created by another local organisation	Bottom up	Constrained independent	Reliant on parent for its existence but arising from a local, bottom up initiative

There are three main funding models for charities:

▪ Social enterprise models, with trade forming a substantial part of the income, supplemented with grant raising for specific projects

▪ Traditionally funded, with the emphasis on membership, donations and legacies and fund raising activities. Some trade, sometimes through a separate trading arm, but this is secondary to the main charitable activities

- Supported by another body, often a council or a business, or by government through grants (in particular, recent Energy Advice Bodies that have sprung up through the availability of government grants in this area. Presumably as time goes on, they will have to adjust their model to a more social enterprise format)

Charities that are local groups are mostly in the traditionally funded group (such as Transition Towns, Age Concern groups).

3.2.4 Sub-Type

An optional filtering field to find groups belonging to a specific network or of a recognised type

Subtype	Notes
Community Association	
Community Council	
Development Trust	A member of the Development Trust Association
Family Group	
Friends of the Earth Group	
Groundwork	
Housing Association	Registered social landlords
Local Strategic Partnership	
National Campaign Group	
Parent Teachers Association	
Parish/Town Council	
Regional Energy Advice Centre	
Religious Organisation	
School	
Scouts/Guides/Woodcraft Folk	
Social Group	
Transition Town	
University/FE College	
Web based group/network	
Wildlife Trust	
Youth Council	

3.2.5 Focus

The main activity of the Challengers, with a detailed level and a top level reporting group

Focus	Focus Group	Notes
Arts, Crafts, Creativity	Not primarily environmental	
Built Environment	Other environmental	
Economic Development, Local	Not primarily environmental	
Education (formal, mixed)	Not primarily environmental	i.e. not a subject based training company - schools, universities
Energy Conservation & Renewable Sources	Specific energy focus	
Environment and Sustainability in General	Environmental sustainability focus	
Food, Food Production, Farming, Organic Gardening	Other environmental	
Heritage	Not primarily environmental	
Infrastructure - support for CVS groups	Not primarily environmental	
Local Community Services	Not primarily environmental	As distinct from economic development of a community
New Group (no previous focus)	New group formed for BGC	
Overseas Development	Not primarily environmental	
People in Target Groups	Not primarily environmental	
Resident's Interest	Not primarily environmental	
Social Group	Not primarily environmental	
Transport	Other environmental	
Waste, Recycling, Resource use	Other environmental	
Wildlife	Other environmental	

3.2.6 Membership Profile

What the members of the Challenger group have in common; often indicates why they came together initially

Membership profile
Common business/social/hobby interest
Ethnic Group
Faith Group
Management, Staff & Volunteers
Older People
Residents of Building/Estate
Village/Town Community Volunteers
Youth

3.2.7 Character

Where possible, an indication of the culture of the group: in most cases this has not been possible to determine, so the field has not been used for analysis

Character
Campaigning
Charitable/philanthropic
Civic duty
Entrepreneurial
Research
Self-help

3.3 Networks

3.3.1 Openness

This relates to the extent to which actors other than the applicant contribute to the *shaping* the innovation (i.e. *not* just whether people are involved as participants).   This may take the form of technical or other specialist input or it may be 'users' or participants within the community (where there is an overlap with distinctions made by traditional community engagement models).

- 0=closed: no external input
- 1=limited input - other actors in secondary roles (e.g. making modifications to an established innovation or choosing between different elements)
- 2=significant input - other actors contributing in subsidiary but important way (e.g. technical experts, advisors)
- 3=dispersed, on-going input - actors can continue to innovate and develop the proposal

It should be noted that in some cases the internal diversity of the applicant group can provide a different approach to achieving the range of inputs that this measure is intended to capture.

3.3.2 Challenger to Audience Relationship Model

Intended relationship with main targets: this is the relationship assumed during the innovation process rather than the starting relationship. (The state of the relationship prior to the project is indicated in the Challenger Network records).

- A - Direct, strong: challenger group is embedded in community of targets
- B - Direct, weak two-way: challenger group not part of target community but frequent communication
- C - Direct, remote or one-way
- D1 - Mediated: strong-strong (through intermediaries with strong ties)
- D2 - Mediated: strong-weak (strong tie between innovating group and intermediaries, weak tie from intermediaries to target group)
- D3 - Mediated: weak-strong (through intermediaries with combination of weak & strong ties)
- D4 - Mediated: weak-weak (through intermediaries with weak ties)

3.3.3   Relationship Classification

The remaining classifications refer to each separate relationship. *This section is incomplete as the classification of network relationships has been done only for the main target audience actors.*

3.3.4   Role of Actor in Project

- Target
- Target subsidiary
- Target indirect - Used with type D network models. Relationship types then refer to relationship with intermediary rather than with target
- Partner
- Wider network – e.g. a transition town is part of the wider network of transition towns
- Service provider, Providing help to the project, but not in partnership

3.3.5   State of Relationship

This is the state of the relationship prior to the start of the project

- Established strong
- Established medium
- Established weak
- Speculative

The strength of the relationship can depend on who the direct relationship is with – the lead group or one of the partners (one degree removed), or one of the other actors.

3.3.6   Relationship Nature

Under development. This could indicate the type of relationship (marketing, service provision, management-employer, partnership etc) and an indication of whether it is a one-way (upstream/ downstream), two-way asymmetric or two-way symmetric relationship. It will also indicate if the format of the relationship is trading or non-trading

3.3.7   Geographical

This is the relationship based largely on the challenger group being in the same geographical location as the secondary actor. Rather than a direct Yes/No, a finer distinction has been made that indicates whether in a geographical relationship the actors are everyone in the bounded area, or a specific group within the bounded area. Options are:

- All
- Specific
- No

3.3.8   Actor Classification

3.3.8.1   Actor type
Under development. This could classify the actors according to their activities and sector, e.g. activist groups, all customers, older people, ethnic group, experts etc

3.3.8.2   Sector
- Public
- Private
- Third
- Individuals

3.4   Proposal Project Classification

3.4.1   Proposal Type

This is used to group innovations with a similar project aim, to allow comparisons of their processes and networks. The detailed types have been grouped to more general types for clarity of presentation

Proposal Type	Proposal Type Group
Low Carbon Enterprises: Biomass	Low Carbon Enterprises
Low Carbon Enterprises: Energy Supply	Low Carbon Enterprises
Low Carbon Enterprises: Other	Low Carbon Enterprises
Low Carbon Enterprises: Recycling	Low Carbon Enterprises
Low Carbon Zones: Grassroots	Low Carbon Zones
Low Carbon Zones: Professionally-led	Low Carbon Zones
Low Carbon Public Buildings: Advice Centres	Low Carbon Public Buildings
Low Carbon Public Buildings: Functional	Low Carbon Public Buildings
Low Carbon Public Buildings: Special Buildings	Low Carbon Public Buildings
Low Carbon Local Projects: Professionally-led	Low Carbon Local Projects
Low Carbon Local Projects: Grassroots	Low Carbon Local Projects
Low Carbon Connections: Sectors/Groups	Low Carbon Connections
Low Carbon Connections: Work Places	Low Carbon Connections
Low Carbon Inventions	Low Carbon Inventions
Low Carbon Originals: Mobile Advice Centres	Low Carbon Originals
Low Carbon Originals: New Communities	Low Carbon Originals
Low Carbon Originals: One-off	Low Carbon Originals
Low Carbon Youth Schemes: Professionally-led	Low Carbon Youth Schemes
Low Carbon Youth Schemes: Grassroots	Low Carbon Youth Schemes
Low Carbon Services: Advice/Tools	Low Carbon Services
Low Carbon Services: Networking	Low Carbon Services

3.5   Innovation Categories

3.5.1   Product/Practice

Product or Service: Yes/No

It should be noted that rather than this product always being the innovative part of the proposal, it is often a common product (insulation, solar heating) but forms part of an innovative whole when combined with the process

Practice: Yes/No

Indicates whether the innovation involves making a behavioural change in people, that will itself lead to greenhouse gas reductions

Note: separate classifications of product / service and practice allows a proposal to be classified as both.

3.5.2 Singular/Systemic/Multiple

Systemic proposals involve linked measures or changes. An innovation can be systemic in a horizontal or vertical way.

A proposal involving a series of measures which are not linked is Multiple.

3.5.3 Systemic Level

- Household
- Community
- Building/Site
- Organisation
- Supply chain
- Individual
- Mixed
- Other

3.5.4 Change Maintained By

- Challenger group
- Community group
- Target (Individual or group)
- Not required (i.e. discrete project rather than continuous)

3.6 Behaviour Change Classification

3.6.1 Mode via which Proposal aims for Behaviour Change (AUV)

Action: Yes/No - E.g. via participating in experiences or practices that disrupt existing habits

Understanding: Yes/No - E.g. via the input of information through marketing or training

Values: Yes/No - E.g. via changing / highlighting the beliefs and norms of the society / group of which the target is part or linking new values to an existing social identity

3.6.2 Intervention Measures (4E's) (Based on Defra Categories)

Any number of these categories can be assigned to each innovation:
- Enabling – By:
  - Provision of information (passive receipt)
  - Provision of skills (courses, other training provision)
  - Provision of materials/infrastructure
- Engaging – By:
  - Personal contact
  - Networks
  - Forums
  - Community actions
  - Media campaigns/opinion formers
- Exemplifying
- Encouraging – By:
  - Positive incentives, e.g. financial reward (prize) or social rewards
  - Negative motivators (fine, social penalty)

3.6.3 Transferability Model

(Based on Mulgan et al, 2007, 'In and Out of Sync: The Challenges of Growing Social Innovations', NESTA)

- Uncontrolled Diffusion: The challenger group (innovator) allows the innovation to be spread via the media, professional or other networks – which they feel is highly likely to lead to adaptation to local contexts

- Directed Diffusion: Diffusion is directed by a 'parent' organisation (where the innovation is spread through networks which can include communities of practice but with different types of controls over the innovation such as branding or kite marks and which could encompass business models such as licensing, federations or franchising)

- Takeover or Emulation: By a more powerful organisation (acting as a demonstration project for say a wider public sector development or bought by private sector organisation)

- Organisational Growth: of the original group

3.7   Climate Change Factors

3.7.1   MACC Measures Defra Behavioural Goals

The main classifications in this section (the *detailed categories* below) are derived from government schemas, in particular the marginal abatement cost categories (MACCs) as discussed in 'Building the Low Carbon Economy' (Committee on Climate Change, December 2008) and Defra's behavioural classifications as they appear in 'A Framework for Pro-Environmental Behaviours' (Defra, January 2008).

3.7.2   Feasibility Rating

(Applied to Carbon Reduction Measure)

This is feasibility in relation to the assessments made by the public policy agenda for carbon reduction articulated by the Committee for Climate Change and Defra. In this case, the proposals at the far right of the MACCs are, in government policy, less likely to be feasible technically and economically. For measures not on MACCs but appearing on Defra's list of behavioural goals, this is an indication of the position on the Willingness/Ability scales

- 0-Not actually a carbon reduction method (e.g. reducing dry landfill)
- 1-Current (below the line on MACC diagrams, high Ability/Willingness). Low cost, easy implementation, high behavioural acceptability end of the scales (e.g. switching off lights, increase recycling).
- 2-Near-term (above the line on MACC diagrams, lower Ability/Willingness). Needs some technical development or is not seen as currently cost effective in its own right or is less acceptable in terms of behavioural measures required (e.g. biofuels and photovoltaic generation, adopt a lower impact diet)
- 3-Future, not being considered by the CCC / not one Defra behaviour goal lists and as such seen as needing significantly more development to be technically or economically feasible or to be behaviourally acceptable.

3.7.3 Regime/Niche/Both

This is applied to the main measures only (as most contain some element of 'making people think about turning off the lights', but this has been ignored for this classification unless it is one of the main measures).

3.8 Carbon Reduction Goals and Measures

Top Level Goal	Mid Level Measure	Detailed Measure	Notes	Defra Behaviours	Reference	Defra Long List
0 Measure not on schema	000 Measure not on schema	0001 General measure not on schema				
01 Residential Energy Use	010 Measure not on schema	0101 Residential measure not on schema				
01 Residential Energy Use	011 Lights & appliances	0111 Electronic products domestic		Buy energy efficient products	MACC & Defra	Buy energy efficient products
01 Residential Energy Use	012 Lifestyle measures	0121 Lifestyle measures, residential energy management	eg heating reduced, turning off lights	Better energy management	MACC & Defra	Better energy management & usage
01 Residential Energy Use	012 Lifestyle measures	0122 Switch to green energy tariff		Better energy management	Defra	Change energy tariff
01 Residential Energy Use	013 Heating measures	0131 Energy efficient boilers		Buy energy efficient products	MACC & Defra	Install more efficient heating system
01 Residential Energy Use	014 Insulation measures	0141 Insulation measures residential	eg solid wall insulation	Install insulation	MACC & Defra	Install insulation products
01 Residential Energy Use	015 Eco-buildings Domestic	0151 Purchase of (& build) energy efficient homes (new)			Defra	Purchase of (& build) energy efficient homes (new)
01 Residential Energy Use	015 Eco-buildings Domestic	0152 purchase of energy efficient homes - existing			Defra	Purchase of energy efficient homes - existing
01 Residential Energy Use	016 Renewable heat & microgeneration	0160 Domestic microgeneration, method unspecified		Install micro-generation	MACC & Defra	Install domestic micro-generation through renewables
01 Residential Energy Use	016 Renewable heat & microgeneration	0161 Biomass residential	off-gas grid	Install micro-generation	MACC & Defra	Install domestic micro-generation through renewables

Top Level Goal	Mid Level Measure	Detailed Measure	Notes	Defra Behaviours	Reference	Defra Long List
01 Residential Energy Use	016 Renewable heat & microgeneration	0162 Photovoltaic generation, residential		Install micro-generation	MACC & Defra	Install domestic micro-generation through renewables
01 Residential Energy Use	016 Renewable heat & microgeneration	0163 Solar water heating, residential		Install micro-generation	MACC	
01 Residential Energy Use	016 Renewable heat & microgeneration	0164 Wind power, residential		Install micro-generation	CCC - Not on MACC diag	Install domestic micro-generation through renewables
02 Non-residential Buildings Energy Use	020 Measure not on schema	0201 Non-residential measure not on schema				
02 Non-residential Buildings Energy Use	021 Energy management measures	0211 Energy management measures	eg turning lights off more, reduced room temps		MACC	
02 Non-residential Buildings Energy Use	022 Lights & appliances	0221 Electronic products non-residential			MACC	
02 Non-residential Buildings Energy Use	023 Renewable heat & microgeneration	0230 Microgeneration, non-domestic, method unspecified			MACC	
02 Non-residential Buildings Energy Use	023 Renewable heat & microgeneration	0231 Biomass non-residential			MACC	
02 Non-residential Buildings Energy Use	023 Renewable heat & microgeneration	0232 Solar thermal heating non-residential			MACC	
02 Non-residential Buildings Energy Use	023 Renewable heat & microgeneration	0233 Heat pumps non-residential			MACC	
02 Non-residential Buildings Energy Use	023 Renewable heat & microgeneration	0234 Photovoltaic generation non-residential			MACC	

Top Level Goal	Mid Level Measure	Detailed Measure	Notes	Defra Behaviours	Reference	Defra Long List
02 Non-residential Buildings Energy Use	023 Renewable heat & microgeneration	0235 Wind power, non-residential			CCC - Not on MACC diag	
02 Non-residential Buildings Energy Use	024 Efficiency measures	0241 Insulation measures non-residential			MACC	
02 Non-residential Buildings Energy Use	025 Process efficiency	0251 Variable speed drives			MACC	
02 Non-residential Buildings Energy Use	026 Eco-buildings non-residential	0261 Building/Refitting buildings with eco-design principles				
03 Energy use in Industry	030 Measure not on schema	0301 Industry measure not on schema				
03 Energy use in Industry	031 Energy use in Industry	0311 General energy use in Industry			CCC	
04 Combined Energy Schemes	041 CHP schemes	0411 CHP Schemes			MACC	
04 Combined Energy Schemes	042 Small scale hydro-electric schemes	0421 Hydro-electric Schemes	Mentioned in CCC doc but not on MACC		CCC - Not on MACC diag	
05 Transport Technologies	050 Measure not on schema	0501 Transport measure not on schema				
05 Transport Technologies	051 Cars	0511 Electric cars - domestic use	ie improved design	Use more efficient vehicles	MACC as supply side, Defra behavioural category	Buy/use more energy efficient (low carbon) vehicles
05 Transport Technologies	051 Cars	0512 Electric cars - non-domestic use	ie improved design		MACC as supply side, Defra behavioural category	Buy/use more energy efficient (low carbon) vehicles
05 Transport Technologies	052 Vans	0521 Van design			MACC as supply side	
05 Transport Technologies	053 HGV	0531 HGV design			MACC as supply side	

Top Level Goal	Mid Level Measure	Detailed Measure	Notes	Defra Behaviours	Reference	Defra Long List
05 Transport Technologies	054 Biofuels	0541 Biofuels as transport fuel		Use more efficient vehicles	MACC as supply side, Defra behavioural category	Buy/use more energy efficient (low carbon) vehicles
05 Transport Technologies	055 Rail	0551 Rail design			CCC	
05 Transport Technologies	055 Rail	0552 Rail energy metering			CCC	
06 Transport Use	061 Eco-driving	0611 Eco-driving			MACC & Defra	Drive more economically
06 Transport Use	062 Eco-driving enforcement	0621 Speed limits			MACC	
06 Transport Use	063 Modal shift	0631 Individual journey planning	Individual measures to change to better mode	Use car less for short trips	CCC & Defra (2 measures)	Use car less - seek alternatives for short trips
06 Transport Use	063 Modal shift	0633 Transport planning	Government measures to give modal options		CCC	
06 Transport Use	063 Modal shift	0634 Reduced transport need, domestic	Business or individual? Land Use/ Planning?		CCC	
06 Transport Use	064 Network access	0641 Pedestrianisation			CCC	
06 Transport Use	064 Network access	0642 Bus & cycle lanes			CCC	
06 Transport Use	064 Network access	0643 Congestion charges			CCC	
06 Transport Use	064 Network access	0644 Emissions differentiated charges	Parking charges		CCC	
06 Transport Use	065 Land use and planning	0651 Mixed use building developments	Mixed to reduce travel		CCC	
06 Transport Use	065 Land use and planning	0652 Siting of new developments			CCC	
06 Transport Use	065 Land use and planning	0653 Public transport provision			CCC	
07 Agriculture and Food	071 Lifestyle dietary changes	0711 Adopt lower impact diet	Not covered in CCC document	Adopt lower impact diet	Defra	Adopt diet with lower GHG/env impacts
07 Agriculture and Food	071 Lifestyle dietary changes	0712 Eat more seasonal local food	Not covered in CCC document	Eat more food grown locally in season	Defra	Eat food locally in season

Top Level Goal	Mid Level Measure	Detailed Measure	Notes	Defra Behaviours	Reference	Defra Long List
07 Agriculture and Food	072 Anaerobic digestion (farms)	0721 Anaerobic digestion	Converting agricultural waste to renewable energy		MACC	
07 Agriculture and Food	073 Crop & soil	0731 Reducing fertilizer use	Could be subdivided by method, eg timing, organic		MACC	
07 Agriculture and Food	074 Livestock	0741 Reducing animal emissions	By selective breeding, breeds used, drugs		MACC	
08 Land Use, Land Use Change & Forestry	081 LULUCF	0811 Peatland restoration			CCC	
08 Land Use, Land Use Change & Forestry	081 LULUCF	0812 Land use transition	eg between grassland & other agriculture uses		CCC	
08 Land Use, Land Use Change & Forestry	081 LULUCF	0813 Increasing number of trees			CCC	
08 Land Use, Land Use Change & Forestry	081 LULUCF	0814 Forest management	More regular harvesting of existing forests		CCC	
08 Land Use, Land Use Change & Forestry	081 LULUCF	0815 Increasing plant cover in general			None	
09 Waste	091 Lifestyle measures, waste	0911 Recycling (processed)		Increase recycling	Defra	Increase recycling (and segregation)
09 Waste	091 Lifestyle measures, waste	0912 Re-use, repair, re-sale	Reduce manufacturing	Increase recycling	Defra	Re-use, repair, re-sale
09 Waste	091 Lifestyle measures, waste	0913 Purchase products with longer life-span	Reduce manufacturing		Defra	Purchase products with a longer life-span
09 Waste	091 Lifestyle measures, waste	0914 Buy products with less packaging	Reduce manufacturing		Defra	Buy products with less unnecessary packaging
09 Waste	091 Lifestyle measures, waste	0915 Reduce food/wet waste	Not covered in CCC document	Waste less food	Defra	Waste less

Top Level Goal	Mid Level Measure	Detailed Measure	Notes	Defra Behaviours	Reference	Defra Long List
09 Waste	092 Waste treatment (wet)	0921 Waste to mechanical/biological treatment	eg Landfill waste to power stations, land recovery		MACC	
09 Waste	092 Waste treatment (wet)	0922 Waste to anaerobic digestion	Converting to renewable energy		MACC	
09 Waste	092 Waste treatment (wet)	0923 Switch to recycling downstream			MACC	
09 Waste	093 Other waste GHG reduction methods	0931 In vessel composting	Downstream		MACC	
09 Waste	093 Other waste GHG reduction methods	0932 Incineration of wet waste			MACC	
09 Waste	094 Waste water	0941 Grey water schemes				
09 Waste	094 Waste water	0942 Reduce water use in home		More responsible water usage	Defra	Lower water demand
09 Waste	094 Waste water	0943 Reduce water use non-domestic		More responsible water usage		
10 Aviation & Shipping	101 Reduction in air travel	1011 Reduction in air travel		Avoid unnecessary flights (short haul)	Defra	Reduce non-essential flying (short haul)
10 Aviation & Shipping	102 Reduction in goods transported	1021 Reduction in goods transported international				
11 Offsetting	111 Carbon Offsetting	1111 General offsetting schemes			None	
11 Offsetting	111 Carbon Offsetting	1112 Contract & converge schemes			None	
12 Non-GHG Environmental Benefits	121 Other environmental benefits	1211 Other environmental benefits	eg dry waste, species diversity			
13 Non-specific reductions	131 General awareness-raising	1311 General awareness-raising project				
13 Non-specific reductions	132 Lifestyle measures, non-specific	1321 Non-specific across the board reductions				