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WBCSD Sustainable Cities Engagement Model

Summary version

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A strategic city-business engagement model for sustainable cities

The sustainability of our cities is one of the defining challenges of these times. Already more than half of the global population lives in cities, and it is projected that over the next two decades roughly 1.4m people will move to cities every week (that's the population of Stockholm). The challenges this poses in terms of sustainable development are already visible today – lack of affordable housing, pressure on resources, gridlocked urban transport systems, air pollution, lack of access to clean water, etc.

On the other hand, to reach the Sustainable Development Goals in cities provides a significant business opportunity, according to a recent report issued by the Business and Sustainable Development Commission "Valuing the SDG Prize in Cities". The report outlines 16 specific opportunities worth 3.7tn USD annually by 2030. These opportunities arise in particular in areas such as affordable housing, building efficiency, mobility and water and sanitation infrastructure.

A stronger business government partnership will be critical to make sure cities tackle their challenges holistically and to develop new partnership models to deliver on the SDGs in cities.

The **WBCSD Sustainable Cities Engagement Model** helps cities to partner with businesses to find solutions to their urban sustainability challenges. By providing a platform for collaboration the WBCSD seeks to create value for cities and businesses by stimulating global collaborative action. Few engagement models exist today that allow cities and business to interact at an early strategic stage to support the delivery of strategic sustainability goals. What is needed is a process that allows cities and business to:

- Understand a city's sustainability challenges together, and set integrated priorities and ambitions;
- Identify solutions and delivery models including the private sector;
- Develop organizational, governance and finance models that create effective solutions.

Cities and businesses on their own tend to work in silos. WBCSD's role is that of a neutral convener to help cities and businesses work together, frame challenges holistically and align all relevant stakeholders around a common vision. It is a catalyzer to develop new organizational and business models to tackle sustainability challenges. The WBCSD Sustainable Cities Engagement Model captures what business and cities must bring to the table to make their collaboration more effective.

Making more sustainable cities and businesses more successful

The role of the private sector is critical to make cities more sustainable. Business has the expertise, the strategic interest and the financial capacity to provide sustainable solutions. But these solutions have to be embedded in and contribute to a city's overall sustainability ambition. Hence, also business needs to work with cities and other stakeholders to define this.

It is the traditional approach that businesses respond to public tenders to develop a city's infrastructure and services through various delivery methods (such as PPP, service contracts, Build-operate-transfer models, etc.). In this approach the most important decisions affecting sustainability have typically been made and cannot be influenced anymore, which makes it difficult to influence sustainable outcomes. This traditional approach lacks an engagement

model in which cities and business can interact at strategic, pre-commercial stage to identify more integrated and holistic solutions for a city's needs. Such a more integrated approach, if done correctly, influences the economics of sustainable outcomes positively, and hence creates business opportunities for companies that provide sustainable solutions.

Benefits of the strategic city-business engagement

Both cities and business will benefit from an engagement process that helps them build the foundations of a new approach to public-private partnerships based on innovation and co-creation:

- WBCSD offers a neutral platform for cities and business to develop solutions together and breaks down decision-making "silos", in a proven, trusted way.
- Strategic city-business collaboration reduces complexity and cost, through early stage engagement and shared development of ideas.
- It aligns different interests, commercial, public, private, to pursue a common sustainable vision.
- New business models enable the scale up and replication of solutions across cities and build the foundation of a new approach to public-private partnerships.

More specifically:

Benefits to Businesses

- Learn about city priorities and future trends
- Reduce transaction costs when approaching cities
- Position sustainable solutions under a shared vision with the most relevant players
- Grow innovation through new business models and public-private partnerships
- Drive scale through WBCSD and partners

Benefits to Cities

- Get access to leading thinking and technology in business
- Understand better business realities and opportunities;
- Widen the group of stakeholders with a stake in the city's sustainability;
- Explore new forms of urban governance and partnership models;
- Increase the city's innovation capacity and attractiveness;
- Reduce cost and get access to new innovative financing.

The role of WBCSD

The WBCSD offers a neutral platform to help cities and business come together in a structured engagement process that creates trust, fosters commitment and connects solution providers to decision makers and stakeholders. The WBCSD Sustainable Cities program helps both business and cities to rapidly identify core sustainability issues for a city and identify business solutions to deliver against the city's objectives.

It is critical that the process is guided by a common vision and conducted in a transparent manner to avoid potential conflicts of interest and to foster trust. It is also important that appropriate organizational and governance models be identified at different stages of the planning process of urban projects, from early visioning and strategizing, to planning to procurement and implementation.

The following diagram illustrates the importance of different forms of organization and collaboration. In each engagement parties need to define these modes of collaboration. Some solutions identified in the collaborative process may be led by the city, others by the private sector or other city stakeholders. Many solutions will need to be addressed in some form of public-private partnership:

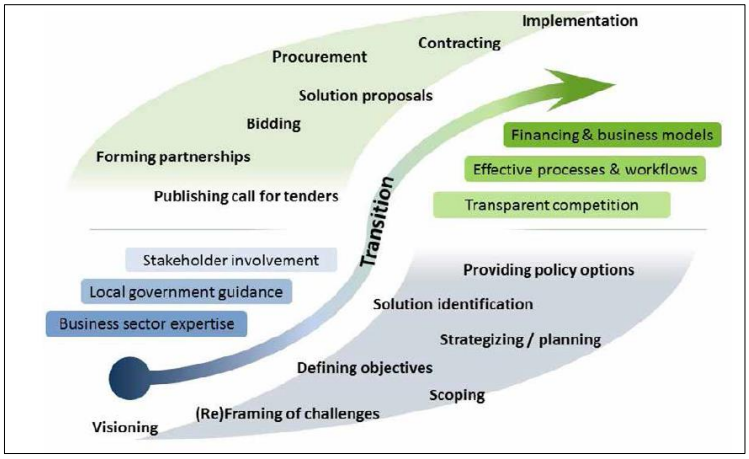

Figure 1: ICLEI-WBCSD Innovative City-Business Collaboration, April 2015

This is about cities and business coming together to realize sustainability, sharing ownership, identify appropriate business solutions for complex issues and thereby reducing the risk of making unsustainable decisions.

WBCSD brings experience from well over 20 city-business engagements over 5 years:

- **Business expertise** – multi-company, multi-sector expertise, business case analysis
- **Collaboration** – neutral, action-oriented convener;
- **Holistic approach** – align stakeholders behind a common vision, break silos
- **Credibility** – Track record of city-business collaboration, forge personal, value-based business relationships
- **Implementation & Scale** – catalyze new partnerships, organizational and business models

Examples

The Zero Emissions Cities (ZEC) project works with cities to develop concrete projects that reduce greenhouse gas emissions at scale. The project provides a platform for businesses and cities to collaborate in an integrated, open fashion, to first understand a city's challenges, to engage relevant stakeholders and to develop organizational and financial models to implement innovative solutions and new ways of working:

- In **Birmingham (UK)** WBCSD has developed a ZEC city vision to serve as input into the master plan for Birmingham Smithfield, the largest urban redevelopment area in public ownership in Europe. This has helped the city set its ambition levels (on a scale from compliance to best practice to aspirational) and has provided good practice examples from ZEC partners' experience. The city will adopt the ZEC city vision in the planning requirements for Smithfield and WBCSD will engage with the development partners to effectively implement the city's ambition.

- In **Amsterdam (Netherlands)**, the ZEC project is helping the municipality of Amsterdam align local stakeholders in the district of Zuid-Oost on collaborative sustainability initiatives. The aim is to reach a zero emissions district through smart use of energy resources and infrastructure. Activities will be coordinated and financed through a central organization, ZOEnergy, being set up by partners of this project (a business plan is under development). Amsterdam ArenA's initiative of an Energy hub may become the first result of this multi-stakeholder collaboration.

The Energy Efficiency in Buildings (EEB) project works in cities around the world to engage the full building value chain and the city to develop actions that overcome identified market barriers for energy-efficient buildings. The project's ambition is that 50% of projected energy use in buildings can be avoided with today's available technologies and practices.

- In **Houston (US)**, the EEB project has successfully created an EEB Platform (www.eebhouston.org) bringing together the city and private sector partners to coordinate and pool their activities to drive energy efficiency in buildings. The private sector helped the city pass legislation creating a 100m USD commercial buildings finance project pipeline (Property Assessed Clean Mechanism – PACE) and is developing training material to help building operators make the business case for retrofit programs.

The Sustainable Mobility project (SMP) has developed an urban mobility planning tool consisting of a set of 19 indicators for sustainable mobility (endorsed by the European Commission) and a set of over 200 mobility solutions that can be linked to a city's priorities. The critical element is that the city goes through an engagement process with city stakeholders, including business, academia, citizen groups, to identify its priorities and develop a mobility roadmap.

- In **Indore (India)**, the SMP project helped the city design an integrated multi-modal mobility plan with solutions based on credible benchmarking. The city announced the provision of integrated public transport for all and initiated the implementation of Smart Ticket systems and multi-modal travel information & apps to connect the bus system with autos and cycles. "The WBCSD study, which is done in a very scientific manner, will enable us to convince everybody to improve the mobility of the city." (P. Narahari, District Collector of Indore)
- In **Bangkok (Thailand)**, the recommendations of the SMP project have led to a successful pilot project to reduce traffic demand (the Sathorn model), consisting of park & ride, shuttle and school bus system, flexible working time, and traffic flow management, resulting in 10-20% reduced travel during peak time. This model will now be rolled out country-wide under the auspices of the Ministry of Transport.

A structured engagement process to realize a city's ambition

The WBCSD has developed an Engagement Process that helps define and implement a city's sustainability ambition. It is supported by a set of sustainability principles and performance indicators and builds on WBCSD knowledge as well as best practices and solutions provided by WBCSD members and other companies.

The Engagement Process is divided into 5 Phases:

1. Selection of City and a cross-sectoral group of companies; identify key entry points of sustainable cities vision;
2. Understanding the city's needs (scoping) and setting accountabilities;
3. Project Planning and Development;

4. Implementation; and
5. Monitoring and Evaluation.

The Engagement Process delivers a blueprint to streamline city-business interaction that can be replicated and scaled-up across the world. It highlights lessons learnt and approaches / tools developed in previous and current WBCSD city engagements. The 5 Phases of the Engagement Process are explained and illustrated in **Annex 1**, with more details in a separate Full Annex.

The **ambition and scope of a city engagement** are developed within Phases 1 and 2 of the strategic city-business engagement process, supported by sustainability principles and performance indicators (KPIs) that build on the science-based goals developed in WBCSD's Vision 2050 as well as on the Sustainable Development Goals (SDGs). The Sustainable Cities Engagement Model contains the essential topics and requirements WBCSD believes will contribute to a sustainable and resilient city.

This helps a city rapidly define its priorities for the city-business collaboration and to determine its level of ambition on the identified urban needs. The level of ambition can be tailored based on the city's aspirations, supported by the performance indicators proposed in WBCSD's framework. The framework aims to:

- Be aspirational but non-prescriptive
- Put urban priorities and needs at the center
- Propose sustainability principles and indicators for each category of urban needs
- Provide a platform for cities and businesses to identify the necessary expertise and capabilities to deliver sustainable outcomes
- Give the city the opportunity to decide on the level of ambition it wants to achieve based on international best practice examples.

The framework builds on 10 pillars representing urban systems, supported by a series of sustainability principles proposed to guide the engagement with the city. The principles should be addressed with a level of aspiration for improvement established by the city-business team. Underneath each of the principles sits a set of KPIs to identify measurable outcomes to be achieved through the engagement.

The following list summarizes the 10 pillars of the WBCSD Sustainable Cities vision (a larger description can be found in Annex 2, with more details in a separate Full Annex).

Rationale for the WBCSD's 10 pillars of key urban needs / urban systems:

- **Energy:** cities have a large environmental impact, accounting for 70% of global energy use and energy related GHG emissions. As such, ensuring they are energy efficient and resilient to the impacts of climate change will ensure they remain livable.
- **Water & Sanitation:** over 1.1 billion individuals lack access to water from a clean, safe source, and over 2.6 billion people do not have access to toilets and other adequate sanitation facilities. This lack of access is a primary cause of water contamination and water-borne diseases. Supporting cities deliver infrastructure to support this is essential to their ability to support communities.
- **Waste & Materials:** 10 -15% of building material is wasted during construction. Reducing such wasteful practices is essential to delivering a more resource efficient and circular economy.
- **Mobility:** Congestion in cities can cost as much as 2-4% of national GDP, by measures such as lost time, wasted fuel, and increased cost of doing business. Making mobility safe, clean and affordable is essential to delivering sustainable cities.
- **Buildings:** Up to 440 million urban households could live in sub-standard housing by 2025 and 60% of European buildings are unoccupied during office hours. Making our buildings more sustainable and ensuring they support human health will underpin the transition to a low carbon economy.
- **Air Quality & Health:** Over 5 million premature deaths are attributable to air pollution. The prevalence of obesity in cities is three to four times the rate in rural areas. Working to ensure city residents can live healthy lifestyles is essential to a sustainable future.
- **Natural Environment:** Cities have a huge impact on their ecosystems and those that surround them. Land use, deforestation, pollution and waste disposal all have impacts on local landscapes. Reducing the loss of natural ecosystems and the restoration of degraded ones so that biodiversity and ecosystem services are maintained is essential to the WBCSD's mission.
- **Food:** By 2030 global food demand is expected to rise 35%. That 75% of food demand is generated from 12 plants and 5 animal species demonstrates the challenge of resilience and the pressure that will be placed on supply chains. The WBCSD goal to, by 2020, sustainably increase the production and resource efficiency of agriculture systems to secure access to sufficient, safe, and nutritious food and sustainable bio-based products is essential to the future development of cities.
- **Economy:** urban GDP represents around 80% of global GDP. As cities are such pivotal generators of wealth it is essential that this provides access to all members of society, supporting cities to achieve basic needs and human rights and access to jobs.
- **People & Community:** the way in which we live in cities is changing and this has a material impact on global systems. Projections of urban growth mean that seven out of 10 people will live in cities by 2050. This puts a huge strain on city systems, including transport, social infrastructure and housing. Balancing this against the changing demands of people will be a huge challenge for local Government.

The principles and indicators are presented in detail in **Annex 2**.

Addressing potential conflicts of interest

As highlighted already in WBCSD's first city project (Urban Infrastructure Initiative, 2010-2014), the engagement process needs to respect the existing regulatory framework of the city and set clear parameters, including how the output of the collaborative work relates to public procurement modalities.

The regulatory framework guiding city-business interaction may differ from one city to another. However, a few general rules apply to ensure that businesses who engage in pre-commercial dialogue with a city are not excluded from participating in commercial tendering processes or implementation partnerships later on. These include:

- Entities involved in the design process of a public project should not participate in writing the terms of reference or requests for proposal for the commercial phase;
- Entities involved in the design process should not be involved in budget estimates or financial forecasts;
- All information developed by the entities involved in the design process should be made available to all parties participating in a commercial tender process;
- Public contracts should undergo a competitive process;
- As a general principle international organizations such as the UN, World Bank, multilateral banks, donor agencies etc. promote transparency in the procurement process, i.e. “equal disclosure of information to all potential business partners”, and they define “organization conflict of interest situations as any work that a contractor may do in conflict with previous work or where a contractor may improperly influence the outcome” (reference: based on information made available to WBCSD by PwC).

Turning this the other way, the strategic pre-commercial engagement with a group of businesses does not preclude the possibility for the city to seek an open tendering process for the delivery of urban services and implementation of projects. But it increases the city’s understanding of and access to private sector capabilities in pursuit of the highest possible sustainability outcomes the city wants to achieve.

Annexes

- Annex 1: Five Phase City-Business Engagement Process (short version)
- Annex 2: Principles and indicators underpinning the WBCSD Sustainable Cities Vision (short version)

A Full Annex is available separately.

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Five Phase City-Business Engagement Model Summary

Phase	Aim	Proposed Method / Key Milestones	Outputs	Role of Member Company	Role of City	Role of WBCSD
1 **City and Business Selection (3-6 months)**	Four or more Companies representing multiple sectors and a city government demonstrate mutual interest to work together on urban sustainability.	- City is identified - Partner organizations agree to work together - Initial scoping meeting held	Form city-business team. Agree upon sustainability vision. Convene project launch meeting.	Demonstrate interest in working with other companies and city on sustainability. Designate member of city-business team. Coordinate launch meeting. Agree upon vision.	Demonstrate interest in working with business on sustainability. Commitment from mayor. Designate member of city-business team. Coordinate launch meeting. Agree upon vision.	Neutral convener & facilitator. Coordination capacity. Provide staff member to support city-business engagement. Draft initial MOU for project.
2 **Understanding the city's needs (scoping) and setting accountabilities (6 months)**	Company representatives, city leaders and other key stakeholders ("city-business team") work together to establish the scope of work, define success and agree upon roles.	- Review of city ambition against WBCSD City Vision	Assemble detailed scope of work document. Define accountabilities. Establish key milestones. Refine MOU based on accountabilities and timeline.	Convene workshops to define the scope of work and areas of expertise. Agree upon KPIs. Take on leadership role in one or more areas of expertise.	Convene workshops to define the scope of work and areas of expertise. Agree upon KPIs. Introduce city's technical experts to team based on project scope.	Draw on previous experiences to help define scope of work and KPIs. Coordination support.
3 **Project Planning and Development (6 months)**	Companies work together to develop action plans and devise business solutions.	- In-depth review against WBCSD Cities Vision and KPI's - Business Case Development	Written action plan and solution to address each KPI. Clear timeline with deadlines to support implementation phase.	Develop action plan and solutions based on the selected KPIs and areas of focus. Present plans and solutions to city.	Provide input and technical capacity to support the development of action plans and solutions. Help refine and	Review action plans and offer input as needed. Document successes and challenges for future reference.

					strengthen action plans.	
4 Implementation (1-5 years)	City and companies implement the action plan.	- Deliver against business case / project scope	Depends on the results of Phases 2 and 3, but may include public tender, cooperative business models, or public-private partnerships.	Support city in the delivery of action plan. Help troubleshoot issues.	Deliver action plan. Document what works and what doesn't work.	Gather and record best practices. Track and assess the project over time.
5 Monitoring and Evaluation (1-5 years)	The WBCSD monitors and evaluates the progress of city-business engagements over time, reporting on learning and best practices.	- Review Performance	Conduct final project review. WBCSD monitors the project over time, documenting key learnings and updates in case study.	Review project against original success factors. Observe what worked well, what didn't and why.	Review project against original success factors. Observe what worked well, what didn't and why.	Convene final project meeting. Develop project case study. Monitor performance and impact of project into the future.

The core collaborative engagement activities take place in Phases 1-3, with a total estimated time requirement of 18 months.
Phases 4 and 5 will depend on delivery / implementation models defined in Phase 3, shaping also the further collaboration modalities.

Summary Sustainable Cities Vision Framework (excerpt from full framework, which is available in the full concept note)

Urban System	Energy	Water & Sanitation	Waste & Materials	Mobility	Buildings (incl. housing & land use)	Air quality & health	Natural environment	Food	Economy	People & community
Scope of urban system	Energy system & mgt. Renewable energy Energy efficiency GHG mgt.	Water provision & mgt. Sanitation	Waste mgt. Waste-to-energy Wastewater Material use & circular economy	Public & private mobility Logistics	Housing Land use & zoning Construction Energy efficiency Materials	Air pollution Noise Sports & recreation Access to medical facilities	Natural infrastructure Green spaces Ecosystems services Resilience & Adaptation	Food security Nutrition Transport & distribution Urban farming	Economic development Employment Innovation Social impact	Basic needs & rights Governance & participation
Sustainability principles	Net zero emissions in second half of 21st century Energy security Sustainable energy	5Rs Reduce demand for potable water to sustainable levels	Promote resource efficiency and the circular economy.	Access to safe, inclusive, multi-modal and low environmental impact mobility	Access to affordable housing Net zero energy buildings	Reduce air pollution in cities, promoting public health.	Restore and reduce where possible city impacts on natural systems.	Promote food security and reduce the volume of food waste.	Promote an equitable society with access to jobs for all.	Promote structures of Governance that support engagement and representation for all.
Action 2020 Priority	*See Full Annex*									
Measures of success	*See Full Annex*									
Pertinent SDG's	*See Full Annex*									