Consultation on the UN Open Working Group on the SDGs'

Urban SDG Goal 11: Targets & Indicators

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1. Context

After 18 months of deliberation, the UN Open Working Group (OWG) closed in New York on 19th June 2014 by proposing a set of Sustainable Development Goals (SDGs) to be presented to the UN General Assembly in September 2014.

A sustained global campaign for an urban SDG supported by over 200 cities, major urban networks and institutions in September 2013 played a major role in the passage of SDG 11: **Make Cities and Human Settlements inclusive, safe, resilient and sustainable**

This is a major achievement for the urban community from across the world. But an unfinished agenda needs to be closed: a reframing of the current Targets and Indicators associated with the urban SDG and up to ten other related SDGs[1] to help build synergy between them, enhance their 'scientific' credibility and implementability at city, regional and national levels - with a wider range of stakeholders, who were not fully present in the OWG intergovernmental negotiations.
A three day consultation (see Annex A for details) supported by Mistra Urban Futures and SDSN at Royal Holloway, London over 22-24 August 2014, brought together over three dozen participants from across the globe representing major urban organisations, institutions and movements; cities and global thought and practice leaders working on the SDGs (see Annex B for details).

2. Goals

The goals of the consultation were to:
* Provide an opportunity for an update and dialogue between key #urbanSDG Campaign constituents and other stakeholders
* Draft a short reframing of OWG Goal 11 Targets and Indicators for a Mayors' meeting in September 2014
* Draft a longer document that presents a more detailed articulation of the Targets and Indicators for Goal 11 and other relevant SDGs
* Review a potential #urbanSDG publication that presents 5-6 city cases using this broad framework

The first three goals were achieved in significant measure, while the fourth was broadly discussed largely because of connectivity challenges with remote participants.

3. Opportunities of the OWG 13 SDG framework

The post-2015 development agenda that is unfolding after Rio+20, the High Level Panel, and now the OWG on the SDGs, builds on the momentum and unfinished agenda of the Millennium Development Goals (MDGs). It is distinguished by three main differences: (1) addressing the needs and aspirations of all people across all members states (irrespective of per capita GNI or wealth); (2) embracing 21st century goals (cities, climate) compared with 20th century (water and sanitation, energy, universal healthcare and education), and residual 19th century goals of reducing poverty and maintaining food security; and (3) a

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[1] Poverty (#1), Inequality (#10); Health (#3), Education (#4), Water and sanitation (#6), Sustainable Energy (#7), Productive Employment (#8), Infrastructure (#9), Waste and sustainable production and consumption (#12), Climate change (#13) and Inclusion and Justice (#16)

devolution of power, capacities, resources and responsibility to local and regional governments and critically involving other non-state stakeholders (e.g. civil society, scientists, corporates, media).

Why the world needs an urban goal?

With more than half of the world population living in cities and towns, in the first decade of this millennium, there is an increasing realisation that a structural shift in regional and global demography has taken place and may well accelerate. The fact has yet to make its mark on the popular and political consciousness in many parts of world that this urban shift took place two to three decades ago in terms of economic output and productivity increase.

History teaches us that urbanisation is neither inevitable, nor always sustainable, nor the terminal condition of most states and civilisations. The 21st century's transition to an increasingly urban world, embedded in an ecologically challenged global environment and often contested rural terrain, lies at the fulcrum of the challenge and opportunity of sustainable development.

A changing geography of the world's population, economic output, savings and investment towards East and South Asia, and sub-Saharan Africa, since the 1990s, implies that a large share of incremental urbanisation will take place in these areas over the coming decades. This will largely play itself out in demographic, economic output, employment, new infrastructure and building construction terms. In other parts of the world, challenges of saturation, shrinking footprints and populations, decaying infrastructure and innovation will need to be responded to in equal measure. In all, increasing inequality, stratification, livelihoods, climate change and risk will need to be addressed.

A clear multi-scalar narrative that places cities and human settlements at the centre of the post-2015 opportunity of sustainable development, needs to be articulated, around all three domains: the social, the economic and environmental. This cannot be implemented without local and regional governments taking the lead in planning, implementation and innovation, within a broad overall scaffolding that permits for regional differentiation. Since "our struggle for global sustainability will be won or lost in our cities"[2] each UN member state will need to define its own urban agenda and empower its constituent cities and human settlements to traverse this distance, along a path first paved by the MDGs

Gaps in and lessons from the MDGs

The MDGs have enabled significant development gains across most goals as sectors. Their engagement with key urban questions was weak. In effect, the MDGs diverted policy attention from the economic livelihoods and increasing demographic importance of cities in the global and many national economies. A strong focus on poverty tended to reduce an emphasis on job creation and inequality that have become increasingly important since the 2008 economic crisis, the effects of which still persist. The imagination that urbanisation and city development can take place without informality or 'slums' endures since the MDGs.

The SDGs will need to build an alternative and proactive narrative situated on the productivity, welfare, and service improvement potential of cities, especially when addressing the challenges of inequality, governance, jobless growth, and land and labour market regulation.

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[2] UN Secretary General Ban Ki-Moon on 23 April 2012 See: http://www.un.org/News/Press/docs/2012/sgsm14249.doc.htm

The MDGs sought to establish universal goals and an agenda that is partly echoed in the SDGs. However, this attempt at universalisation has been seriously challenged by diverse definitions of poverty, deprivation, income inequality, and the lack of a universally applicable definition of urban areas. This points to two differences in the post-2015 process. The first is the need to build a heterodox system of targets and indicators, in which only some are reported at global level, while others are adapted and used at national and sub-national levels. The second is the widening access of all sections of society including the marginalised and poor to the internet and information technology, which enables bottom-up participation, and more frequent measuring and tracking.

The MDGs were largely constructed by a set of experts and statisticians, with limited global or non-state stakeholder engagement. The SDGs can break new ground by building planning and monitoring processes that not only use national statistical systems, but also integrate other stakeholders at community city and regional levels in defining and tracking SDG progress.

Some goals, like climate change, risk, and sustainable cities are important emergent challenges and opportunities that were not seen to be significant actionable policy agendas in the late 1990s, when the MDGs were constructed. It is hoped that the SDG frame would attempt to address some of these gaps.

Gaps in the current SDG & Goal 11 framing

There are several gaps in the current SDG frame, discussed in detail below. In particular, there is a weak focus on sub-national governance and devolution of responsibilities within countries; too much emphasis on national level, lack of clear financing arrangements and mechanisms, a weak focus on involving non-state (private sector, civil society) actors, and a challenging attempt to develop a universal agenda across all member states.

The most serious gap in the current (OWG 13) SDG frame, is a weak focus on in-country and sub-national governance, institutional arrangements and partnerships required for implementation. The SDG Means of Implementation (MoI) framework is contested, often scattered, provides limited coverage of many targets, and is member state-centric, which could seriously limit the possibility of successful implementation.

Financing arrangements and mechanisms are weakly defined, partially because of the separate track within the UN negotiations on them – but that gives little comfort for implementation, especially at city level, where sub-sovereign devolution may be a challenge.

An acknowledgement of the importance of local and regional governments to planning, implementing, and monitoring the SDGs & Goal 11 is weak, and the engagement with and accountability to communities and citizens, even weaker. The need for devolution has been one of the unspoken reasons for the reticence of UN member states to commit to a stand-alone urban SDG. This will be an ongoing political, economic, and fiscal struggle, which will play itself out over the lifetime of the SDGs.

The articulation and current framing of Goal 11 is strongly national government centric. The assumption seems to be that citizen and community needs can only be met by governments or in some cases by the private sector, via PPP arrangements. There is little emphasis on the ability and importance of citizens and communities to have 'voice' and the capacity to meet their own goals. A widening of the Goal 11 frame is important to accommodate a range of stakeholders from communities, movements, trade unions, CBOs

and NGOs, media; through local and regional government; and the private sector. The ability of the SDG narrative to effectively address the needs of these constituents while maintaining a broad universal character needs to be addressed.

A critical assumption of the SDG frame, is universal coverage of Goals and Targets across all geographies, countries and population groups. An urban SDG, is faced with serious challenges when confronted with this specification. First, there is no universal definition of what an urban area is; even though broadly accepted working definitions based on population size, density and employment exist across most countries. Second, there is considerable heterogeneity across urban centres within a country, not to speak of dramatic differences between countries, especially because of widely different per capita incomes.

The Goal 11 frame inadequately recognises the urbanisation of deprivation, poverty and inequality in many parts of the world. This is on top of conventional measures of poverty (e.g. the $1.25/day poverty line measurement) are inappropriate in most urban areas, especially with high levels of informality. The role and importance of the informal economy and its linkage with work and livelihoods, is weakly articulated and understood within the current SDG frame. Goal 11 is largely employment-livelihood blind, not acknowledging that informal settlements are sites of considerable economic productivity and value addition.

The role of technology, knowledge and innovation is weakly outlined within the SDG frame. This is of significant importance in cities, as economies of scale and scope, derive from the concentration of talent, institutions, technology and culture in many cities across the world.

The role of culture is critical to realising the full opportunities of an urban SDG. This is weakly defined, and engaged with within the Goal 11 and would need to be deepened. Hence, considerable intelligence needs to be applied to (1) construct a framework that encompasses key urban SDG dimensions without being prescriptive to local and regional governments; and (2) address the dynamics and needs of cities across the global North and South as well as a size continuum from large metropolitan regions to small towns and settlements.

A Way Forward with the SDGs

A major purpose of the SDGs is to provide the global community, UN member states and other global stakeholders, regional and national governments, enterprises and other business institutions, trade unions, civil society and other community groups, most important citizens - a crisp, simply understood narrative of the plural trajectories and choices that sustainable development provides us.

Success will be defined by broad universal goals that are locally refined and owned via regionally defined indicators to enable societal action, greater accountability, planning, monitoring of action and finally educating citizens, the youth and institutions. Only a few high-level indicators need to be reported annually to the UN by member states. More important is a feedback process that is based in local contexts and decision-making that provides the opportunity to plan and monitor progress to enable them to adapt in time.

The SDG debate is strongly situated within a modernisation frame, with the UN member states occupying a central position especially in terms of entitlements, perceived agency and the ability to respond. This may only be a partial picture, given the dramatic global and national changes since the late 1990s in terms of the role of the state, power and importance of non-state actors, especially the corporate sector and global finance, civil society, the media, and the emergence of a range of new forms of citizen, youth and community-led contestations in many parts of the world.

An additional challenge is that the current OWG discourse is often aspatial and atemporal, situated within a paradigm that assumes universality of context, governance, political and economic institutions and culture. While there are certainly some SDGs that are and should be universal in their scope and applicability, there are others that need to be situated within a multi-scalar spatial imagination to grapple with operational challenges and opportunities.

There also appears to be a relative myopia to the diversity of circumstance, opportunity and access that distinguishes the lives of hundreds of millions of poor, vulnerable, and marginalised people and communities, especially in cities of the global South. An unbundling of SDG Targets and Indicators to embrace both universal and city-level targets and indicators can assist a convergence with a diverse functional reality. In an increasingly networked world many Targets and Indicators will need to reach out across goals e.g. health and sustainable cities to enable better inter-linkages, cross-sectional and multilevel engagement.

The multi-level spatial and functional relationship between neighbourhoods, through city and metropolitan region to province/state and further to national scale needs to be captured better in Goal 11. Cities sit within a skein of spatial and process relationships that cut across administrative boundaries. It is important to take into account the direct engagement of cities with other cities, regions and global investors; the flow of capital, labour and technology across cities and regions that does not always follow sectoral or departmental silos.

The opportunity of emerging urbanisation and the retrofitting and reinvention of existing cities need to be highlighted to capture the imagination on the possibilities being ahead of what seem to be unsurmountable challenges. The framing needs to be more urgent and future oriented, rather than providing analysis of what has happened in the past.

Implementation Opportunities

Plans for SD implementation and innovation are starting to appear across the world, all the way from relatively well endowed metropolitan centres, to smaller towns and settlements. In order to build credibility and enable implementation, the definition of an adaptive implementation architecture that starts with pilot projects to help refine Targets and Indicators is just starting to receive attention.

An important operational challenge is managing multiple Goal 11 interlinkages across different geographical scales (neighbourhood, city, region, country); economic and employment sectors; and a wide range of agents, stakeholders and interests.

A lot more emphasis and energy has to be placed on building processes, methods, and initiatives to work with citizens, communities, local and regional components, private sector and civil society entities, apart from a state-centric programme of action.

The current debate is weak on concrete urban-centric MoIs, and a wider notion of identifying and closing gaps through a mix of appropriate legal, regulatory, policy, institutional, financial, and implementation instruments. Building linkage with the ongoing global dialogue on development financing is mission-critical for the urban SDG. This is partially because of the importance of urban areas to the global economy, especially employment, savings, and investments and the availability of investment capital in urban areas.

For implementation to be successful, a multi-scalar system of reporting and monitoring that is built from local, city, and regional government processes will need to be developed. This will imply building significant capacities at regional, city and lower levels.

OPEN WORKING GROUP 13: PROPOSAL FOR SUSTAINABLE DEVELOPMENT GOALS
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
Goal 11 Targets
11.1 *By 2030, ensure access for all, to adequate, safe and affordable housing and basic services, and upgrade slums*
11.2 *By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons*
11.3 *By 2030 enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries*
11.4 *Strengthen efforts to protect and safeguard the world's cultural and natural heritage*
11.5 *By 2030 significantly reduce the number of deaths and the number of affected people and decrease by y% the economic losses relative to GDP caused by disasters, including water-related disasters, with the focus on protecting the poor and people in vulnerable situations*
11.6 *By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management*
11.7 *By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities*
Goal 11 Means of Implementation
11. a *Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning*
11.b *By 2020, increase by x% the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, develop and implement in line with the forthcoming Hyogo Framework holistic disaster risk management at all levels*
11.c *Support least developed countries, including through financial and technical assistance, for sustainable and resilient buildings utilizing local materials*

4. OWG Goal 11 framing

The high-level framing of the OWG 13 definition of SDG 11: '*Make cities and human settlements inclusive, safe, resilient and sustainable*' is broadly acceptable to the campaign community. The major element, that has dropped out of the articulation is the work '*productive*' i.e. the conception of cities, as engines of development, productive employment and inclusion. It would be ideal if this were reinserted into the Goal, which may not be impossible to achieve.

In this document, this gap is sought to be closed by inserted another Target 11.8, which addresses this question. Given its high-level character, it should ideally be first in the list of (now) eight proposed targets.

5. OWG Goal 11 Target and Indicator framing

The current articulation of Goal 11 is largely defensive, instrumental and reactive. It almost completely misses the significant opportunity of cities delivering the SDGs. It does little to emphasise their transformative potential to address poverty, health and well-being, illiteracy and lack of access to knowledge, enabling good governance and institutional innovation; apart from the standard focus on housing, basic services, infrastructure and some forms of employment. This comes from the ability of many cities to transform current development pathways through economies of scale and scope; potential for social transformation; the concentration of institutions, innovation, diversity and a wide range of cultural practices.

Jobless growth is an important phenomena in some parts of the world that has a dramatic impact on urban livelihoods and hence poverty and deprivation. Its reflection in Goal 11 indicators and targets would enable greater engagement with real time development challenges facing many cities and countries.

The current framing of Goal 11 Targets has much to be desired in terms of simplicity, clarity and coverage of core issues, overlaps and linkages with other SDG targets. A fair amount of reframing and clarification will be necessary, especially as national, regional, and city governments move towards implementation and indicators, as is proposed in the following sections.

A strong caveat here is that the current targets have been carefully negotiated in the face of considerable contest within the OWG. It may be impolitic to unravel this process of negotiation, as it may potentially threaten Goal 11 itself. Having said that, strategic choices will need to be made on how far we wish to proceed with reworking particular Targets.

There is a strong emphasis in this document, on cross linkages between Goal 11 Targets and other Targets contained in other goals. This bundled approach will enable cross-sectional convergence and potential flexibility with local and regional governments to focus on concerns that have local relevance, within a close to universal set of goals.

This document seeks to widen the vision and potential for both cities and human settlements (in rural, peri-urban and urban areas) of different sizes and scales to participate, more equally and through wide range of sectors and instruments in the ongoing process of economic, social and political transformation.

6. Strategic Opportunities & Risks

The fundamental challenges that Goal 11 faces over the next year of negotiations within the UN General Assembly are not unknown. They have been faced before, significant and sometimes moderate success. The primary and ongoing challenges include:

- **Mainstreaming:** the continuing argument has been that urbanisation is a crosscutting concern that does not fit the sectoral structure of universal goals that was being proposed for the SDGs. Hence, like disaster risk reduction; urbanisation and sustainable cities who best served by being mainstreamed across multiple goals.

- **Consolidation with infrastructure:** a number of the targets contained within Goal 11 are seen by some as best/easily consolidated with a goal on infrastructure. This takes a rather technocratic, infrastructure and growth focused view of sustainable cities that tends to neglect its economic, social and environmental contributions. In fact, it may be most sensible to integrate much of the proposed infrastructure Goal (8) into Goal 11. This is a question for debate.

- **Spatialisation and Temporalisation:** the current core OWG 13 framework for the SDGs is largely spatially or temporally blind or neutral. This does not correspond to the ground reality in most parts of the world, especially in low and middle-income countries cities. Not having an urban and human settlements goal makes the challenge of implementation and some modicum of success very difficult to conceptualise and even more difficult to implement.

7. Reframing Goal 11

The reframing in the following sections is focused on targets and subsequently on indicators, which have rather sagely not been defined by the UN Open Working Group, to provide space for negotiation, expert opinion and harmonisation between different policy frameworks and national considerations. These are indicative suggestions, which will need further refinement through multiple forms and negotiating platforms over the next year.

7.1. Reframing Target 11.1: *Ensuing access for all, to adequate, safe and affordable housing and basic services, and upgrade slums.*

Context

This target can be seen as an extension of the slum MDG. But it needs to move from being defensive around a series of entitlements that have not been delivered, to being positive in its messaging for cities and all residents. The rephrasing of the target attempts to make the links between adequate housing, basic services and slum population and inclusion, productivity enhancement, safety, resilience and sustainability.

There seems to be a strong emphasis on individual housing with less for community and collective action, especially around slum upgrading. For countries with large slum populations, working on slum upgrading with their inhabitants represents an effective way to increase the proportion of the urban population with adequate housing. It will be important to develop more accurate measures of slums/informal settlements, working with slum dwellers and their organizations. We have chosen to keep slums, rather than informal settlements, even though it is probably not an accurate description – because of ease of recognition among many member states across the world.

Reframed Target

By 2030, ensure access for all, to adequate, safe and affordable housing and basic services, and upgrade slums **to make cities and human settlements inclusive, productive, safe, resilient and sustainable**.

Proposed Indicators

1. Proportion of urban population living in slums or informal settlements[3]
2. Proportion of urban households living in spaces with under 3 persons per room or under 3 square meters of space per person.
3. Proportion of urban households living in spaces which provide durable protection from extreme weather and disease vectors[4]
4. Proportion of women and men with secure tenure (measured by the percentage with documented rights to their house and the percentage who do not fear arbitrary eviction)
5. Proportion of the urban population in the lowest quintiles that spends more than 30 per cent of its income on accommodation.[5]

Other Supportive Goals

1. **Goal 3.** Ensure healthy lives and promote well-being for all at all ages
2. **Goal 4.** Ensure inclusive and equitable quality education and promote life-long learning opportunities for all
3. **Goal 6.** Ensure availability and sustainable management of water and sanitation for all
4. **Goal 7.** Ensure access to affordable, reliable, sustainable, and modern energy for all
5. **Goal 9.** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

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[3] As defined in the national/local context

[4] Noting Target 11.c support for sustainable and resilient buildings utilizing local materials

[5] Alternate framing: reduction in food and non-food expenditure as a consequence of increased housing costs

6. **Goal 10.** Reduce inequality within and among countries
7. **Goal 16.** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
   - Ensure that all men and women, particularly the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services including microfinance.
   - Reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management

8. **Reframing Target 11.2:** *Providing access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of the vulnerable.*

Context

While some major sectors (e.g., energy and water) have been proposed as separate SDGs, transport has been recognized as a key cross-cutting sectoral enabler of sustainable development. Hence, this Goal 11 Target focuses solely on transport. It is, however, constrained in its imagination of the spatial linkage between land use, local economic development, transportation and poverty.

Given its wide sweep, it requires multiple indicators to characterize the sustainability of transport as it supports other Goals and Targets, including urban-rural connections, rural and regional access, as well as health, climate, and safety. There are some things that are difficult to directly address e.g. the role of sustainable transport in enabling access of low-income workers to labour markets and the increasing peripheralisation of the poor.

Small changes to Target 11.2 and key indicators that are measurable and practicable in support of all these targets are suggested. Among these include: a specific reference to access for people with disabilities; attempting to address the issue of security and public transport, especially for women; keeping the balance between the relevance of average trip length, actual journey time and trip expense; balancing compactness and urban density, and sprawl. Other indicators have been suggested to respond to targets in other goals, e.g. road accidents and transport related air pollution reduction as part of the health SDG.

The question of sustainable transportation indicator development and validation is a vexed one. City data across the world for a number of suggested indicators may be a challenge and require regular transport service to fill in data gaps. Nevertheless, this aspirational indicator set is justifiable as it will establish a strong foundation for transport planning interventions and their linkage with employment, land use, climate mitigation and wider sustainability concerns. A series of secondary indicators are also suggested.

Reframed Target

By 2030, provide access to safe, affordable, accessible, clean, and energy-efficient [sustainable] transport systems for all, improving road safety, [notably by] expanding public transport, enhancing goods movement, walking, and cycling, with [special] attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

Proposed Indicators

1. Mean daily travel time for people by mode (by income quintile)
2. Share of income spent by urban households on transport (by income quintile)
3. Share of trips by public transport, cycling, walking, and other sustainable modes, and motor vehicle occupancy (by income quintile)
4. Average trip length (in km) (by mode)
5. Average load factor for freight vehicles (by vehicle class)
6. Rapid public transport length per urban resident (in km per million) (by mode)
7. Share of streets, public transport vehicles, public transport stops, and buildings accessible to persons with disabilities (percentage)
8. Number of assaults in public transport vehicles (by sex)

Proposed Secondary Indicators

1. Share of people living within 500 meters of public transit running at least every 20 minutes during peak times (percentage by income quintile)
2. Number of freight consolidation centres (numbers)
3. Number of public bicycles and population served by public bikes (percentage)
4. Length of protected and dedicated lane cycleways (Km)
5. Share of urban dwellers engaging in outdoor physical exercise (percentage)
6. Intersection density and average block size
7. Change in urban land area vs. change in urban population (ratio)
8. Share of streets with connected sidewalks (percentage of total street length)
9. Share of blocks with heterogeneous land uses (shops, residences) (percentage)
10. Floor area ratio of developed land (ratio)

Other Supportive Goals

- **Goal 3.** Ensure healthy lives and promote well-being for all at all ages
- **Goal 5**. Achieve gender equality and empower all women and girls
- **Goal 7.** Ensure access to affordable, reliable, sustainable, and modern energy for all
- **Goal 8**. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **Goal 9.** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- **Goal 10.** Reduce inequality within and among countries
- **Goal 12**. Ensure sustainable consumption and production patterns
- **Goal 13.** Take urgent action to combat climate change and its impacts*

8.3. **Reframing Target 11.3:** *Enhancing inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries.*

Context

This is one of the only SDG Targets that has an explicit spatial focus and hence is strategically very important. The process of planning is often misunderstood, as it embraces all dimensions of sustainability: economic, social and environmental. It also means different things to different sub-disciplines and has an important role in providing a scaffolding for urban and regional governance and financing. It also provides the linkage between cities and human settlements i.e. setting sustainable development within a regional context and around the transformation of land use from rural to peri-urban and high-density urban uses.

In theory, participatory planning and its engagement with space, place and form needs to run through all Goal 11 targets, but this may not be pragmatic. Unresolved issues, include a clear definition of participatory planning; key agents and stakeholders in this process across different national and city contracts; the linkage between land use, mixed-use development, transpiration and mobility and jobs and services.

Reframed Target

By 2030, achieve inclusive, connected and integrated land use in cities and human settlements, including by increasing capacity at all levels of government towards implementing multi-level participatory urban and regional planning and management

Proposed Indicators

1. Ratio of population growth rate and land consumption rate (ratio)
2. Intersection density: number of cross-streets/district (numbers)
3. Urban Land use mix (percentages for each use)
4. Sustainable development plan Index (for each urban agglomeration of 0.1 million) (index to be developed)
5. Participatory planning and transparent and accountable management Index (index to be developed)
6. Total annual financial resources for planning allocated for implementation (disaggregated by public sector and other sources) (currency units)

Other Supportive Goals

- **Goal 9.** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- **Goal 16.** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

8.4. **Reframing Target 11.4**: *Strengthening efforts to protect and safeguard the world's cultural and natural heritage.*

Context

This Target does not take into account much of the work done by UN agencies, such as UNESCO. The reframed target builds on this perspective and UNESCO's input into framing the cultural dimensions of sustainability and the SDG process, especially an emphasis on the promotion of cultural heritage, diversity and creativity which are central to cities. The relationship between culture, social life and urban development is critical to the development of cities, as vibrant and convivial places to live, work and celebrate.

The role of design in the built environment is almost completely missing in Goal 11. The protection of natural landscapes and historical neighbourhoods, going beyond the conservation of individual buildings, is an important area that needs to be developed further. Similarly, the linkage between cultural and natural heritage, especially in the form of living heritage which exists in many parts of the world, is weakly defined by this target. The opportunities of livelihood and value addition around the creative economies of cities is also another theme that links economic development, and cultural and natural heritage.

Reframed Target

Improve protection and promotion of cultural heritage, diversity and creativity and safeguard natural heritage

Proposed Indicators

1. Development and implementation of policies and framework for the protection and promotion of heritage, culture, cultural rights and diversity[6] (UNESCO)
2. Development and implementation of policies and framework for the protection and promotion of natural heritage (covered by goal 15)
3. Degree of tolerance within society towards people from different cultural backgrounds and degree of interpersonal trust (UNESCO)

Other Supportive Goals

- **Goal 8**. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **Goal 10.** Reduce inequality within and among countries
- **Goal 13.** Take urgent action to combat climate change and its impacts*
- **Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- **Goal 16.** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

8.5. **Reframing Target 11.5**: *Significantly reducing the number of deaths and the number of affected people and decrease of the economic losses relative to GDP caused by disasters, with the focus on protecting the poor and people in vulnerable situations.*

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[6] Using a qualitative five point scale

Context
This Target speaks directly to the mainstreaming of risk across the SDGs, without adequately integrating new developments in the HFA2 framework. The reframed target is based on ongoing work on defining high-level HFA2 goals and targets. It takes a multidimensional and multi-scalar view of disaster risk reduction in economic, social and environmental asset terms across the spatial scales that determine the risk, hazard exposure and vulnerability of cities, human settlements and their resident population, buildings and lifeline infrastructure.

An additional emphasis is on going beyond the conventional approach of disaster risk reduction, which is often overly focused on loss reduction, to that of building resilience to current and emerging risks. This also provides an opportunity to link to climate change related risks, adaptation and mitigation measures.

Reframed Target

> By 2030, substantially reduce disaster losses, in lives and in social, economic and environmental assets at local, national and regional scales, with the focus on protecting the poor and all people in vulnerable situations and building their resilience

Proposed Indicators
1. Total number of human lives lost, people injured or affected in urban areas (persons per year, by sex, hazard type and category (intensive/extensive))

2. Total damaged and destroyed buildings and lifeline infrastructure (numbers/ appropriate indicator)

3. Replacement costs of destroyed and damaged assets (monetary value annual, by hazard type and category (intensive/extensive))

4. Annual Average Loss (AAL) due to disaster risk (monetary value annual, by hazard type and category (intensive/extensive))

5. Probable Maximum Loss (PML) due to disaster risk (monetary value annual, by hazard type and category (intensive/extensive))

6. Fiscal resilience to Disasters (percentage of GDP)

7. Public investment in Disaster risk management (percentage of GDP)

8. Disaster Risk Policy, Planning & Implementation Index (Index)

Other Supportive Goals
- **Goal 1.** End poverty in all its forms everywhere
    - Disasters 1.5
    - Resilience 1.5
- **Goal 2.** End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
    - Disasters 2.4
    - Resilience 2.4
- **Goal 3.** Ensure healthy lives and promote well-being for all at all ages
    - Resilience 3.3
- **Goal 5.** Achieve gender equality and empower all women and girls
- **Goal 6.** Ensure availability and sustainable management of water and sanitation for all

- **Goal 7.** Ensure access to affordable, reliable, sustainable, and modern energy for all
- **Goal 8**. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **Goal 9.** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
  - o Resilience 9
- **Goal 13.** Take urgent action to combat climate change and its impacts*
  - o Disasters 13.1
  - o Resilience 13.1
- **Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- **Goal 16.** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

9. **Reframing Target 11.6**: *Reducing the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management*

Context

This target has an incomplete and incoherent structure, with environmental impacts occurring and different scales being listed on the target – instead of taking a more generic approach. Air quality is largely a city issue, solid waste is both a city and regional issue. The linkage to other critical urban environmental issues, including: water, wastewater and biodiversity are not made.

There are some structuring issues that need to be resolved. Solid waste management could well be moved to Target 11.2, as part of basic services. The linkage between environment impact and green open spaces i.e. Target 11.7 is not made.

There is no acknowledgement of the regional and global impact of cities, hence the appropriate indicator set may not be forthcoming. Greenhouse gas emissions, which cause critical environmental impact span the city, region and national domains.

In short, this Target needs extensive reframing to: take it to a higher and more generic level; rephrase it to be aspirational and more process-oriented; spatialise and examine trans-boundary impacts; make the link between urban and rural areas (through cities and human settlements); and the dependence of both city and human well-being on ecosystems and their health.

Reframed Target

> By 2030, cities and human settlements have increased their capacity for stewardship of nature/ecosystem health, on which human well-being depends, inside and outside of their administrative boundaries

Proposed Indicators
- Air quality index (index)
- Water quality index (index)
- Urban Biodiversity index (index)
- Solid waste production per capita (Kg per person per day)

Other Supportive Goals
- **Goal 2.** End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
- **Goal 6.** Ensure availability and sustainable management of water and sanitation for all
- **Goal 7.** Ensure access to affordable, reliable, sustainable, and modern energy for all
- **Goal 12.** Ensure sustainable consumption and production patterns
- **Goal 13.** Take urgent action to combat climate change and its impacts*
- **Goal 14.** Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- **Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

9.7. Reframing Target 11.7: *Providing universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities*

Context

This is an important Target not only because of its contemporary political salience, but because it is only one of two places in which the SDGs make an explicit spatial reference. It is also important for the long term sustainability of cities because it seeks to protect public space for the future and makes explicit reference to particular vulnerable groups. It may, however be too end state focused, rather than emphasising on process which will enable a progressive realisation in different contexts.

The Target needs to differentiate between green and public spaces. As not all public places are green and vice versa. These are also governed by rather different dynamics and varied institutional imperatives in terms of management. Public spaces may be defined as those places that serve collective code and have a public right-of-way along with multiple uses. The target here would be to maintain a minimum proportion of public space for both present and future generations.

Green space has an important impact on health, especially the development of children, enabling a physical activity and on the mental health of adults. Hence, securing maintaining and enhancing green space in the face of relentless urban expansion and sprawl is an important target. A challenge, however, is in the definition of the quality of the spaces, which may constrain comparability.

The question of universal access is an important one, as it relates to vulnerable groups and informal economic and other activity that often uses public space. A specific reference to disability is also important as one of the most widespread forms of discrimination is experienced in public and green spaces.

The Target has been rephrased to include both cities and human settlements with a process focus on securing, maintaining and enhancing universal access to safe and inclusive spaces.

Reframed Target

By 2030, <u>all cities and human settlements secure, maintain and enhance universal access to safe and inclusive</u> green and public spaces, particularly for women and children, older persons and persons with disabilities

Proposed Indicators
- Urban green space per capita (sqm per capita)
- Urban public space per capita (sqm per capita)
- Average walking time to nearest green open space (minutes)
- Proportion of secure public space as a proportion of all urban space (percentage)
- Rate(s) of violence committed in public spaces affecting women and men by location [disaggregated by sex, race, sexual orientation, age, disability, as appropriate to the context]

Proposed Secondary Indicators
- Indicator on urban-rural economic linkages (to be developed)
- City Biodiversity Index (Singapore Index)

Other Supportive Goals
- **Goal 5**. Achieve gender equality and empower all women and girls
  o Goal/target 5.2 (GBV and public space) and 5 c. (political empowerment for women)
- **Goal 8**. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
  o Goal 8.3 (development oriented policies for productive activities) and 8.8 (safe and secure working environments)
- **Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
  o Goal/target 15.5 and 15.9 (biodiversity)
- **Goal 16.** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
  o Goal/target 16.1 (reduce all forms of violence)

9.8. Framing Missing Target 11.8: _Promote the role of cities as engines of transformation and innovation to contribute to solving local, regional, national and global problems._

Context

The current articulation of Goal 11 is defensive and reactive. It does not pick up on the aspirational and proactive Campaign narrative that focuses on cities as places that define the future and as sites of opportunity to address and implement the SDGs. It may be useful, therefore, to define a new Target that provides a platform to strengthen the role of cities, as sites and engines of transmission and innovation to contribute to the dressing local, regional, national and global developmental challenges. This should ideally be placed either as the first Target for Goal 11, or if all else fails as chapeaux.

This could be reduced to a more instrumental Target that focuses on improving the productivity of cities and human settlements by improving access to spatial planning, resource conservation, livelihood creation and skill development, infrastructure and services, technology and knowledge, and governance, regulatory, and fiscal reform.

This is a theme around which more debate and discussion is necessary, especially around the definition of indicators.

Reframed Target

Promote the role of cities as engines of transformation and innovation to contribute to solving local, regional, national, and global problems.

Proposed Indicators

- **To be defined**

Other Supportive Goals

- **Goal 1.** End poverty in all its forms everywhere
- **Goal 8**. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **Goal 9.** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

8. Reframing Goal 11: Means of Implementation (MoIs)

Comments

A number of critical issues that related to Goal 11 were transferred into a rather incomplete, fragmented, and unstructured set of Means of Implementation (MoIs). These largely related to contested issues that were discussed during the OWG proceedings.

There are a range of policy and planning instruments that are critical to enable Sustainable Cities and Human settlements that are neither mentioned nor alluded to in the proposed targets for Goal 11 and other SDGs.

This will require at least one detailed consultation that brings together members of the campaign to debate and develop an adaptive policy, planning and implementation scaffolding to help operationalise this Goal.

Reframing MoIs

8.1. **Reframing MoI 11.a**: *Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning*

The first speaks to the challenge of keeping the balance and linkage between urban, peri-urban and rural areas around the three pillars of sustainable development. Strengthening national and planning systems is the key means to enable this. There is however no reference to an overall national, regional, or urban sustainable development plan for the country within which this planning frame would be situated. This has some mapping on Target 11.2

8.2. **Reframing MoI 11.b**: *Increasing the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, develop and implement in line with the forthcoming Hyogo Framework holistic disaster risk management at all levels*

This MoI, is focused on a mix of climate change, resilience and disaster risk reduction, within the HFA2 frame. It does not make a reference to the potential UNFCCC climate convention. The primary policy instrument proposed here is an integrated framework of policies and plans that simultaneously address inclusion, resource efficiency, climate mitigation and adaptation, disaster risk reduction and resilience. This is still an emerging area of practice for which few good examples are available internationally. This has some mapping on Target 11.5.

8.3. **Reframing MoI 11.c**: *Supporting least developed countries, including through financial and technical assistance, for sustainable and resilient buildings utilizing local materials*

This MoI extends MDG commitments to provide financial and technical assistance for sustainable and resilient buildings using local materials. There are a number of glaring exceptions – including water, wastewater, transportation, telecommunication, power and energy and social infrastructure – to which this MoI should also pay some attention.

9. **The Potential to Consolidate Goal 11 Targets**

As the SDG proposals from the OWG are reviewed by the UN Secretary General's report and proceed through the General Assembly over 2014 and 2015, three broad scenarios may emerge for the SDGs, and more specifically for Goal 11.

The first is that the process of negotiation will lead to an expansion of goals and targets from the already large pool available for discussion. A further expansion of goals and potential dilution of the importance of Goal 11 as an integrating and operationalisable goal will be a serious risk to implementation of the SDGs.

The second is that the framing of Goal 11 remains relatively unchanged, and this document can be used during the process of negotiation to help reframe some targets and define a set of actionable indicators.

The third is that a process of consolidation of goals and targets is initiated. The first concern in this scenario is that Goal 11 may be integrated with another goal and hence, the opportunity of having a standalone SDGs for Cities and Human settlements may recede. From the negotiations and discussions at the OWG this seems improbable. Nevertheless, it is a potential risk that needs to be assessed and responded to. Here again, the analysis presented in this document that shows the cross linkage between Goal 11 and its Targets and other Goals will be useful in helping make strategic choices.

The following sections explore the overall SDG frame and the linkages between other SDGs, their Targets, and Goal 11. This is potentially useful in examining how to 'urbanise' other SDGs, such as health, energy, water, and environmental protection.

Goal 11 Potential Links with Other OWG 13 Goals & Targets

Goal 1. End poverty in all its forms everywhere

Goal 2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

Goal 3. Ensure healthy lives and promote well-being for all at all ages

Goal 4. Ensure inclusive and equitable quality education and promote life-long learning opportunities for all

Goal 5. Achieve gender equality and empower all women and girls

Goal 6. Ensure availability and sustainable management of water and sanitation for all

Goal 7. Ensure access to affordable, reliable, sustainable, and modern energy for all

Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 10. Reduce inequality within and among countries

Goal 12. Ensure sustainable consumption and production patterns

Goal 13. Take urgent action to combat climate change and its impacts*

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

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10. Potential Links with Other Goals[7]

10.1. Reframing Targets for Goal 1: End poverty in all its forms everywhere

Comment

The SDG that has most political consensus behind it is the commitment to end extreme poverty in all forms across the world. The emphasis of much of the progress during the MDG period has been on reducing rural poverty, partially through development and income growth, but also because of enhanced employment income and Social Security in urban areas. The most dramatic impact of this on national, regional and global targets has been in East Asia.

However, commitment to extreme poverty reduction does not automatically translate into an effective set of interventions to address urban poverty, as the underlying definitions, causes and dynamics can be considerably different from that in rural areas of the same countries. The following section, attempts to 'urbanise' Goal 1 and appropriate Targets.

Targets

Target 1.1 by 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day

- **Percentage of <u>urban</u> population below $1.25 (PPP) per day (MDG Indicator):** A separate indicator is necessary for urban income poverty, as the $1.25 poverty line is poorly adapted to urban environments where basic services (housing, water, energy, etc.) need to be purchased.

Target 1.2 by 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

- **Percentage of <u>urban</u> population living below national poverty line (MDG Indicator):** The national poverty line should be differentiated for urban versus rural settings within the country to account for differences in cost of living.
- **Percentage of <u>urban</u> population in extreme multi-dimensional poverty:** Multi-dimensional poverty assessments aim to measure the non-income based dimensions of poverty, to provide a more comprehensive assessment of the extent of poverty and deprivation. At a minimum this 'MPI2015' would track extreme deprivation in nutrition, education, health care, water, sanitation, access to modern cooking solutions and reliable electricity, to show continuity with MDG priorities

Target 1.3 implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable

- **Percentage of <u>urban</u> population covered by social protection programs:** The ILO includes the following ten elements as part of comprehensive social security coverage: medical care, sickness benefits, and protection of disability, old age, survivor, maternity, children, unemployment, employment injury, and general

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[7] This section draws extensively from the analysis presented in the SDSN 25th July 2014
Working Paper on "Indicators and Monitoring Frameworks for Sustainable Development Goals: launching a data revolution for SDGs"

protection against poverty and social exclusion. By gender, age, urban/rural, and by type

Target 1.5 by 2030 build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

- Losses from disasters, by climate and non-climate-related events in urban areas (in US$ and in lives lost) This indicator measures losses, both lives lost and economic costs, in urban and rural areas due to natural disasters, disaggregated by climate and non-climate-related events. Extreme climate-related natural disasters include the following: (i) hydro-meteorological events (storms, floods, mass movements (wet)) and (ii) climatological events (extreme temperature, drought, wildfire). Non-climate-related natural disasters consist primarily of geophysical events (earthquakes, volcano eruptions, tsunamis, dry mass movements). Other disasters that may be climate or non-climate related include biological events (epidemics, insect infestations, animal stampedes). If in doubt, we propose that the events be categorized as "non-climate related."
- Share of rural population living within 2 kilometres of a road, motorable trail or other appropriate infrastructure providing all-year access for sustainable transport
- Share of rural population living within 30 minutes' walk of appropriate formal or informal transport services

10.2.**Reframing Targets for Goal 2**: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

Comment

The challenge with this goal is the loss of focus on rural productivity and the breakdown of the linkage between sustainable agriculture and livelihoods and poverty reduction. The campaign has helped that there is a strong synergy between sustainable cities and sustainable agricultural and rural prosperity because of the backward for linkages between the urban job creation and buttresses and rural prosperity. Cities cannot survive without sustainable food supplies from peri-urban and rural areas and hence are strongly dependent on them for their survival, growth, and development.

Targets

There are no suggestions for this Goal, except to disaggregate indicators for urban and rural areas separately.

Potential indicators include:

Target 2.1 by 2030 end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round
- Percentage of urban population below minimum level of dietary energy consumption (MDG Indicator)

Target 2.2 by 2030 end all forms of malnutrition, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs
- Prevalence of stunting in urban children under the age of 5 years

10.3. **Reframing Targets for Goal 3**: Ensure healthy lives and promote well-being for all at all ages

Comment

The framing of SDG3 on health, implicitly acknowledges the relationship between planetary health, healthy cities and human health and well-being. This is partially based on the long history in public health of the interrelationship between first communicable and more recently non-communicable diseases and city structure, functioning, environmental status, resilience and their impact on human lifestyles.

Key areas in which strong linkages exist include: water, sanitation and hygiene; ambient and household air pollution; transportation systems that facilitate exercise; housing design, construction and quality related health risks. Areas that are still poorly addressed include mental health; nutrition and obesity.

A more holistic perspective that links ecosystem, urban and human health, is still under development. This will potentially widen the debate over a typically narrow focus on health systems and healthcare that dominates the debate on the SDG.

Targets

Potential indicators, disaggregated by age, location (urban and rural areas), and income level include:

Target 3.1 by 2030 reduce the global maternal mortality ratio to less than 70 per 100,000 live births
- Maternal mortality ratio (MDG indicator) and rate

Target 3.2 by 2030 end preventable deaths of new-borns and under-five children
- Neonatal, infant, and under-five mortality rates (modified MDG Indicator)

Target 3.3 by 2030 end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases
- Incidence, prevalence and death rates associated with TB (MDG Indicator)
- Incidence and death rates associated with malaria (MDG Indicator)

Target 3.4 by 2030 reduce by one-third pre-mature mortality from non-communicable diseases (NCDs) through prevention
- Probability of dying between ages 30 and 70 from cardiovascular disease, cancer, diabetes, or chronic respiratory disease

Target 3.6 by 2020 halve global deaths and injuries from road traffic accidents
- Road traffic deaths per 100,000 population
- Fatalities due to road crashes (by income quintile, sex, age)
- Serious injuries due to road crashes (by income quintile, sex, age)
- Economic impact due to road crashes (by income quintile)

Secondary indicators
- Share of roads rated unsafe (1 or 2 star rating defined by International Road Assessment Program)
- Share of vehicle manufactured meeting minimum safety standards set by UN
- Share of motorcycle riders/passengers wearing helmets

Target 3.9 -- by 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination

- Mean urban air pollution of particulate matter (PM10 and PM2.5) Rapid urbanization has resulted in increasing urban air pollution in major cities, especially in developing countries. It is estimated that over 1 million premature deaths can be attributed to urban outdoor air pollution
- Emissions of PM2.5 and PM10 from passenger and freight vehicles
- Share of motor vehicles meeting Euro 6 and Euro 5 or equivalent vehicle emission standards
- Share of transportation fuel (gasoline and diesel) that is ultra-low sulphur (under 50 ppm and under 10 ppm)
- Share of in-use passenger, commercial, and freight vehicles covered by regular Inspection and Maintenance Programs and renewable motor vehicle registration requirements

10.4. **Reframing Targets for Goal 4**: Ensure inclusive and equitable quality education and promote life-long learning opportunities for all

Comment

The Education SDG emphasises universal free access to primary and secondary education with a focus on relevant, quality education. It attempts to address the gender imbalance in both school and higher education. A significant new innovation, is the introduction of early childhood care and development to prepare young children for primary schooling. While there is a continuing debate on learning outcomes and what constitutes effective learning, there is an increasing consensus on the need to simultaneous address quality and access.

Urbanists have not focused on education as a significant contributor towards economic and social development. The opportunity costs of being in school, versus not being in school in urban areas is vastly different from that in rural areas. In addition, most education provision in cities is a domain of local government. Hence strengthening the mandate and capacity of local governance to deliver this SDG will have an important contributory impact on urban sustainability.

Targets

Target 4.1 by 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes

Target 4.2 by 2030 ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

Target 4.3 by 2030 ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university

Target 4.4 by 2030, increase by x% the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

Target 4.5 by 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable,
including persons with disabilities, indigenous peoples, and children in vulnerable situations

Target 4.6 by 2030 ensure that all youth and at least x% of adults, both men and women, achieve literacy and numeracy

10.5.   **Reframing Targets for Goal 5**: Achieve gender equality and empower all women and girls

Comment

The struggle for goal around gender equality and empowerment has an important parallels with the campaign for an urban SDG. The MDG's close to mainstream gender concerns, by integrating them into particular goals and targets. While gender is included as standalone SDG and addresses key issues, that gender protagonists would like to see, some key themes like reproductive rights are likely to be left out.

Gender framing provides a number of means of engagement for urban SDG. This includes: linking into questions of inequality by ending all forms of discrimination; addressing gender-based violence in public spaces; addressing access to public services, public spaces and economic resources; and, finally, control over land and property, which are central to gender questions and women's participation. Attention will need to be given to detail, phrasing and emphasising active participants and empowerment. The intersection nature of gender with other social elements also needs to be given appropriate salience.

Targets

Potential indicators, disaggregated by age, marital status, location (urban and rural areas), ethnicity, income level and where appropriate type of and severity of violence, include:

Target 5.2 Eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other types of exploitation
  * Prevalence of women 15-49 <u>in urban areas</u> who have experienced physical or sexual violence by an intimate partner in the last 12 months

Target 5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilations
  * Percentage of women aged 20-24 <u>in urban areas</u> who were married or in a union before age 18

Target 5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies, and the promotion of shared responsibility within the household and the family as nationally appropriate
  * Gender gap in wages, <u>in urban areas</u>, by sector of economic activity

10.6. **Reframing Targets for Goal 6**: Ensure availability and sustainable management of water and sanitation for all

Comment

Universal access to safe and affordable water and sanitation is a carryover from the MDGs. This is among one of the core SDGs that underpins Sustainable Cities or Goal 11. The implementation of service delivery under target 11.2 will not be possible without the simultaneous achievement of target 6.1, 6.2 and 6.3. Hence a strong cross-referencing between Goal 11 and Goal 6 will be necessary.

Targets

Potential indicators, disaggregated by urban and rural areas:

Target 6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all

- **Percentage of <u>urban</u> population using basic drinking water (modified MDG Indicator):** Drinking water is defined as water used by humans for ingestion, food preparation, and basic hygiene purposes. Households are considered to have basic drinking water service when they use water from an improved source with a total collection time of 30 minutes or less for a round trip, including queuing. An improved drinking water source is a source or delivery point that by nature of its construction or through active intervention is protected from outside contamination with faecal matter

Target 6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

- **Percentage of <u>urban</u> population using basic sanitation (modified MDG Indicator):** Improved sanitation facilities at home are those that effectively separate excreta from human contact, and ensure that excreta do not re-enter the immediate environment. Facilities are considered adequate if the facility is shared among no more than 5 households or 30 persons, whichever is fewer.

Target 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and increasing recycling and safe reuse by x% globally

- **Percentage of urban wastewater flows treated to national standards, by domestic and industrial source:** Broadly defined, wastewater is a combination of one or more of: domestic effluent consisting of blackwater (excreta, urine and faecal sludge) and greywater (kitchen and bathing wastewater); water from commercial establishments and institutions, including hospitals; industrial effluent, storm water and other urban run-off; agricultural, horticultural and aquaculture effluent, either dissolved or as suspended matter. Wastewater treatment is the process of removing suspended and dissolved physical, chemical, and biological contaminants to produce (a) water that is safe to be discharged to the environment or suitable for reuse and (b) a solid sludge suitable for disposal or reuse (e.g. as fertilizer).

10.7. **Reframing Targets for Goal 7**: Ensure access to affordable, reliable, sustainable, and modern energy for all

Comment

The transition to sustainable energy systems will underpin the transformation of urban areas and settlements to sustainability. Much of the maladaptive behaviour and negative environmental impacts and externalities that are created by cities are driven by a strong dependence on inefficient fossil fuel based energy systems. A greater debate on what constitutes modern energy services needs to be initiated.

The energy transition will have a number of key challenges: universal access to efficient, reliable and modern energy systems is still not available to hundreds of millions of people in South Asia and sub-Saharan Africa; the widespread adoption of energy efficient technology, depends partially on universal access, quality of supply and appropriate pricing signals that internalise the true costs of carbon; the transition from fossil fuel to gas and renewable based energy systems requires massive investments in technology, capital and a restructuring of systems to provide appropriate grid diversity and security; the decarbonisation of the entire energy system and supply chain will be a herculean task that has to be affected over the next few decades, if dangerous climate change impacts are to be avoided.

Cities will have a critical role to play in this, from altered land-use and increased compactness; significant changes in transport and mobility systems; significant changes in the urban metabolism from energy, buildings, transportation to water and biomass systems. Energy poverty is an important consideration for sustainable cities which does not find an adequate reference in this Goal. A target that addresses universal basic energy services may be one way forward on this.

In order to move forward towards implementation, a range of policy questions will need to be addressed, including norms for expanding infrastructure that are contextually specific and local appropriate; technology transfer within local contexts; new forms of financing energy infrastructure, energy pricing and cross subsidisation.

Targets

Potential indicators, disaggregated by urban and rural areas and sex of head of household:

Target 7.1 By 2030 ensure universal access to affordable, reliable, and modern energy services

- Share of the <u>urban </u>population with access to modern cooking solutions (%)
- Share of the <u>urban</u> population with access to reliable electricity (%)

Target 7.3 Double the global rate of improvement in energy efficiency by 2030

- Motor vehicle fuel economy of all new Light Duty Vehicles
- Motor vehicle fuel economy of all in-use Light Duty Vehicles

10.8. **Reframing Targets for Goal 8**: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Comments

This is the SDG that speaks most directly to the productive role of cities in terms of employment generation and validation. Goal 11 is truncated without a strong reference to this, either in the goal or in a relevant target. This is one reason why a suggestion of inserting a new target around urban productivity has been mooted. In the absence of this, or as a compliment a strong cross-reference to goal eight from Goal 11 to Goal 8 should be made.

Targets

Potential indicators, disaggregated by urban and rural areas; province/district and where appropriate sex, and formal/informal sector:

Target 8.1 Sustain per capita economic growth in accordance with national circumstances, and in particular at least 7% per annum GDP growth in the least-developed countries

- GNI per capita (PPP, current US$ Atlas method)

Target 8.5 By 2030 achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

- Share of informal employment in total employment

Target 8.6 By 2020 substantially reduce the proportion of youth not in employment, education or training

- Youth employment rate

10.9. **Reframing Targets for Goal 9**: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Comment

This is the SDG that is closest in content to and a potential competitor for attention with Goal 11. There was strong support within some member states of the OWG for this goal, as they see this as a necessary condition for industrialisation, development, and economic growth, which underpinned their contemporary development strategy.

This is a sector and an SDG that will be significantly driven by private sector interests, given that over USD 2 trillion a year will be invested in transport, energy, and water infrastructure across the world. There are a number of tough trade-offs that are involved in developing sustainable infrastructure and contests between national, regional, and local governments in how to address urban metropolitan infrastructure systems most effectively.

In an ideal world, and an earlier framing, sustainable infrastructure was integrated into the Sustainable Cities and Productive Rural Areas SDGs. This was a rational and operationalisable framing that unfortunately did not pass muster in the OWG. This debate may well open up once more during the passage through the UN General Assembly.

A strategic call of the campaign on the most appropriate means to address this challenge, the potential risk of integration and mainstreaming, along with a more detailed set of urban indicators, needs further discussion.

Targets

Potential indicators, disaggregated by urban and rural areas:

Target 9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

*   Access to all-weather road (% access within [x] km distance to road)
*   Logistics Performance Index by country (measures the relative ease and efficiency with which products can be moved into and inside a country)
*   Passenger-kilometres by various land transport modes in major national and regional corridors
*   Cost of national and regional bulk freight per tonne-km

Target 9.4 By 2030 upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities

*   Average load factor of freight vehicles by mode (efficiency of freight logistics)

Target 9.c Significantly increase access to ICT and strive to provide universal and affordable access to internet in LDCs by 2020

*   Mobile broadband subscriptions per 100 <u>urban</u> inhabitants

10.10. **Reframing Targets for Goal 10**: Reduce inequality within and among countries

Comment

The rise of inequality has been especially sharp over the last two decades. The core dynamics influencing this are situated and closely related to the economy, livelihoods, capital formation and concentration of technology, wealth, knowledge institutions in urban areas. This is a relatively unexplored area of research and intervention. The unintended consequences of and intervention in the space are also not very well understood across the world.

Targets

Potential indicators, disaggregated by urban and rural areas, province, or district:

Target 10.1 by 2030 progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average

- **Palma ratio:** ratio of richest 10% of the <u>urban</u> population's share of gross national income (GNI) divided by the poorest 40% of the population's share
- **Percentage of <u>urban</u> households with incomes below 50% of median income:** an indicator of inequality at the bottom of the income distribution, which acts as a cause of social exclusion and undermines equality of opportunity.

10.11. **Reframing Targets for Goal 12**: Ensure sustainable consumption and production patterns

Comment

The sustainable consumption and production SDG has no reference to urban areas or urban metabolism, where much of both demand and supply side challenges emerge from. The target on waste reduction, instead of being part of basic services (i.e. Target 11.2) has found its way into Target 12.5.

A strong cross-reference could be made to this from Goal 11.

Targets

Target 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse

- Solid waste generation, recycling and disposal (tonnes per day)
- Proportion of uncleared or untreated solid waste (percentage)

10.12. **Reframing Targets for Goal 13**: Take urgent action to combat climate change and its impacts

Comment

The SDG on climate change is one of the most serious and contested SDGs and is one of the goals and targets to which sustainable cities could contribute dramatically, if an adequate reframing of Goal 11 Targets, Indicators, MoIs and cross referencing to Goal 13 were enabled.

Goal 13 and its targets are very general and therefore difficult to operationalise. Urban areas are focal points of energy use and carbon dioxide emissions. When city level emissions are examined in detail, the divisions between low-, mid-and high-income countries become a little blurred, in spite of the fact that low and middle-income countries typically have much lower per capita carbon emissions.

The most important fact that is not represented in this articulation is the huge window of opportunity that is emerging for climate mitigation and adaptation over the next two decades, as most of the cities of tomorrow are yet to be built. The question of embodied versus operational energy use for this new infrastructure and buildings is central. In addition, there is a close relationship between urban form, infrastructure, energy and carbon intensity – which are typically locked in by patterns of land use.

Cities are also, however, among the most important sites of greenhouse gas emission reduction through resource efficiency, presentation of new technology, and radical decarbonisation through energy, transportation, water, buildings and biomass systems. This has not been adequately realised in both Goals 11 and 13 and is a significant incremental opportunity.

Targets

Target 13.1 Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries

- CO_2 intensity of the transport sector (gCO2/vkm), and of new cars (gCO2/pkm) and trucks (tCO2tkm)

10.13. **Reframing Targets for Goals 14**: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

10.14. **Reframing Targets for Goal 15**: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Comment

The environment is widely dispersed through the entire SDG framing. Starting from Goal 2 on sustainable agriculture, Goal 6 on sustainable water management, Goal 11 on Sustainable cities, Goal 12 on climate change, and finally, Goals 14 and 15 that relate to the conservation of ocean and marine resources and terrestrial ecosystems and halting biodiversity loss.

Greater clarity is required around the use of the concepts of resilience and sustainability, which are currently used interchangeably even though they mean very different things. Sustainability can be interpreted as a normative goal of society. Resilience is an attributable system that is sometimes desirable and sometimes undesirable depending on the context.

The SDGs provide an opportunity to view an urban goal through the lens of the environment by enabling strong linkages to relevant targets in these other goals. The idea that cities are open or semi-open systems that depend on their survival on ecosystem services that come from a region is an important concept to emphasise.

11. The Way Forward

A high-level discussion took place on strategic directions for the Campaign, which outlined the following broad priority areas:

- **Mobilisation:** A phased widening (across geographical areas and stakeholder categories) and deepening of the campaign to encompass a range of existing and new constituencies. An indicator set of targets and potential lead partners are indicated below:
  a. Cities & Mayors: 1,000 (all six continents) *[UCLG, ICLEI, C-40, Cities Alliance, Habitat]*
  b. INGOs: 100 *[Communitas, SDSN]*
  c. Universities, Professional & Science organisations: 250 *[SDSN, ICSU, Future Earth]*
  d. Movements, Trade Unions & People's organisations: 2 million members *[SDI, WIEGO]*
  e. Youth organisations: 100 *[Communitas]*
  f. Development Financial Institutions and financial institutions: 10 *[SDSN]*
  g. Corporations : 20 of the top 100 *[SDSN, WUC]*
  h. Member State support : 50+ *[Habitat, Cities Alliance, Communitas, SDSN]*

- **Convening:** Of partners and other key stakeholders in both internal and external convening events. Indicative events are listed below:
  a. Internal: three more internal convening meetings till UNGA 2014 *[SDSN, Mistra]*
  b. External: establishing a coordinated joint calendar and synchronised websites to link to ongoing and planned meetings with external constituencies and stakeholders *[all Partners]*

- **Negotiation:** With member states and other key stakeholders around the urban SDG, suggested targets and indicators to align with the overall framing and priorities of the campaign. It would embrace the following constituencies:
  a. Naysayers, 'fence sitters', & advocates in both national capitals & UN HQ *[Campaign negotiators and designated national/city advocates]*
  b. Other Goals gatekeepers & advocates *[SDSN]*

- **Communicate & Inspire**: Initiate telecommunication and inspiration campaign around 'cities are the future' with active participation of campaign partners and their networks and communication teams. Indicative responsibilities:
  a. Media: *[Communitas, WUC, SDSN]*
  b. Key fora: G-20, WSF, Davos, Fund-Bank annual meetings *[to be discussed further]*
  c. Roadshows: national/city *[to be discussed further at next meeting in New York]*

- **(Co)-Reframe**: The current development and urban and settlements discourse; globally, nationally & with key constituencies and stakeholders, through advocacy, analytical work, publications, convening and action within cities
  a. Globally *[All Campaign members]*
  b. Nationally & at City-level *[to be discussed further at next meeting in New York]*

- **Experiment:** With SDG development and planning processes at city level; mobilisation and pilot projects to be ready to deliver outcomes starting Jan 2016

    c.   National and city-level mobilisation *[UCLG, ICLEI, SDI, WIEGO, Country SDSNs]*

    d.   City-level SD Plans *[Habitat, SDSN, Cities Alliance, Mistra, SDSN CSI & other partners]*

    e.   Financing *[to be discussed further]*

    f.   Institutional reform and development *[to be discussed further]*

- **Educate:** Campaign members, their constituents, national, regional, and city governments, professionals and researchers, students and citizens across the world:

    g.   MOOC on Sustainable Cities and Human Settlements *[SDSN and Campaign partners]*

    h.   Establishing a global network of researchers & educators *[SDSN, Future Earth, ICSU, Mistra, IIED, ACC, IIHS etc. to be discussed further]*

A detailed action plan based on this overall framework would need to be developed and funded through individual partner initiatives and a potential light touch campaign process.

Annex A: London Consultation Schedule 22-24 August 2014

22nd August 2014 | Friday				
From	To	Activities	Suggested Lead Presenters	Chair
10:00	10:30	Registration and Arrivals		
10:30	11:00	Welcome by Mistra		
11:00	11:15	Introductions	Sue Parnell, Thomas Elmquist	David Simon
11:15	11:45	SDGs and Goal 11 Framing	Aromar Revi, Jeffrey Sachs (from 11.30-11.45)	
11:45	12:00	Next Steps on the SDGs	Guido Schmidt (via Skype), Jessica Espey (via Skype)	
12:00	12:10	Next Steps on the SDG indicators	Cynthia Rosenzweig, William Solecki	
12:10	12:25	UN Habitat Reflections and links to Habitat III	Andrew Rudd, Raf Tuts	
12:25	13:10	Campaign Partners and Institutional Reflections		
		: Communitas	Maruxa Cardama	David Satterthwaithe
		: UCLG	Edgardo Bilsky	
		: ICLEI	Yunus Arikhan	
		: Cities Alliance	William Cobbbet Federico Silva	
13:10	14:00	Lunch		
14:00	14:40	Campaign Partners and Institutional Reflections		
		: SDI	David Satterthwaithe	Thomas Elmquist
		: WEIGO	Caroline Skinner	
		: ITDP	Michael Replogle	
		: World Urban Campaign	Eugene Birch	
14:40	15:00	Reflections on the MDGs	Michael Cohen, David Satterthwaithe	
15:00	16:30	Reflections on Proposed OWG SDGs		

		Poverty and Livelihoods (Caroline Skinner, David Satterthwaite) Health (Andrew Haines tbc) Education(Chandrika Bahadur) Gender (Caren Levy) Water & Sanitation (Aromar Revi) Energy (Jessica Algehed, Zarina Patel) Infrastructure (Shagun Mehrotra) Environment (Thomas Elmquist) Climate (Karen Seto) Human Rights (Sarah Bradshaw)		Aromar Revi
16:30	16:45	Coffee/Tea Break		
16:45	18:00	Reflections on SDGs at City level		
		: Framing	William Solecki	
		: Durban	Debra Roberts	
		: Bangalore	Garima Jain	
		: New York	William Solecki	Eugene Birch
		: Accra	Martin Oteng-Ababio	
		: Rio	Carolina Jaguaribe	
		: US experience	Eugene Birch	
		: Operationalising the SDGs	Peter Head	

23rd August 2014 | Saturday				
From	To	Activities	Suggested Lead Presenters	Chair
9:00	9:15	Framing	Maruxa Cardama, Debra Roberts & Aromar Revi	
	11:15	Working Groups on Goal 11 Reframing Targets & Indicators		
		: WG1 – Target 1 – Housing and basic Services		
		: WG2 – Target 2 – Sustainable Transport		
		: WG3 – Target 3 – Participatory Planning		
		: WG4 – Target 4 – Cultural and Natural Heritage		
		: WG5 – Target 5 – Disasters		
		: WG6 – Target 6 – Environment		

From	To	Activities	Suggested Lead Presenters	Chair
		: WG7 – Target 7 – Public Spaces		
11:15	11:30	Coffee/Tea Break		
11:30	13:00	Goal 11 Working Groups Continue		
13:00	14:00	Lunch		
14:00	14:15	Framing	Andrew Haines, Chandrika Bahadur & David Satterthwaithe	
14:00	16:15	Urbanising Other SDGs		
		: WG1 – Water and Infrastructure		
		: WG2 – Education & Health		
		: WG3 – Climate and Energy		
		: WG4 – Poverty and Gender		
16:15	16:30	Tea/Coffee		
16:30	18:00	Reporting Back	All groups	Sue Parnell
18:00	18:30	Coordinating group meeting		

24th August 2014 | Sunday				
From	To	Activities	Suggested Lead Presenters	Chair
9:00	11:00	Closing session	All participants	Aromar Revi
11:30	11:45	Tea Break and Early Departures		
11:45	13:00	Summary Documentation and Follow up Actions		David Simon

Annex B: Brief profile of Participants

Andrew Haines: Andrew Haines is a Professor of Public Health and Primary Care with a joint appointment in the Dept of Social and Environmental Health Research and in the Dept of Population Health. He was previously Director (originally Dean) of LSHTM for nearly 10 years up to October 2010, having previously been Professor of Primary Health Care at UCL between 1987-2000. He worked part-time as a general practitioner in North London for many years. He has been a member of a number of major international and national committees including the MRC Global Health Group (chair) and the MRC Strategy Group. He was formerly chair of the Universities UK Health and Social Care Policy Committee and a member of the WHO Advisory Committee on Health Research. He was a member of Working Group 2 of the UN Intergovernmental Panel on Climate Change for the second and third assessment reports and review editor of the health chapter fifth report. He chaired the Scientific Advisory Panel for the 2013 WHO World Health Report on Research for Universal Health Coverage. He sits on a number of other national and international committees.	
Andrew Rudd: Andrew Rudd is the Urban Environment Officer in the Urban Planning and Design Branch of UN-Habitat. He serves as focal point for the agency's green economy, cities and biodiversity and urban agriculture initiatives, and has represented UN-Habitat in the Environmental Management Group's IMG on the Green Economy, the International Resource Panel's Cities Working Group, the Global Partnership on Cities and Biodiversity and the Task Forces for the City Biodiversity Index and Outlook. Mr Rudd managed the Urban Patterns for a Green Economy quick guides series, which will be launched at Rio +20. At UN-Habitat he also coordinated a photographic investigation of rapidly-growing cities and the agency's participation in the Shanghai World Expo 2010. Previously Mr Rudd worked as an architect in New York on projects related to transport master planning and retail concept design. He is a contributing author of the upcoming City Biodiversity Outlook (2012), Working towards a Balanced and Inclusive Green Economy (2011), UN-Habitat's State of the World's Cities Report 2010: Bridging the Urban Divide and the LSE Cities Programme's Housing and the City (2007). Mr Rudd received a BA in Architecture from Yale University and an MSc in City Design and Social Science from LSE.	

Ania Rok: Ania Rok (Project Officer Governance & Social Innovation, ICLEI European Secretariat) is a sociologist and an expert in local sustainability processes. Her work focuses on building bridges between the local government community and other actors, such as international actors, research organizations and grassroots sustainability initiatives. She was actively involved in the local government community preparatory process for the Rio+20 Conference, as a co-author of the Local Sustainability 2012. Taking stock and moving forward. Global Review (ICLEI 2012), and is co-facilitating ICLEI's engagement with the SDG process. Ania is currently involved as a knowledge brokerage expert and analyst in projects on transition management, citizen participation and co-creation, social innovation, resource efficiency and European and global frameworks for local sustainability processes.	
Aromar Revi: Aromar Revi is the Director of the Indian Institute for Human Settlements (IIHS) – India's first prospective National University for Research and Innovation to address challenges of urbanisation through an integrated programme of education, research, consulting and advisory services. He has been a senior advisor to various ministries of the Government of India, consulted with a wide range of UN, multilateral, bilateral development and private sector institutions and works on economic, environmental and social change at global, regional and urban scales. He is also one of South Asia's leading disaster mitigation and management experts and has led emergency teams to assess, plan and execute recovery and rehabilitation programmes for ten major earthquake, cyclone, surge and flood events affecting over five million people. Aromar is considered a leading expert on Global Environmental Change especially on Climate Change adaptation and mitigation. He is one of the Coordinating Lead Authors for the Urban Areas section of the IPCC 5th Assessment report (2014). He also serves as a member of the Global Advisory Board for the Global Assessment of Risk report (2011).	
Caren Levy: Caren Levy is the director, of the Development Planning Unit at the University College of London. She is an urban development planner working on planning, community-led development and governance, with a focus on housing, infrastructure and transport in urban areas in the global South. She has a special interest in the institutionalization of social justice in policy and planning, particularly related to the cross-cutting issues of gender, diversity and environment. In these fields, she has 25 years' experience of teaching, research, training and consultancy in mainstreaming social justice in organizational development, and exploring innovatory approaches to planning methodology, planning education and capacity building. She works both in London and abroad with communities, governments and international organizations, including UN Habitat, ILO, EU, DFID, SDC, SIDA. Country experience includes Egypt, Namibia, India, South Africa, Sri Lanka, Chile, Colombia and Brazil.	

Carlos Francisco C.: A medical doctor and epidemiologist (MD-PhD) by training, Dr Carlos Dora has a distinguished career in public health and environmental issues. At WHO, he is coordinator of the Unit "Interventions for Healthy Environments" which is part of the Department of Public Health and Environment. In this capacity, he has spearheaded efforts to bring together the various types of Health Impact Assessment (HIA) at the global level, in particular by organising the April 2010 conference in Geneva, which focused on HIA in Cities and HIA in Extractive Industries. Dr Dora works on the interface between knowledge and practice. At WHO, he previously developed a programme on the environmental health implications of transport policies, and before that he worked on environmental health problems in Eastern Europe. He has also served as a senior policy analyst at the WHO Director General's office. Before joining WHO, he worked in environmental epidemiology at the London School of Hygiene and Tropical Medicine. Before that, he worked in internal medicine, in post-graduate medical training and in the organization of local preventive and health care services in Brazil and the United Kingdom.

Caroline Skinner: Caroline Skinner is Urban Policies Programme Director for the global action-research-policy network Women in Informal Employment: Globalizing and Organizing (WIEGO) and a Senior Researcher at the African Centre for Cities (ACC) at the University of Cape Town. For over 15 years, Skinner's work has interrogated the nature of the informal economy with a focus on informing livelihood-centred policy and planning responses. She has published widely on the topic. She has been involved in policy and advocacy work at a local, provincial, national and international levels. Since 2009 she has been managing the research component of the Gates Foundation funded global project – Inclusive Cities. The project is a consortium of largely membership based organizations of the working poor, that aims through organizing and policy advocacy to ensure that urban informal workers needs are heard within urban planning processes. Among other responsibilities, she has overseen the publishing of nearly 100 publications on the informal economy (see http://wiego.org/publications-resources).

Chandrika Bahadur: Chandrika Bahadur is Director for Education Initiatives at the SDSN, based in New Delhi. Previously she was a consultant to the Indian Institute for Human Settlements, Bangalore. From 2011-2012, she worked with Columbia University, helping the Government of Jordan in designing its poverty reduction strategies. From 2008-2011, she was advisor to the Chairman and Managing Director at Reliance Industries. Her primary responsibility was to help in the setting up of Reliance Foundation, a Rs. 1000 crores non-profit philanthropic foundation focusing on areas of education, health, rural development, and urban renewal. In this role, she helped develop an overall strategic framework for the Foundation including its core areas of work, organizational structure, budgets and partnerships.

Chikako Takase: Chikako Takase assumed the position of Director of UNCRD in February 2012, after serving as Acting Director since March 2011. Prior to coming to UNCRD, she served as Deputy Chief of the Policy Coordination Branch, Office for ECOSOC Support and Coordination, Department of Economic and Social Affairs at the United Nations (UN DESA). She began her career at the UN in 1984, after serving as Associate Expert Officer in Jakarta for UNIDO. She first worked for the Projections and Perspective Studies Branch, Department of International Economic and Social Affairs, where she was in charge of medium-term forecasting, and at the Macroeconomic and Social Policy Analysis Division, Department of Economic and Social Information and Policy Analysis, where she was involved in monitoring developed country economies and in drafting the Department's flagship annual publication, World Economic Survey. She later worked for the Division for Sustainable Development (DSD), Department of Policy Coordination and Sustainable Development, during which time she had an opportunity to work for the Secretariat of the Convention on Biological Diversity from 1996-1999. While at DSD, she was involved in the preparation as well as organization of the World Summit on Sustainable Development, held in Johannesburg, South Africa in 2002. At DSD, her work mainly focused on changing consumption and production patterns. She holds B.A. in Liberal Arts (Economics) from International Christian University, Japan, and M.A. in Development Economics from the University of Sussex, UK.

Cynthia Rosenzweig: Cynthia Rosenzweig is a Senior Research Scientist at the NASA Goddard Institute for Space Studies, where she heads the Climate Impacts Group. She is Co-Chair of the New York City Panel on Climate Change, a body of experts convened by the mayor to advise the city on adaptation for its critical infrastructure. She co-led the Metropolitan East Coast Regional Assessment of the U.S. National Assessment of the Potential Consequences of Climate Variability and Change, sponsored by the U.S. Global Change Research Program. She was a Coordinating Lead Author of the IPCC Working Group II Fourth Assessment Report. She is Co-Director of the Urban Climate Change Research Network (UCCRN) and Co-Editor of the First UCCRN Assessment Report on Climate Change and Cities (ARC3), the first-ever global, interdisciplinary, cross-regional, science-based assessment to address climate risks, adaptation, mitigation, and policy mechanisms relevant to cities. She is the founder of AgMIP, a major international collaborative effort to assess the state of global agricultural modeling, understand climate impacts on the agricultural sector, and enhance adaptation capacity, as it pertains to food security, in developing and developed countries. She was named as one of "Nature's 10: Ten People Who Mattered in 2012" by the science journal Nature. A recipient of a Guggenheim Fellowship, she joins impact models with climate models to project future outcomes of both land-based and urban systems under altered climate conditions. She is a Professor at Barnard College and a Senior Research Scientist at the Earth Institute at Columbia University.

David Satterthwaithe: David Satterthwaite is a Senior Fellow at the International Institute for Environment and Development (IIED) and editor of the international journal Environment and Urbanization. He is also visiting Professor at the Development Planning Unit, University College London. Most of his work has been on poverty reduction in urban areas in Africa, Asia and Latin America, undertaken with local teams. He has written and edited various books on urban issues, including Squatter Citizen (with Jorge E. Hardoy) and Environmental Problems in an Urbanizing World (with Jorge E. Hardoy and Diana Mitlin). He also co-authored two books recently published by Routledge on urban poverty with Diana Mitlin. He has a particular interest in how climate change can or will add to the stresses and shocks faced by low-income urban dwellers. He contributed to the IPCC's Third and Fourth Assessments and was a coordinating lead author in the Fifth Assessment. He was awarded the Volvo Environment Prize in 2004.

David Simon: David Simon research encompasses principally the interface between development and the environment, in the context of sustainability and global environmental/climate change but also aspects of political geography and critical geopolitics, urbanisation and transport policy. He has a keen interest in theoretical, applied and policy arenas, underpinned by the belief that real progress lies in a far closer integration across them than is generally the case. He has been at the leading edge of debates about the nature of 'development' and the exploration of the utility of so-called 'post-structuralist' perspectives such as postmodernism, postcolonialism and post-traditionalism, with application to various empirical contexts. This work has been presented at international conferences, and published especially in leading international outlets like Geografiska Annaler(1997), Environment and Planning D: Society and Space (1998), my co-edited book, Development as Theory and Practice (1999); the edited volume, Towards a new regional and local development research agenda (2002); Development in Practice (2003) and in Progress in Development Studies (2003).

Debra Roberts: Debra Roberts established and heads the Environmental Planning and Climate Protection Department of eThekwini Municipality (Durban, South Africa). Her key responsibilities in this post include: overseeing the planning and protection of the city's biodiversity and natural resource base; directing and developing the municipality's Climate Protection Programme; and ensuring that biodiversity and climate change considerations influence all aspects of planning and development in the city. Dr. Roberts is currently a lead author of Chapter 8 (Urban Areas) and a contributing author to Chapter 12 (Africa) of Working Group II of the Intergovernmental Panel on Climate Change's (IPCC) Fifth Assessment Report, due for release in 2014. She is also a member of the South African climate negotiating team. She sits on various international advisory bodies focused on climate change issues in cities (e.g. the Rockefeller Foundation's Asian Cities Climate Change Resilience Network). In addition she acted as vice-chair and then chair of UN-Habitat's HS-NET Advisory Board which oversaw the production of the 2011 "Cities and Climate Change" Global Report. Most recently she has been appointed as one of the 60 international experts convened under Royal Decree by the King of Bhutan to work on the preparation of "The New Development Paradigm Report" which will be submitted to the United Nations General Assembly in 2014. Dr Roberts will co-chair the Ecological Sustainability Working Group of the "New Development Paradigm" International Expert Working Group. Dr. Roberts has written widely in the fields of urban open space planning, environmental management and urban climate protection and has received a number of awards for her work.

Edgardo Bilsky: Edgardo Bilsky is the director of programs and research at United Cities and Local Governments (UCLG, headquarters in Barcelona, Spain) and coordinates UCLG's triennial flagship report, the Global Report on Local Democracy and Decentralization (GOLD). Born in Argentina, he has a Masters in History from the University of Paris VII and from the High Level School of Social Sciences (EHESS) in Paris. He joined UCLG at its foundation as a global organization in 2004, having been director for Latin America, since 1990, at the World Federation of United Cities, one of UCLG's two founding organizations. In the 90's, he led different projects on support to decentralization and local development in Central America (Costa Rica, Guatemala, Honduras, Nicaragua, Salvador) and in Dominican Republic (for the European Commission). Prior to this in the 80's, he conducted research and taught at the University of Paris and Buenos Aires (Argentina).	
Eugene Birch: Eugénie L. Birch FAICP, RTPI (hon), is the Nussdorf Professor of Urban Research, Department of City and Regional Planning, School of Design, University of Pennsylvania. She is the founding co-director of the Penn Institute for Urban Research, dedicated to integrative research and instruction in sustainable urban development. She is co-editor of Penn Press's The City in the 21st Century series that has published more than twenty volumes since 2005. Dr. Birch has served in many leadership positions including editor, Journal of the American Planning Association; chair, Planning Accreditation Board; president, Association of Collegiate Schools of Planning, Society for American City and Regional Planning History and the International Planning History Society. She has received several awards: the Lawrence C. Gerkens Award in Planning History, Jay Chatterjee Award, Margarita McCoy Award and Distinguished Educator Award from the Association of Collegiate Schools of Planning. Dr. Birch, who lives in New York City, holds a Ph.D and Masters in Urban Planning from Columbia University and an A.B. cum laude in History from Bryn Mawr College	
Federico Silva: Dr. Federico Silva is a Senior Programme Specialist at the Cities Alliance, where he coordinates the Catalytic Fund, one of the partnership's main business lines, and the corporate Results Framework and Performance System. Prior to joining the Cities Alliance, Dr. Silva worked as a project manager for the international NGO CIVICUS and as a consultant for the Italian Ministry of Finance. He is the author of numerous academic papers on international affairs.	

Garima Jain: Garima Jain is a Consultant at the Indian Institute for Human Settlements. Her areas of research include issues of vulnerabilities and risks particularly in urban areas, migration, climate change and multi-dimensional urban poverty. She supports the practice team on urban policy projects. She has led several urban policy projects including those on disaster risk for UNISDR, urban poverty for UNDP and overall urban policy support partnership with Rockefeller Foundation. She is currently involved in developing Comparative City Indicators for the Post 2015 Sustainable Development Goals, particularly those pertaining to Goal 11 on Sustainable Cities and Human Settlements. She also helps build and deliver capacity building programmes for working professionals on various themes including – Integrated Urban Disaster Risk Reduction, Building Resilience against Risk, Urban India & Environmental Sustainability, Data Visualisation and Re-imagining the world-class city. She also contributes to the curriculum building exercise for Quantitative and Empirical Methods, Urban Management and Urban Planning. Garima also assists with the project management of the organisation. She has an extensive experience in planning, research and capacity building. She led design and development projects for sustainable community habitats in Mukteshwar. She has worked with the City of Somerville (Massachusetts) for analysing existing and designing new parking regulations. She was a part of the London Organizing Committee of Olympic Games (2012), where she helped prepare accessibility & inclusion guidelines and led the accessibility management team in the transportation planning projects

Guido Schmidt-Traub: Guido Schmidt-Traub is Executive Director of the UN Sustainable Development Solutions Network. He has served as climate change advisor to the Africa Progress Panel secretariat and was CEO of Paris-based CDC Climate Asset Management, an investment company regulated by the French financial markets regulator. From 2008-2010 Guido was Director and Partner at South Pole Carbon Asset Management in Zurich, a leading developer of greenhouse gas emission projects. Prior to managing the MDG Support Team at UNDP (2006-2008) he served as Policy Advisor and then as Associate Director of the UN Millennium Project in New York, which was tasked with developing a concrete action plan for the world to achieve the Millennium Development Goals. Earlier Guido was Partner at IndexIT Scandinavia, a private equity fund for early-stage technology companies, and consultant at McKinsey & Company in Germany. Guido holds an M.Phil. in Economics from Oxford University (Rhodes Scholar) and a Masters in physical chemistry from the Free University Berlin. He resides in Paris with his family.

Ian Short : Ian Short is Chief Executive of the Institute for Sustainability, an independent charity established in 2009 to significantly accelerate the delivery of sustainable cities. The Institute works with a diverse range of partners in the UK and internationally to deliver innovative demonstration projects focused on systemic solutions for cities and neighborhoods. Ian is a Governing Board member of the Climate-KIC, an organisation established by the European Commission in 2010 to become Europe's catalyst for climate change adaptation and mitigation innovation. He is also on the Mayor of London's Smart London Board, which is leading efforts to utilise digital technology to make London an even better place to live, work and invest.	
Jessica Algehed: Jessica Algehed (born 1971) is Acting Director for Mistra Urban Futures. She has been working at the centre since 2012. Jessica has a PhD in Industrial Energy Systems from Chalmers University of Technology in Gothenburg and has a broad experience within energy, climate mitigation and sustainable development. Previous experience include for example working as climate expert and strategist at Region Västra Götaland and building up and heading a cross-disciplinary systems and policy research and innovation group of 25 sustainability experts at SP Technical Research Institute of Sweden. Jessica has written several publications, most of them synthesizing research in order to transfer academic knowledge to policy makers, for example regarding waste management, sustainable consumption and industrial energy systems.	
Jessica Espey: Jessica is a Manager for the SDSN. Prior to joining she served as a special adviser on the post-2015 agenda within the Office of the President of Liberia, supporting the work of The High Level Panel of Eminent Persons (of which President Sirleaf was co-chair) and the development of the Common African Position on the Post-2015 Agenda. For three years prior she was a senior researcher for Save the Children UK, who initially supported her work in Liberia on secondment. She has also worked as a researcher at the Overseas Development Institute (ODI). She has particular expertise in the study of inequality and gender discrimination. Jessica holds a Bachelor of Arts with Honours in Modern History from the University of Oxford and a Masters of Sciences in the Political Economy of Development from the School of Oriental and African Studies, University of London. Over the past 8 years she has lived and worked in the UK, Liberia, Kenya and Rwanda.	

Jochen Mattern: Jochen Mattern leads the Secretariat of the "Development Partners Working Group on Decentralisation and Local Governance – DeLoG" and is head of the GIZ sectoral programme "Sector Dialogue and Donor Harmonisation, Decentralisation and Local Governance". He has worked amongst others for GTZ and UNDP in Brazil, El Salvador, Guatemala, Nicaragua and Zimbabwe in the fields of decentralisation, governance, urban / local development. He holds a Master's degree in Political Science and studied in Paris (Sciences Po) and Leipzig.	
Karen Seto is Professor of Geography and Urbanization at the Yale School of Forestry & Environmental Studies. Prior to joining Yale, she was on the faculty at Stanford University for eight years. Professor Seto's research is on the human transformation of land and the links between urbanization, global change, and sustainability. She is an expert in urbanization dynamics, forecasting urban growth, and examining the environmental consequences of urban expansion. She has pioneered methods using satellite remote sensing to reconstruct historical patterns of urbanization and to develop projections of future urban expansion. She specializes in China and India, where she has conducted urbanization research for more than fifteen years.	
Martin Oteng-Ababio: Martin Oteng-Ababio is a Senior Lecturer and Coordinator of the Urban Disaster Risk Reduction Programme, Department of Geography and Resource Development, University of Ghana – Legon. His specialized areas of study include urban environmental management, urban disaster risk reduction, and the problem of informality. Among other topics, he has studied E-waste scavenging as an economic opportunity for youth in Accra. He has written widely on urban issues in Ghana, and is the author/co-author of over 25 articles in refereed journals, as well as 5 book chapters. He is currently working on a book on solid waste management in Ghana. He received his PhD in Geography and Resource Development from the University of Ghana.	

Maruxa Cardama: Maruxa co-founded Communitas, a coalition for sustainable cities and regions in the new UN Development Agenda. Earlier she run nrg4SD, an international organisation of subnational governments promoting sustainable communities, and co-facilitated the engagement of subnational and local authorities in the UN Rio +20 Conference. Previously she was Deputy Director at the representation of the South West of England to the EU where she led on the sustainability portfolio for a partnership of regional authorities, academia and the private sector. Before that, she started her career at the EU representation of the Spanish region of Galicia and the EU Committee of the Regions. Besides, Maruxa has worked as Expert on Governance and Public Administration Reform for the Government of Romania and The British Council. She has also lectured in capacity building programmes on EU sustainability policy and funding. In all, Maruxa has 12 years-experience on strategic policy analysis and advocacy, international partnerships, capacity building, and multi-level governance in the field of sustainable development at the international, national and subnational levels. She is currently serving as Co-Chair of the Drafting Committee for the Declaration of the upcoming 65th Annual UN DPI/NGO Conference, which will take place 27-29 in NYC with the title '2015 and Beyond: Our Action Agenda'.

Michael Replogle: Michael Replogle is Managing Director for Policy and Founder of the Institute for Transportation and Development Policy, which since 1985 has worked with governments worldwide to bring about sustainable transport solutions that protect the environment and public health while promoting equitable economic development. He helped found the Partnership on Sustainable Low Carbon Transport (SLoCaT), which brings together 88 organizations, including multilateral development banks (MBDs), UN agencies, NGOs, and associations to shape global policy and support implementation of related voluntary commitments. SLoCaT helped foster a $175 billion commitment for more sustainable transport over the next decade from the 8 largest MDBs at Rio+20. In 2013, he was named a non-resident visiting professor at the China Academy of Transportation Sciences in Beijing. He has recently been a consultant to the Asian Development Bank, InterAmerican Development Bank, and Global Environmental Facility on GHG appraisal methods for transportation and he is an advisor to the Climate Bonds Initiative on certification standards for transport sector investments. As Transportation Director for the Environmental Defense Fund from 1992-2009, Replogle shaped development and implementation of U.S. transportation laws and advised governments worldwide on urban planning, transport management and finance, and environmental analysis. He was responsible for comprehensive planning, travel forecasting, and growth management for Montgomery County, Maryland from 1983-92. He earned honors degrees in civil engineering and sociology from the University of Pennsylvania. Bloomberg Business Week in 2011 cited him as one of the world's leading global experts on transportation.

Micheal Cohen: Michael Cohen (Ph.D., University of Chicago) is Professor of International Affairs, Director of the International Affairs Program, and Director of the Observatory on Latin America at The New School University in New York. From 1972 to 1999, he worked at the World Bank and was responsible for much of the urban policy development of the Bank over that period. He has advised many governments and international organizations and worked in 55 countries. He is a member of the U.S. National Academy of Sciences Panels on Infrastructure and Urban Dynamics. Since leaving the World Bank in 1999, he has worked extensively with other international organizations and governments in developing countries. He is the author or editor of many books, including most recently, Argentina's Economic Growth and Recovery: The Economy in a Time of Default (2012), The Global Economic Crisis in Latin America: Impacts and Responses, (2012) Latin America on the Move: The Post Neoliberal Transition, (2007), Argentina in Collapse? : The Americas Debate, (both edited with Margarita Gutman, 2003), Preparing the Urban Future: Global Pressures and Local Forces (ed. with A. Garland, B. Ruble, and J. Tulchin, 1996), The Human Face of the Urban Environment (ed. with I. Serageldin, 1994), and Urban Policy and Economic Development: An Agenda for the 1990s.

Neal Peirce: Neal Peirce is the founder and editor-in-chief of Citiscope, a non-profit website/news service focused on innovations in cities across the world. Citiscope's weekly stories by indigenous journalists, as well as a CitiSignals, curated reports on major urban developments worldwide, began publication in late 2013. Peirce was the lead author of the 2008 book, Century of the City: No Time To Lose, based on a "Global Urban Summit" convened by the Rockefeller Foundation in Bellagio, Italy. He also authored the 1993 book, Citistates, on the worldwide rise of metro regions. A veteran U.S. journalist focused on cities and issues of local governance, he was a founder of National Journal magazine and from 1975 to 2013 wrote the United States first nationally syndicated column on city and state trends and developments, distributed by the Washington Post Writers Group. He was formerly a member of the German Marshall Fund of the U.S. board.

Neha Sami: Neha works on the political economy of land and governance in urban India. She is also interested in issues of brownfield redevelopment and planning for climate change. At IIHS, she anchors research of urbanisation and climate change; heads collaborative knowledge networks under the Urban Knowledge Network Asia; and leads work on India's first integrated metropolitan assessment for Bangalore. She has worked with the Boston Redevelopment Authority as an analyst with the Economic Development Division. She has also worked as a consultant with the Environment and Sustainable Development Division of the UN-ESCAP (Bangkok).Her recent writing includes several journal articles in Land Use Policy; International Journal of Urban And Regional Research; and the Journal of Industrial Ecology. Neha has a Ph.D. in Urban Planning from the University of Michigan, and a Masters in Environmental Management from Yale University.

Paula Lucci : Paula joined ODI in November 2011. Current research interests include the post-2015 MDGs debate, urban poverty, and inclusive growth. She has over five years' experience in economic development research and policy analysis. She has also done work on the role of the private sector in development and migration. Prior to joining ODI, Paula was Managing Economist in a private sector consultancy and has worked for think tanks in developed and developing countries, such as, the Institute for Public Policy Research, the Centre for Cities, the Centre on Migration, Policy and Society in Oxford, and CENIT in Argentina. She also has experience working for the public sector in Argentina and Mexico. She holds an MPhil in International Development from Oxford University and an MSc in Economics from Pompeu Fabra University.

Peter Head: Peter is a civil and structural engineer who has become a recognised world leader in major bridges, advanced composite technology and in sustainable development in cities and regions with leadership posts in AECOM and Arup. He has won many awards for his work including in 2009 the Sir Frank Whittle medal of the Royal Academy of Engineering for a lifetime contribution to Innovation in Engineering and the Environment. He joined Arup in 2004 to create and lead their planning and integrated urbanism team, which by 2011 had doubled in size to 800 people. He was cited by Time magazine in 2008 as one of 30 global eco-heroes and has been one of CNN's Principle Voices. In 2011 he was awarded the CBE in the New Year's Honours List for services to Civil Engineering and the Environment. In April 2011 he left Arup to set up The Ecological Sequestration Trust, a Charity which has brought together the world's top scientists, engineers, economists, financiers and other specialists to create a GIS platform to enable regions all over the world to plan, design and implement inclusive resilient growth using low carbon urban-rural development approaches which are energy, water and food secure.

Rafael Tuts : Rafael Tuts is since January 2012 Coordinator of the Urban Planning and Design Branch of the United Nations Human Settlements Programme, UN-Habitat, based in Nairobi, Kenya. The current focus of his work is to support national, regional and city authorities to achieve compact, integrated, connected and inclusive cities that are resilient to climate change. This vision is being implemented at different scale levels, ranging from neighborhood design to city-region planning, in over thirty countries in Africa, Asia and Latin America. Within this capacity, he is also supervising UN-Habitat's Cities and Climate Change Initiative and its Low Emission Urban Development Strategies project (Urban LEDS). He is also leading UN-Habitat's contribution to the Post 2015 Development Agenda including the formulation of the Sustainable Development Goals. He is UN-Habitat's focal point for the United Nations Environment Programme (UNEP), the Global Environment Fund (GEF) and the United Nations Framework Convention on Climate Change (UNFCCC).Together with colleagues from the World Bank, UNEP and Cities Alliance, he developed and implemented a Joint Work Programme on Cities and Climate Change, which received the World Bank Vice-President Team Award in 2011 in recognition of its efforts as a unique showcase of the positive effects of successful consensus-building in a global partnership.

Sarah Potts: Sarah Potts serves as the Interim Director of C40 Governance and Global Partnerships. In this role, Sarah oversees all partnerships, grants, and drives core strategy efforts related to the organisation's delivery of strategic support across all C40 cities. Previously, Sarah served the organisation as the Deputy Director of Regions and Initiatives, where she developed and drove core global strategy efforts related to delivery of direct assistance and peer-to-peer exchange across 63 C40 Cities around the world to reduce GHG emissions and climate risks. Prior to the integration of C40 and the Clinton Climate Initiative, Sarah served as the Los Angeles City Director for the Clinton Climate Initiative. Sarah holds both a Bachelor's and a Master's degree in International Development from Brown University.

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Shagun Mehrotra: Shagun Mehrotra is an Assistant Professor in Environmental Policy and Sustainability Management. His research, teaching, and policy advice focus on environmental management, infrastructure economics and finance, and poverty reduction in cities, particularly in large developing-country slums. Shagun was formerly Managing Director of Climate and Cities, an international policy advisory facility, CCSR, jointly housed at The Earth Institute, Columbia University, and NASA Goddard Institute for Space Studies. Previously, he was on the staff of the World Bank, leading infrastructure reform of public utilities in Africa with a focus on expanding services to the urban poor. Shagun has a PhD in Infrastructure Economics and Urban Planning from Columbia University, in addition to Masters Degrees in Urban Planning, and International Affairs from Columbia University, as well as Urban Environmental Management from the Asian Institute of Technology, Thailand.	
Sue Parnell: Sue Parnell is an urban geographer in the Department of Environmental and Geographical Sciences at the University of Cape Town (UCT) and is on the Executive of the African Centre for Cities at UCT. She has held previous academic positions at Wits University and the University of London (SOAS) and visiting research fellowships from the LSE, Oxford University, Durham University, the British Academy and was a Leverhulme Visiting Professor at University College London in 2012. She is a widely published author of scholarly papers. Recent co-edited books include Climate at a City Scale, A Routledge Handbook of Cities of the Global South and Africa's Urban Revolution. She serves on the Editorial Boards of many ISI ranked academic journals dealing with urban and development issues. Sue's early academic research was in the area of urban historical geography and focussed on the rise of racial residential segregation and the impact of colonialism on urbanisation and town planning in Sub-Saharan Africa. Post democracy in South Africa much of her work focused on issues of urban transformation (local government, welfare and urban environmental justice. By its nature this research was not purely academic, but involved liasing with communities, local and national government and international donors. This mode of translational research now forms a core mode of work at the African Centre for Cities.). Recently Sue has returned to historical research, working with a number of other partners on explaining the planning deficits of African cities. Sue has a prominent position with UCT leadership structures, served on the boards of several local NGOs concerned with poverty alleviation, sustainability and gender equity, is a regular keynote speaker and is part of national and international advisory research panels.	

Thomas Elmquist: Thomas Elmqvist, PhD, is a professor in Natural Resource Management at Stockholm resilience Centre, Stockholm University. His research is focused on ecosystem services, land use change, urbanization, natural disturbances and components of resilience including the role of social institutions. He is coordinating a major interdisciplinary research theme as part of the Stockholm Resilience Centre (www.stockholmresilience.su.se) at Stockholm University, focussing on governance and management of ecosystem services in urban landscapes. He serves as associated editor for the journals Ecology and Society, Ecosystem services, Ambio and Sustainability Science. He has led the "Cities and Biodiversity project" (www.cbobook.org) and currently leading a Future Earth project "What is Urban" and part of the scoping expert group on regional and subregional assessments in IPBES	
William Solecki: William D. Solecki is a Professor in the Department of Geography, Hunter College, City University of New York. He has led or co-led numerous projects on the process of urban environmental change and transformation. As Director of the CUNY Institute for Sustainable Cities, he has worked extensively on connecting cutting-edge urban environmental science to everyday practice and action in cities. He most recently served as Co-Chair of the New York City Panel on Climate Change, as Co-Principal Investigator of the Integrated Assessment for Effective Climate Change Adaptation Strategies in New York State (ClimAID), and as Co-Leader of the Metropolitan East Coast Assessment of the US National Assessment of the Potential Consequences of Climate Variability and Change. He is a Lead Author of the IPCC Working Group II Fifth Assessment Report. He is also a member of the Scientific Steering Committee of the Urban and Global Environmental Change core project of the International Human Dimensions Programme.	
Yunus Arikhan: Yunus Arikan has been working at ICLEI World Secretariat since 2009. Between 2009-2012, he led ICLEI´s Cities Climate Center. Within this scope, he advanced and coordinated ICLEI´s work on climate mitigation, established the Bonn Center for Local Climate Action and Reporting – carbon, operating the Cities Climate Registry, and served as the Director of Secretariat the World Mayors Council on Climate Change. Since 2013, he leads ICLEI´s policy and advocacy work at the UN ECOSOC, UN bodies and multilateral agreements.	
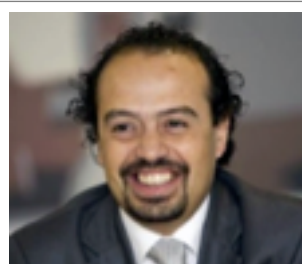
Zarina Patel: Zarina Patel holds a joint appointment with the African Centre for Cities and the Department of Environmental and Geographical Sciences at the University of Cape Town. Her research is focused on the political dimensions of policy and governance arrangements in pursuit of urban sustainable development. Uncovering of ways in which power is exercised through the use of specific and multiple knowledges and the range of value-based assumptions held by decision makers is a central strand of her research. A further strand traces the political geographies of environmental governance and the changing roles of the state and non-state actors in urban climate governance. Previous appointments include a senior lectureship in the School of Geography, Archaeology and Environmental Sciences at the University of Witwatersrand, and a British Academy Fellowship in the Geography Department at the University of Sheffield. She has sat on the Boards of various environmental NGOs and statutory bodies in South Africa, and continues to serve on the Editorial Board of Local Environment: International Journal of Justice and Sustainability.