



'Eco-City Frameworks at a Crossroads' London Workshops 11 February & 13 March 2015

SYNTHESIS REPORT

Introduction

This report summarises the main discussion points from two workshops held at the University of Westminster (London) on 11 February 2015 and 13 March 2015. These workshops formed part of the third phase of a three-year programme of cross-comparative research conducted by the Leverhulme Trust-funded *Tomorrow's City Today* international research network. Parallel workshops took place in Germany, Canada, South Korea and China.

Both workshops began with a presentation by Simon Joss (University of Westminster) of key findings from the first two phases of the programme of research. These suggest that a degree of standardisation can be observed in the recent proliferation of urban sustainability frameworks around the world, and that there are various ways in which this process may develop in future. The participants – a mixture of practitioners, policy-makers and academics – were then invited to discuss the findings and the future prospects for 'eco-city frameworks', based on their own knowledge and experiences of the field. During this discussion, they were asked to consider the relationship between standardisation and innovation (and what this means for frameworks of different types); the implications of standards being globalised rather than locally derived, and vice versa (what can and cannot usefully be standardised); expectations from future policy and practice (including the question of leadership - who should be doing what to ensure a more constructive way forwards); and expectations from future research and knowledge sharing.

A short input paper, which has been included as an appendix to this report, had been circulated to participants in advance of each workshop.

We are very grateful to the 23 participants, all of whom contributed generously to the discussions: Janet Askew, Rory Bergin, Daniel Black, Jane Carlsen, Calvin King-Lam Chung, Martin de Jong, John Devaney, Daniel Greenwood, James Harris, Rachel Huxley, Joanne Leach, Fred London, Richard Lorch, Charlotte Palmer, Judith Ryser, Michael Stevens, Fred Steward, Yavor Stoev, Tse-Hui Teh, Catalina Turcu, Patricia Willoughby, Wei Yang, and Amy Zhao.

The two London workshops were jointly organised by Rob Cowley (University of Westminster), Professor Yvonne Rydin (The Bartlett, University College London), and Professor Simon Joss (University of Westminster). The first was chaired by Rob Cowley and the second by Yvonne Rydin.

*Rob Cowley, Simon Joss, Yvonne Rydin
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Summary of Discussion Points

Enacting Frameworks

In the light of the established body of theoretical literature which reminds us that any set of indicators or standards is a contingent construct rather than a neutral tool of measurement, there is an ongoing need to acknowledge the constructed nature of frameworks in the sphere of sustainable urban development. However, little systematic research has been conducted into what happens during and after the processes of implementing urban sustainability frameworks; their widespread adoption is a relatively new phenomenon. Based at least on the experiences of the workshop participants, the precise outcomes of implementing frameworks appear to be shaped not simply by the nature of a framework's explicit attributes (the indicators or targets themselves, and the principles behind these) but also by the characteristics and capabilities of the actors involved in the process. The interface, then, between a framework and the particular actors involved in a given context is of crucial significance.

The outcomes of implementing frameworks which are less technically prescriptive (ie which specify high-level principles only, or focus primarily on enabling decision-making) may be particularly dependent on the expertise of the core team involved. The case of the introduction of the *One Planet Living* framework in one UK location illustrated this point well; its successful progress was facilitated by the local council's well established set of institutional procedures. In other contexts, where governance structures need to be devised from scratch, it was surmised that the same process might have been more problematic. Relatedly, it was observed that local authorities vary considerably in terms of knowledge, policies, and the willingness of communities to let development take place. The involvement of mayors keen to align themselves closely with a particular scheme, for personal and/or political reasons, was seen as a significant driver of uptake; and for local or national governmental involvement more generally, the political value of a given scheme is likely to be a key consideration. In one case described, the city leadership decided against adopting a particular framework since this would add to the burden of accountability.

If sustainability is ultimately dependent on buy-in from the general public, then similar considerations also apply to the involvement of the wider local community – and in particular local residents. More technical specifications, which are attuned to institutional procedures or the practices of engineers and developers, may have weaker resonance with residents and other stakeholders. This may cause communication problems for local authorities, in terms of consultation during the adoption process, publicising new codes and requirements and the rationale behind these, and sharing successful achievements.

Taking Motivations Into Account

Levels of uptake alone should not necessarily be read as measures of success in sustainability terms. One participant observed that more professionalised and profit-oriented frameworks appear to be thriving more obviously than others with more of a 'grass-roots' orientation. If there is an evolutionary tendency towards the development of globally replicable frameworks, this may be because they appeal to global commercial actors rather than because there is inherent value for

sustainability in this tendency. Similarly, if standards are promoted by commercial actors because they create business opportunities through the provision of technical solutions, then it might be expected that the preference would be for these opportunities to be international rather than local.

The currently multiplicity in the field of frameworks may allow developers or local councils to seek out schemes better matched to what they can already achieve – especially if the aim is explicitly one of marketing. A city already performing well on sustainable consumption, for example, may be unlikely to apply for an award from a scheme where this does not form a significant part of the evaluative criteria. From a cynical perspective, this implies a potential ‘race to the bottom’, in which political or commercial actors seek to ‘game’ the system. To the extent that certain schemes are tailored to the current needs of the UK construction industry, there is a risk that they will serve to reproduce the structure of this industry, rather than bring about more fundamental transformation. It seems, furthermore, uncertain how the quality of the assessment process itself might be guaranteed: in other words, who assesses the assessors? Potential adopters whose goals are more instrumental may well gravitate towards schemes where assessment is more leniently conducted.

It is realistic to assume that frameworks will typically be adopted at least partly for instrumental reasons. This is not in itself problematic; clearly, schemes need to encourage rather than deter participation by providing clear motivations for taking part. At the same time, this carries with it the risk that implementation may be reduced to a ‘tick-box’ exercise (even if the actors involved have more lofty ambitions, they may have little capacity to care about these in their everyday working life). Arguably, however, even so-called tick-box exercises may have beneficial effects in raising overall standards even slightly from existing unsustainable practices. Without targets, even less may happen; many people may lack intrinsic motivation to help shape a sustainable future. And even if this outcome points towards incrementalism, and might be critiqued as a poor response to the pressing demands of climate change, the fact of standardisation may lead to new technologies becoming more feasible due to new economies of scale. There is some potential, furthermore, for standards to ‘upskill’ industries, and industries themselves may welcome standards as a way of achieving this.

Standardising versus Innovating?

If making sense of the ongoing proliferation of eco-city frameworks involves considering the motivations of the various groups of actors involved, an attempt to *evaluate* the current state of play raises the question of what the fundamental goal of frameworks is understood to be. Should we be identifying success in terms of efficiency through standardisation? Or does their primary significance lie in the extent to which they serve to enable innovation?

Taking the latter approach need not mean denying the value of standardisation in many contexts. Some participants pointed to the need for the ‘routine checking’ of simple activities, so as to ensure minimum levels of safety (in the case of housing for example) or acceptable provision of services (such as transport). For infrastructure extending beyond particular localities – for example, electricity grids and railways – the ‘narrowing’ effect of standardisation clearly leads to socially and economically beneficial efficiencies. And yet the question arises of whether a rather more complex,

intangible and shifting long-term goal such as ‘sustainable development’ can meaningfully be standardised in the same way.

It need not be assumed that standardisation will always be in conflict with innovation. No framework can ever be entirely prescriptive, and the means of meeting its requirements will always require some creative thinking. In terms of innovation, the real value of frameworks may then lie in the discussions leading up to any formal assessments (either in terms of how a fixed criterion will be met, or what that criterion should be) – even if there is some “danger of sedimentation” afterwards. Adopting a pre-existing framework, meanwhile, removes the need to come to an agreement on starting points of different types; the question of how to define sustainability is set aside. The existence of standardised frameworks, then, may both encourage social learning and catalyse action which would otherwise not occur.

Alternative evaluative questions, accordingly, might then be posed. To what extent do frameworks encourage social learning? Do they lead to more fundamental transformations in society? Do they have an impact on absolute measures of sustainability? Widespread uptake might itself, furthermore, be considered a measure of success on a framework’s own terms. Not only would each of these perspectives lead to a different evaluation, but the expectation that any one framework should succeed in all these respects seems questionable; nevertheless, we should recognise that different purposes may be conflated in practice.

Spatial Considerations: Global *versus* Local?

If we allow that different frameworks may serve different goals, then some of this difference relates to questions of scale. Rather than seeing different scales as more or less manageable, the argument was made that different types of frameworks should apply at different scales. The development of very technical standards for individual new buildings may seem a feasible ambition at national level (and such codes exist for development in the UK, as elsewhere). But a framework aimed at making a ‘whole-city’ sustainable can only be partial in its prescriptiveness, and may necessarily be more process-oriented and open-ended. (Some participants argued that a neighbourhood is a rather more manageable scale for frameworks to aim to encompass.) This is even more the case for frameworks aiming at replicability across different cities: even similarly sized cities in close proximity may differ significantly in their existing built form, political leadership, and economic and social structure. If more technical global city standards are to be truly replicable, most participants felt that these standards should focus on high-level ‘output’ indicators (such as total carbon emissions), with the precise means of meeting these being determined at local level.

While tensions may exist between these scales, a ‘nested’ or ‘tiered’ approach seems an attractive solution. Accordingly, a city might simultaneously adopt one globally accepted standard which focused on output indicators, alongside another whose technical specification was seen as relevant to local conditions. It was noted that the UK’s national spatial planning system has tended to try to stimulate an outcomes approach, rather than specifying input details. There would, therefore, seem to be considerable scope for more technically detailed frameworks, when adopted at local level, to complement national policy requirements. It is already the case that some new commercial developments (such as Menlyn Maine in South Africa) have adopted multiple frameworks. In such

cases, the interface between different frameworks (and between these and local planning policies), as much as their individual attributes, may be a crucial factor in determining the choices made. No framework, furthermore, will ever describe a city in its entirety; alignment with the broader life of the city – its materiality as well as its social, cultural, political, economic and environmental context – cannot be taken for granted.

In any case, it is far from self-evident that detailed prescriptive frameworks will necessarily fail to become globally replicable. The *BREEAM Communities* certification scheme, for example, allows for local differences by certifying on the basis of ‘overall points’ basis within each broad criterion; it also provides for a ‘national annexe’ of criteria which are specific to individual countries. And yet it would seem that flexibility remains in tension with quality assurance. Frameworks which emphasise broad principles, or whose goal is primarily to enable local communities to decide on their own priorities, may have broader application than detailed technical prescriptions, but assessing compliance will tend to be more subjective.

Temporal Considerations

Alongside questions of scale, several temporal considerations were also highlighted during the discussions. First, it was observed that some types of outcome can be measured almost immediately (for example, usage of a new service), while others may take decades to have an effect (for example, in the realms of health, employment or education) and present greater difficulties of measurement partly due to their more diffused causality. The risk that short-term, tangible outcomes will be privileged over long-term ones may be exacerbated by the growing availability of real-time feedback data in ‘smart’ city initiatives and elsewhere, in spite of the possibilities these open up for more dynamic processes of performance measurement and reflexive learning. Additionally, some processes may be more difficult or time-consuming than others to operationalise; potentially, this may influence the choice of framework in favour of those appearing to allow for ‘easy wins’. If the goal of frameworks is to encourage innovative design and inclusive debate, there is therefore a paradoxical sense in which ease of implementation and measurement may even be undesirable.

Questions of applicability and replicability relate to dealing with *change* as well as to differences between places. In rapidly altering technological and social contexts, the static nature of frameworks may potentially cause difficulties when they are used over longer periods. If frameworks are valorised primarily as enablers of innovation, it may seem relatively unproblematic for a framework to change in reflection of its context; more difficulties, however, arise where instrumental goals of standardised certification or comparable performance assessment are valued. Ongoing use may also depend on continuity in willingness to apply (and pay for) a scheme; this may be a particular problem if key actors change roles – whether they are local authority staff, mayors, politicians, commercial actors or local community activists. A rush towards standardisation may, in any case, be undesirable at this stage due to the recency of the widespread introduction of frameworks; we are only beginning to analyse and reflect on their successes and failures at community level.

A parallel set of considerations relates to the phasing of developments, or the different stages in the life of a city as a whole. If indicators, or frameworks of indicators, are ‘tools’, then different tools might be applicable to different ‘moments’ in a city’s development. Relatedly, one participant

commented that sustainability frameworks and codes of different types often seem to be perceived as mainly designed for new developments. While the compelling case can be made that early intervention (during masterplanning or before) is disproportionately effective in terms of sustainability outcomes, it should be remembered that only a negligible proportion of the UK urban areas consists of new development. There may therefore be a stronger case for focusing more on retrofitting, and within this to distinguish between urban fabrics from different historical eras.

Outlook and Recommendations

At the end of the workshops, the participants were asked to summarise their key conclusions and recommendations for the future. The range of views expressed is reflected below:

Need for normalisation of sustainable practices

- There is a risk that frameworks entrench the idea that sustainability is a ‘bolt-on’; it may be better to call them something like ‘city standards’. For example, while the requirements of the UK’s ‘eco-towns’ were, arguably, reasonable as more general minimum standards for new development, the use of this label may have positioned them as abnormal.
- Sustainability itself may currently have an image problem, appearing to be too proscriptive, ‘worthy’, ‘anti-fun’ and ‘a pain’. If we are unable to organise things so that sustainability appears to happen of its own accord, at least there should be more emphasis on how it may make life more enjoyable.

Standardisation does have a useful role to play

- There was little objection to the idea of standardised high-level generic targets being set at international and national level (though these should be allowed to evolve as well), with more specific targets set locally.
- Although the label ‘tick box’ carries negative overtones, people may more readily relate to concrete targets than to vague principles.

Don’t make assumptions about community involvement

- Focusing overly on the interfaces between frameworks and policy-makers, practitioners and commercial actors may risk underplaying the importance of community involvement. Strong institutional buy-in from a town hall may not equate to enthusiasm at neighbourhood level.
- Nevertheless, public participation in any urban planning decision-making in the UK is often shallow or reactive (for example, focusing on preserving local parking spaces). We need to know more about the barriers to active community participation in sustainability planning, what it would mean to ‘educate’ the public better, and if this is in fact a desirable democratic goal.

The limits of ‘consensus’ as a foundation for implementation

- Although formal consensus may seem necessary as a basis for action, the reality of imperfect consultation processes requires us to acknowledge the likelihood that they conceal the imposition of particular sets of norms. Since, additionally, innovation may be stifled precisely at the point where ‘closure’ is reached in decision-making, consensus itself should be allowed to evolve over time.

- In building consensus, there may be a case to consider introducing a duty of collaboration – but how this might be feasible is as yet unclear.

Local authorities are key

- While developers may voluntarily choose to be accredited by frameworks, the tension between the profit motive and sustainability can potentially be managed by public sector involvement: “We won’t stumble into change; it should be policy-led”. However, this may be problematic if uptake is only driven by political motivations; policies should also be grounded in research.
- There is evidence that many city leaderships are actively interested in sustainability, and aware of the demonstrable co-benefits that it brings. The case for city-level change is particularly compelling given the national UK government’s track record of failure (and history of introducing contradictory policies) in the broader field of sustainability.
- Successful implementation of city-wide frameworks often appears to depend on strong backing from a mayor in particular (one sign of success is that a scheme passes from one mayor to the next).

The reality that local authorities have limited capacity

- Despite their potentially key role in shaping the ongoing evolution of the eco-city framework, local authorities in the UK are relatively constrained at the moment. If, realistically, there is a reliance on NGOs and private sector, it becomes important to learn lessons from cases where hybrid delivery models work well.

A framework for evaluating frameworks

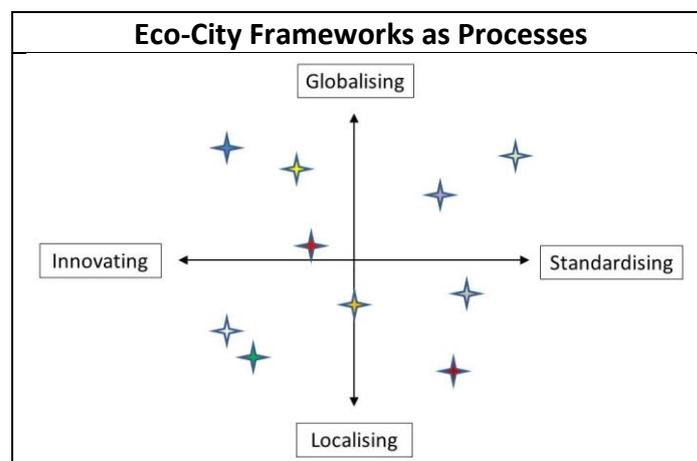
- In addition to successes or failures of frameworks on their own terms, we have few tools with which to evaluate their impacts cross-comparatively. Ongoing critical reflection is needed, in other words, not just about the ways frameworks are constructed and implemented, and the role of ‘experts’ in this, but what differences all of this actually makes to urban life.

APPENDIX: INPUT PAPER CIRCULATED IN ADVANCE OF WORKSHOPS

‘Eco-City Frameworks at a Crossroads’ Workshop – Background Information

Over the last three years, the *Tomorrow’s City Today* International Leverhulme Research Network has looked closely at the different types of urban sustainability indicator frameworks which have recently emerged around the world. The appearance of so many frameworks which are intended to be replicable, or are already being used in different contexts internationally, suggests the possibility of a convergence of standards in the near future. The questions of what form this standardisation may take, however, and whose interests it will serve, are open for debate. In this sense, the eco-city – at least in terms of the types of framework which underpin it – is at a crossroads.

Indicator frameworks come in a wide variety of guises, but can be summarised using two dimensions, as shown on the diagram below. Those sitting towards the upper ‘globalising’ end of the vertical axis tend to emphasise internationally applicable criteria and targets, and encourage international comparability and replicability. Those at the bottom end are defined essentially as a local process, whereby context-specific goals and actions are prioritised. Frameworks on the left-hand side of the diagram have more of an open innovation function (through stakeholder participation etc.), often encouraging ‘social learning’. Those on the right-hand ‘standardising’ side point in the direction of formal performance assessment and certification, as a means of defining and governing sustainable urban development.



Any given framework might be positioned along the two axes for the purposes of analysis –based on its underlying rationale and its resulting scope and functionality. By plotting all recent eco-city frameworks on the same chart, it should be possible to visualise the nature of the dominant clusters, so as to help us understand the overall direction in which the development of eco-city frameworks seems to be pointing.

To illustrate the characteristics of a typical framework in each ‘quadrant’, we have described four scenarios overleaf. Although these draw variously on existing frameworks, they are imaginary; in the real world, frameworks may be less easy to pigeonhole since they combine different functions.

1. ‘Globalising Innovating’ Framework (top left quadrant)

This framework can be applied at different scales (from small city districts up to city regions) anywhere in the world. It stipulates a series of underlying principles and areas of sustainability applicable to all urban areas, and the need to develop and implement indicators. However, it does not prescribe precise actions or exactly which indicators should be used. Rather, it gives local stakeholders the tools to work together so as to identify feasible goals relevant to their context. Best practice and learnings are shared internationally between member initiatives, including comparisons between schemes when this is helpful. The scheme is managed by an international organisation promoting urban sustainability policy and practice.

2. 'Globalising Standardising' Framework (top right quadrant)

This accreditation framework sets detailed minimum standards relating to specified aspects of sustainable urban development. New-build developments or retrofitted urban areas in any part of the world can be assessed against these for the purposes of endorsement or certification. To allow for contextual differences, it uses a points-based system (such that any particular initiative does not have to meet the standard on every individual dimension). Like scenario 1 above, the scheme is managed by an international organisation promoting urban sustainability policy and practice.

3. 'Localising Innovating' Framework (bottom left quadrant)

This toolkit defines a range of areas in which local initiatives should strive towards greater sustainability, and outlines a process through which local community stakeholders and residents can agree on more specific goals. It does not envisage any direct comparisons being made between schemes, since each place has its own environmental, institutional, economic, social and cultural characteristics. The organisation promoting the scheme exists to support local communities.

4. 'Localising Standardising' Framework (bottom right quadrant)

This certification scheme sets high-level generic standards, but allows local actors to determine how these will be reached. To allow for variations in pre-existing local conditions, success is measured in terms of improvements from a set of baselines, rather than on absolute outcomes. The scheme is run by an organisation aiming to improve sustainability across all urban areas in a given territory.

In this workshop, we would like to explore the various dimensions and functions of eco-city frameworks by addressing the questions below, among others.

Considering the four scenarios above:

- What/whose interests are served by eco-city frameworks? Are these interests in conflict?
- In what ways might each scenario generate or stifle innovation?
- How might the needs for global comparability and local relevance be reconciled?
- Where do you see the future of eco-city frameworks lying? Ideally, would you like to see a single comprehensive internationally used framework of some sort, or a suite of different frameworks and tools which could be assembled for individual initiatives?

Global Overview of Urban Sustainability Frameworks 2013 (for reference)

(Organisational type: 1 = international (governmental); 2 = national agencies; 3 = local authorities (incl. networks); 4 = technology/engineering firms; 5 = social enterprises/non-governmental organisations; 6 = professional bodies.)

<i>Name of framework</i>	<i>Year</i>	<i>Type of organisation</i>	<i>Name of Framework</i>	<i>Year</i>	<i>Type of organisation</i>
ASEAN ESC Model Cities	2010	1	Green City Index	2009	4
Biosphere Eco-City	2006	1	Green Climate Cities	2012	3
BREEAM Communities	2008; re-launched 2012	6	Green Communities	1996-7	2
CASBEE for Urban Development / Cities	2007; city version 2010	6	Green Star Communities	2012	6
Charter of Eco Mayors (Les Eco Maires)	2010; indicators published 2011	3 (network)	IEFS	2012	5
City Biodiversity Index ('Singapore Index')	2008; guidelines published 2010	1	IGBC Green Townships Rating System	2008; final version 2012	6
CityGrid	2009	5	LEED ND	2010	6
Climate Positive	2009	5	Living Building Challenge	2006; Updated 2012	5
Community Capital Tool	2012	5	National Eco-County, Eco-City and Eco- Province	2003; revised 2007	2
DGNB NSQ	2009; pilot launched 2011	6	National Eco-Garden City	2004; revised 2010	2
Eco-city Development Index System	2011	6	One Planet Communities	2008	5
EcoDistricts	2010	3	RFSC	2010; pilot completed 2012	1
Eco-Model Cities	2008	2	Selo Casa Azul Caixa	2009	2
ÉcoQuartier	2008; second phase 2011	2	SlimCity	2009	5
Eco2 Cities	2009	1	Smarter Cities Challenge	2011	4
Enterprise Green Communities, USA	2011	5	Star Community Rating System	2008; rating system registered 2012	5
Estidama Pearl Community Rating System	2009	2	Sustainable Cities Index	2012	5
European Common Indicators	2002	1	Sustainable Communities	1998; current indicator set 2010	5
FSA	2013	5	Tianjin Binhai Ecocity	2008; KPIs reviewed 2010	3
Global City Indicators Facility	2008	5	Urban Sustainability Indicators	2012	5
Global Urban Indicators	1991; revised 2006	1	REAP for Local Authorities	2010	6
Green Cities Programme	2011	1			

Source: Joss & Tomozeiu (2013). (For more details, including organisational affiliation and key framework characteristics, see the 'Global Overview Report' from: www.westminster.ac.uk/ecocities/projects/leverhulme-international-indicators).

**To find about more about the 'Tomorrow's City Today'
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