Livable Cities – health and well-being in the urban environment

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Editor in chief

Koen Joosse koen.joosse@philips.com

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Summary



More than half of the world's population is living in cities and urban areas and this is predicted to rise to 70% in 2050. The scale of city growth presents new social, economic and environmental challenges for those who live, work and do business in them. Safety and security, public health, a sense of belonging are just a few of the factors that contribute to urban citizens' health and well-being across the world. How do we create a city for its people and who are the parties that need to come together to do this? Which long-term visions as well as simple next steps can they develop in the face of rapid urbanization? This paper looks behind the veneer of our urban centers and explores how best to convert them into *Livable Cities*.

Introduction

Although *Livable Cities* has been a theme among urban planners for decades, it has only recently begun to enter the public mind. Part of this late adoption may lie in confusion with what constitutes a livable city. But despite its subjectivity and various interpretations, the broader recognition is both welcome and timely. This is as Ban Ki-moon, Secretary-General of the United Nations has described, the 'urban century'. The theme *Livable Cities* presses us to ask deep questions about what is important in modern life and how to bring this about in an urban setting and against the background of the demographic, economic, environmental and resource challenges societies are facing across the world.

Awareness

Globally we have reached a critical point in relation to the sustainability of many of our cities. Modern urban living is frequently characterized by overcrowding and pressure on resources, high levels of personal anxiety, and a certain sense of loss in traditional 'community spirit'. The statistics show that it may only get worse: more than one in every two inhabitants on earth lives in a city today. This figure is set to rise to two in every three inhabitants by 2050. Today, cities already account for 70% of global energy consumption. Furthermore, people are living longer, living longer alone, and living longer alone in cities.

These trends have enormous implications and while efforts are being made, these have been isolated and insular "solutions" that have failed to acknowledge the enormity and nature of the challenge. Under the header *Livable Cities*, parties are beginning to look at the challenge from a more coherent, integrated perspective. With ever more people living in a city, the question returns: what actually constitutes a livable city?

The idea of *Livable Cities* is dual - the basics need to be in place (i.e. clean air and water, energy and waste management) but, as for example the Philips Center for Health and



Well-being has shown in its Index research (see elsewhere in this paper), quality of life is of equal importance.

Security and safety, environmental friendliness and accessibility to transportational, educational, medical and recreational facilities are just some of the main quality of life attributes that which city dwellers generally aspire in their locality. But providing for all of these simultaneously and on a sustained basis is proving to be increasingly challenging, as livable city challenges vary greatly the world over. In cities of the developed world, for example, crime, CO2 emissions, recreational and public transportation concerns are frequently most prominent. Sanitation and access to water and other essential provisions, meanwhile, tend to be the issues of primary concern in urban centers across the developing world. Also in the developing world, urban growth is at its greatest, with cities gaining an average of 5 million residents every month.¹ Such widespread movement of citizens potentially poses a threat of demographic destabilization, and requires a swift



¹ Anna K. Tibaijuka, Under-Secretary-General and Executive Director, UN-Habitat ('State of the World's Cities 2008/2009' – Harmonious Cities) and appropriate response by a range of stakeholders. Similarly, other urbanizationrelated issues in both developed and developing areas require a locally-focused approach, rather than having a 'one-size fits all' arrangement imposed.

Changes to urban planning

In its latest Global Report on Human Settlements, UN-Habitat (the United National Human Settlements Program) calls for changes to current approaches to urban planning, claiming that "planning systems in many parts of the world are not up to the task of dealing with the major urban challenges of the 21st century".² It also calls on governments to accept urbanization as a positive phenomenon and an effective means for improving access to services, as well as economic and social opportunities.

The physical and sociological characteristics of a city are vital not only in attracting inhabitants to live there, but in fact are also key factors in influencing the health and well-being of its inhabitants. Richard Florida, Director of the Martin Prosperity Institute and thought leader on economic competitiveness and demographic trends, asserts that places that engage in higher levels of creativity and innovation tend to have lower levels of obesity and smoking.³ This suggests a link between the dynamic civic and commercial opportunities in a particular location and the resulting health outcomes of inhabitants in that location.

Prioritizing the livable city agenda

That the livable city agenda is now being afforded greater priority by a growing community of policy makers, agencies, grassroots initiatives, educational, commercial interests and others is a fitting response to urbanization. The political sphere - perhaps best placed to affect change in this context is increasingly viewing social policy and strategic urban frameworks through a prism of preservation and protection of a city's inhabitants, and the implementation of livable city principles in a formally structured, systematic and sustainable manner has become more commonplace in municipal chambers and national parliaments the world over.

² UN-Habitat Global Report on Human Settlement 2009 'Planning Sustainable Cities: Policy Directions'

³ Creative Class / Martin Prosperity Institute research (www.creativeclass.com)

Among the many such initiatives on the academic front, the Smart Cities group based at Massachusetts Institute of Technology (MIT) is a research body focusing on the application of new technologies that enable urban energy efficiency and sustainability, enhanced opportunity, equity and cultural creativity.⁴ Examining in detail metropolitan behaviors, trends and lifestyles, the group provides a series of visions on everything from 21st century playgrounds to a radical reconfiguration of how we view and use automobiles.

In the commercial sphere, IBM has rolled out a wider range of 'Smarter Cities' initiatives globally and, in March 2010, announced the company's first Smarter Cities Technology Centre, to be located in Dublin, Ireland.⁵ This centre will host a highly-skilled, cross-disciplinary team to help cities around the world better understand, interconnect and manage their core operational systems such as transport, communication, water and energy. The initiative will involve working closely with city authorities, universities, small and large businesses towards researching, developing and commercializing new ways of making city systems more connected, sustainable and intelligent.

Meanwhile, on the transportation front, cities have gathered a broad network of stakeholders to devise strategic plans for their environs, such as San Francisco's Livable City initiative, the mission of which is to create a balanced transportation system and promote complementary land use that supports a safer, healthier and more accessible city.⁶

Making a difference

As a major player in the global lighting, healthcare and consumer lifestyle industries, Philips is helping define the *Livable Cities* dialogue and is in a position to affect change in our cities globally. The actual notion of what makes a city livable has been researched and confirmed by citizens, as shown in the Philips Index for Health and Well-being, a survey being conducted worldwide on how people perceive their health and well-being and the environments in which they live.

⁶ http://www.livablecity.org/

⁴ http://cities.media.mit.edu

⁵ http://www.entemp.ie/press/2010/20100324.htm



Featuring key insights from this research, as well as senior management across various sectors of Philips, this paper essentially offers suggestions on how cities, through a collaborative effort, can reach their potential and become more 'alive' and 'livable' through tangible and intangible interventions.

In light of the need for decisive action on impending environmental crises, it asks if there exists the will - socially, politically and commercially - to make the *Livable Cities* agenda a civic priority.

Finally, it concludes that no single entity should 'own' or seek to monopolize the *Livable Cities* landscape, and sufficiently advancing the proposition is only achievable if an unprecedented level of engagement occurs between Government, civil society, commercial providers and a more empowered citizen.

Philips and Livable Cities -Past, present and future

Philips' involvement in livable city principles is traceable back to its genesis in 1891 and its production of cost-effective, reliable electric lights. With the advent of this revolution and subsequent electrification of streetscapes, buildings and homes, Philips was among the pioneers that helped create new lifestyles and enhance environments by the use of electric light. And just as the times have changed dramatically over that period, so too has Philips, ensuring more pleasant, safe and productive cities through the decades. This chapter highlights Philips' views on *Livable Cities* as well as examples of concrete steps it is taking and solutions it is creating to enhance the health and well-being of citizens in urban environments.

Listening and facilitating

Philips continually consults with citizens on their perspectives about their environments and related health and well-being trends. This broad yet informed consultation is an ongoing attentive listening exercise that feeds into advancing the *Livable Cities* agenda.

The Philips Center for Health & Wellbeing is dedicated to improving quality of life for people around the world, by identifying barriers to health and wellbeing - and developing solutions to overcome them. Together with a diverse range of independent experts, global agenda setters, policymakers and opinion leaders, the Center debates and defines the critical problems that society is facing.

A recent example is the earlier cited Philips Index on health & well-being conducted among Americans, which revealed that safety/crime rate, local hospitals and access to healthcare facilities were cited as the most important features in a community.⁷ Similar studies are currently underway in a large number of other countries across the world. At the Philips Center for Health and Wellbeing 'Keeping Cities Livable' Consultation Event,⁸ a panel of independent experts, global agenda-setters and opinion leaders identified a series of important dynamics at play in relation to the livability of any city. These are discussed in the following sub-chapters.

A city's brand

All cities have a certain brand - a particular feel, personality and ambiance that distinguishes it from other urban centers. This brand can be a source of pride for inhabitants, a tourist attractant and a potent marketing factor to commercial investors. So eager are city authorities to define - or refine - their own identity with compelling lighting solutions, for example, that they invested ≤ 6.2 billion in outdoor lighting in 2008 alone.

Philips provides one in every three outdoor lights across the globe today, and through its involvement with the annual international *city.people.light* award, promotes the use of light as an essential component in urban development. Launched in 2002, *city.people.light* honours

⁷ Philips Index: America's Health & Well-being Report 2010

⁸ Philips Center for Health and Well-being 'Keeping Cities Livable': Consultation Event, Amsterdam, 9/12/09

For both, see www.philips-thecenter.org

towns or cities that strive to "rehumanize" urban environments through the medium of light, and has reviewed 141 urban lighting projects internationally. Organized by Philips and the Lighting Urban Community International Association (LUCI), the competition highlights the contribution that lighting can make to the well-being of those who live, work or visit a city. With a jury comprising lighting architects, designers and municipal lighting managers, criteria such as contribution to a city's cultural and architectural heritage, night-time identity and environment are assessed. Recent winners of the prestigious *city.people.light* accolade have included Seoul, South Korea (2008) for "its effort to bring nature back to the city combined with an harmonious and almost entertaining landscape design gives this previously lost and forgotten place an almost fairytale night-time image". Jyväskylä, Finland (2009) was recognized for its 'City of Light' project, which focused on its innovative application of outdoor architectural lighting to strengthen the sense of security for the city's vibrant and fast-growing population.



Seoul - city.people.light winner 2008



Jyväskylä, Finland - city.people.light winner 2009

Social cohesion

A key part of a city's 'brand' is the sense and degree of community and social cohesion that exists in and exudes from its inhabitants. Philips has been developing community-centric initiatives that propel social cohesion in an integrated and participative way.

As an example, Philips rolled out the world's first dedicated solar-powered LED floodlighting solution to enable citizens - in the developing world and elsewhere - with little or no access to electricity to enjoy playing or watching sport after sunset. A portable solution using the latest energyefficient LED lighting technology, the system illuminates large areas with bright white light, and advanced battery cells provide up to eight hours of floodlighting on a single charge. This application opens up a range of opportunities previously unavailable to communities where deficient electricity supplies have restricted participation in social activities. Furthermore, this new solar LED floodlighting system can also be used for evening classes in remote villages, safety and security, shops or outdoor markets, or emergency lighting for disaster situations.

Another example is Philips' SimplyHealthy@Schools community program, a global initiative that educates school children aged 9-12 on how to stay healthy. Incorporating a program of changing classrooms' lighting to become more energy-efficient. The initiative, operated by Philips employees working in a voluntary capacity, teaches the adults of tomorrow how to create a healthy life, community and planet. Topics such as light, air, water, oral healthcare, exercise and environmental conservation are explored in an interactive way, in tandem with a free-of-charge lighting upgrade for participating schools. Following a successful launch phase in eight countries (India, Indonesia, Japan, Malaysia, The Philippines, Russia, Singapore and Thailand) which reached 5,000 students, the program is expanding globally in 2010.



With the world's first dedicated solar-powered LED floodlighting (intense beams of light) solution, Philips is enabling people with little or no access to electricity to enjoy playing or watching sport longer into the night.



SimplyHealthy@Schools is a global Philips community program intended to share our insights and help underprivileged school kids around the world live healthier lives.

Feeling "at home" and comfortable in one's city

Citizens feeling "at home" and comfortable in their urban locality is imperative if a city is to flourish in any truly communityoriented way. This sense of calm and connection with one's surroundings is greatly facilitated by enhanced lighting solutions, both internally and externally, in the home and in the workplace. Philips fulfils this aspiration by "simply enhancing life with light", through its solutions for homes, offices, outdoors, industry, retail, hospitality, entertainment, healthcare and the automotive industry. The advent of solid-state lighting such as LED solutions is widely considered to be the most profound and exciting change to occur in the lighting industry since the invention of the light bulb itself. Across many sectors - from healthcare to education - tailored LED solutions are showing great promise in providing comfort for patients and a more conducive study environment for students.

2009 saw Philips introduce a complete range of energy-efficient LED light bulbs for the home, marking another landmark in the development of solid-state lighting.

From the illumination of urban landmarks and multi-purpose lighting solutions for sports stadia to energy-saving street lighting, Philips is enhancing urban aesthetics while simultaneously reducing energy output. Combining both of these is at the heart of the *Livable Cities* ideal.

But 'livability' is not about bulbs or mechanical components. Rather, it is about sustainability, cost-effectiveness and the unique personal experience that lighting and other solutions can provide the



The design exploration project 'Glowing Places' investigated innovative ways to embed interactive lighting into the structure of objects and buildings

individual citizen. The atmospheric impact of such applications and their influence on everything from productivity levels to marketability are what intrinsically link them to a city's livability. And the impact of these solutions on health and well-being is profound and lasting. It signals to citizens, through the media of air, light, buildings, green spaces - almost everything we see and sense in urban environments - that positive sensory experiences and mobility contribute to our vitality and our feeling "at home".

Safety and security

Feeling personally safe in a densely populated environment is of paramount importance to anyone living in a city. As well as being the single most important consideration for those citizens sampled in the aforementioned Philips Index: America's Health & Well-being Report 2010, the importance of security in cities was borne out in the Philips Keeping Cities Livable' consultation event.⁹

Philips' 'Light on Demand' model is based on the insight that municipalities want to save energy by keeping street lights from shining unnecessarily at night. In the installation, sensor-enabled, whitelight lamps are designed to light up as pedestrians approach, and dim as they walk away. The result of this intuitive, intelligent lighting is less waste and light pollution - without, crucially, sacrificing citizens' safety.

Philips is currently progressing a series of multi-purpose intelligent solutions which



Light on demand solutions ensure optimal visual conditions while enabling huge energy savings.

have more than one purpose in areas such as street furniture. A luminaire, for example, can function as a sign, an interface, a landmark and a bench.

Healthy life

Part of the definition for *Livable Cities* includes citizens' health. This starts from the basics, such as ongoing access to clean air and drinkable water, the availability of sufficient nutritious food and safe waste disposal. However, the notion of Livable Cities goes well beyond this. Access to quality healthcare is a vital component for all citizens and the provision of community-based services is a second requirement. This was confirmed in the Philips Index: America's Health & Well-being Report 2010, which found that access to local hospitals and healthcare facilities ranked as the next most important consideration for city inhabitants after safety and crime rate. This positioned healthcare amenities ahead of shopping facilities, pollution, quality of roads, availability of employment, educational and recreational facilities.

In older age and with health needs, support of independent living is also vital in maintaining physical and emotional well-being. How can cities be age-friendly? Both age-friendly health services such as home care, as well as creating an environment that facilitates healthcare at home where needed, are elements of a health system that support independent living of elderly citizens.



Encouraging healthy, active lifestyles, Philips is a signature sponsor of the American Heart Association's largest multi-city event and fundraiser called Start! Heart Walk.

The importance of a healthy environment is a recurring theme in the studies and urban analyses of Richard Florida, Director of the Martin Prosperity Institute. Florida contends that the primary determinants for human happiness and fulfillment are (i) work that engages us; (ii) loving relationships; and (iii) the place in which we live. And, addressing a Philips Center for Health and Well-being Consultation Event, Florida added that the five primary factors influencing our happiness and well-being are (a) where you feel safe and secure; (b) where you have opportunities (employment, social outlets, recreation, etc); (c) where you have ethical and effective leadership; (d) where you have open-mindedness and social inclusion (e) the quality of the place (i.e. aesthetics, clean air and environment).¹⁰

But perhaps most significantly, Florida identifies a correlation between a city's creativity and innovation as expressed by its inhabitants, and levels of obesity and smoking in that city. Having undertaken an analysis of data from the Centers for Disease Control and Prevention, Florida has illustrated how smoking and obesity are less prevalent in areas with a greater concentration of 'artistic' inhabitants.

Of course, people themselves are primarily responsible for adopting healthy lifestyles. And while we all know that sufficient exercise is an important element of that, it is often hard to fit that into our busy schedules. With its DirectLife activity monitor Philips aims to enhance people's awareness of their activity and bring it at a higher level in an unobtrusive and fun way. DirectLife is a tailored fitness solution that tracks your body's activity, monitors your progress and, supplemented by clinical expertise, helps to maintain activity at a higher level within your daily routine. This flexible, portable and 'always on' innovation takes full account of people's busy work schedules which can make going to the gym logistically difficult.

A focus on sleep

Quality of sleep is another life aspect that has a profound influence on citizen's health and well-being. Philips has undertaken a number of studies on sleep, regionally and internationally, which have produced some insightful results. A Philips-commissioned survey undertaken by TNS in March 2009 across the UK, Germany, USA, Japan and The Netherlands revealed that:

- 72 percent of respondents sleep six-anda-quarter hours a night;
- With most sleep experts agreeing that eight hours is the right amount, it means people are sleeping 19 percent less than they should;
- On average, each respondent spends six hours and fifty-one minutes in bed;
- 34 percent said that inadequate sleep negatively affected their family relationships; 25 percent said it affected sexual relationships; and 19 percent said it affected friendships;
- After inadequate sleep, 58 percent are less able to concentrate, 51 percent have less patience, 49 percent have less enthusiasm and 25 percent have impaired judgement;
- 87 percent have had their work impacted by lack of sleep with between six and seven days being the average number impacted each year;
- 42 percent of respondents simply toss and turn and watch the clock when they wake up in the middle of the night.

These findings have profound implications for how healthy, productive and happy we are as citizens and, by extension, as a society.

In India, Philips commissioned a major survey on sleep in 2009, which revealed that a staggering 93 per cent of Indians surveyed across 25 cities are sleep deprived, with 58 per cent of those surveyed feeling that their work suffered from lack of adequate sleep.¹¹ While clearly a quality of life issue, sleep deprivation is, more profoundly, a serious health risk (diabetes, weight gain, high blood pressure, etc).



Sleep study supported by Philips Respironics equipment.

In the wake of this survey, Philips Respironics announced its participation in assisting hospitals and clinics in Mumbai and New Delhi to establish 130 sleep labs, by providing the technology, facilities and training required to undertake groundbreaking investigations. Discoveries stemming from this research will assist understanding of sleep deficiency and related conditions, and potentially revolutionize our entire approach to sleep.

In terms of domestic applications that are geared towards assisting one's sleeping patterns, Philips' Wake-up Light awakens people in a 'natural' way, by producing light that increases gradually over 30 minutes prior to one's set 'getting-up' time, with accompanying 'wake-up sounds'. This has been developed on the basis that exposure to light regulates the biological clock that controls the body's sleep-wake rhythm. The level of the hormone melatonin rises in the evening, preparing our body for sleep. The light in the morning stimulates the production of the hormone cortisol, which makes us awake and alert. Optimally, the sleep-wake rhythm is in sync with the rhythm of our daily life.

This, of course, is often not the case in modern life, with people regularly needing to wake up when it is still dark.



The Philips Wake-up Light is a dawn simulator designed to gently wake the body the way nature intended - with light.

Back to nature

Proximity to and availability of green spaces and recreational facilities encourages fitness of mind and body, while access to a range of nourishing food options helps to promote a healthy diet. The provision of well-lit walkways also supports an active lifestyle and offers nature on or near one's city doorstep.

The combined effect of these amenities is the promotion of a sense of security and community, something often lacking in densely populated districts. Green spaces and other outdoor recreational amenities are only of benefit to a community if they are safe to use. Light plays a key role in providing such safety. But brightness doesn't always equate to benefits, and a respect for darkness or, at least low-level lighting, is sometimes important and has its place in urban environments - not least when excessive light itself becomes an eyesore and pollutant.

Similarly, streetscapes and other quarters of a city that are crowded with artifacts and amenities – while well-intentioned – leads to a cluttering of space and, by extension, become an imposition. Philips endorsement of a 'decluttering' policy in our urban environments is gaining momentum and will continue to manifest itself over the coming years. The phenomenon of urban agriculture or 'vertical gardening', too, has blossomed among all social classes in cities globally in recent years, and an estimated 800 million people are involved in this practice.¹²



Philips uses the Biosphere Home Farm design concept to generate insights on people's concerns related to food quality and sourcing.

The emergence of urban agriculture is clear evidence that people are looking to be closer to nature. It also points to people's changing perception of mass production. "In London, there is a 20-year wait to get an allotment to grow vegetables. People are making a statement," according to Clive Van Heerden, Senior Director, Philips Design. In its exploratory 'Design Probes' program Philips Design has studied the food and 'urban farming' space, taking a close look at changing food consumption patterns and offering insights into how food will be produced into the future by citizens in their own home.

Asked whether nature and green spaces were seen as critical or a luxury in to a city, the prevailing view among participants at the Philips 'Making Cities Livable' consultation event was that the many natural benefits - plants, birdlife, water, trees as sound barriers, etc - classified them as an essential provision.¹³

¹² UNDP 1996, FAO 1999

What makes a livable city?

As is the case with the term *Livable Cities*, there are countless interpretations of what 'quality of life' means.

A common reference point is the WHO's definition, which describes quality of life as "a broad-ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships and their relationships to the salient features in the environment".¹⁴

A number of international findings are published each year that identify the world's most 'livable' cities:

Mercer's 'Quality of Living' survey¹⁵ is an annual study that assesses 215 cities, ranking them based on a set of specific criteria such as safety, education, hygiene, recreation, political-economic stability and public transportation. While carried out primarily to assist governments and major companies in placing employees on international assignments, the study is also an influential yardstick for prospective foreign direct investment opportunities.

Embracing a range of custom-designed global mobility software tools, Mercer's survey identifies the cities with the best infrastructure based on electricity supply, water availability, telephone and mail services, public transport provision, traffic congestion and the range of international flights from local airports.

Similarly, the Economist Intelligence Unit conducts a distinguished 'World's Most Livable City' audit¹⁶ based on healthcare, education, stability, environment and culture, and infrastructure across 140 cities worldwide.

¹⁵ www.mercer.com/qualityofliving

¹⁶ www.economist.com

¹⁴ WHOQoL Group 1993

Taking simple steps together

Partnership is the key to any workable *Livable Cities* charter. Philips is just one of a number of stakeholders who are in a position to affect change, and who are eager to do so. This journey of change is an exciting one, but is not a race to the finishing line - wherever or whenever that line is. Assuming that people are universally supportive of a more livable urban environment, how will this actually be achieved and to whom are people looking for leadership on realizing the *Livable Cities* vision?

The challenges of converting the *Livable Cities* proposition from conceptual to concrete can be broadly divided into two areas: solving infrastructural deficiencies in existing cities, and the installation of energy-efficient lighting and other solutions in new 'eco-cities' such as Sino-Singapore Tianjin Eco-city, located 150km from Beijing and Masdar City, the world's first carbonneutral zero waste city, located in Abu Dhabi - both of which are embracing Philips innovations from its lighting portfolio.

But while eco-cities represent an exciting and seismic change in urban planning, they are not a panacea for the problems that exist in our existing cities, and can take ten to fifteen years to build. It doesn't happen overnight. So besides the fact that longterm visionary horizons are needed, change towards more *Livable Cities* must also come from incremental, simple next steps. Similarly, it would be a mistake if one tries to think solely of revolutionary technologies and 'new' things. In truth, sometimes we have already a lot of the technologies. *Livable Cities* is, in essence, the convergence of existing technologies and, more than anything else, a mindset change.

Political will

While partnership is, as mentioned, critical to *Livable Cities*, political will is an absolute pre-requisite. Mayors, in particular, have a pivotal position here, with a number of cities - New York, London and elsewhere having undergone a transformation through hands-on, 'personal crusades' by individual mayors. Addressing the Philips Center for Health and Well-being 'Making Cities Livable' consultation event, Richard Florida, Director of the Martin Prosperity Institute, suggested that "the equivalent of a G-20 for mayors"¹⁷ be explored as a potential forum.

Geert van Kuyck, Chief Marketing Officer, Philips Electronics, believes that the *Livable Cities* cause presents "an opportunity for mayors to get cities to radically renovate their infrastructure" and sees national governments has having an enabler role in this context. Clive Van Heerden, Senior Director, Philips Design, cites city congestion charges as an example of how strong urban governance on a single issue can create a beneficial ripple effect that engineers widespread change in consumer behavior: "London's congestion charge has created a huge demand for small, hybrid vehicles... it has changed the economy".¹⁸

Other noteworthy examples of how citizens can adopt a fundamental modification to their daily lifestyles include smoking bans and plastic bag levies (both successful initiatives which were initially dismissed in some quarters as 'unworkable').

Facilitating change

A topic where decisive and collaborative action is needed is in reducing global energy consumption. While climate change affects all of Planet Earth, cities are the source of 70% of global energy consumption. Approximately 40% of the world's energy is used in buildings - more than in transport or industry.¹⁹

Governments on an international scale are looking for ways to adopt greater

¹⁹ WBCSD Manifesto for Energy Efficiency in Buildings (2009) - www.wbcsd.org

¹⁷ Philips Center for Health and Well-being 'Keeping Cities Livable: Consultation Event', December 2009

¹⁸ In interview, January 2010

energy efficiency. As far back as 2006, Philips issued a call for the phasing out of energy-inefficient incandescent light bulbs for residential use, and this has been widely implemented (the EU, to take just one example, having committed to this pledge in all 27 member states by 2012. Non-residential and outdoor lighting, too, is undergoing a major process of reform, with legislative proposals afoot in many jurisdictions to phase out inefficient technologies in this sector.

Nevertheless, the transformation to energy efficient lighting is a rather slow process. With a 6-7% replacement rate per year for office lighting and 3% rate for city lighting, coupled with the fact that as much as half of municipal energy spending today goes towards lighting, a new model of light acquisition and provision needs to be embraced.

Philips has formally called on mayors and municipal leaders to accelerate sustainability in infrastructure projects and building renovation. This appeal has been strengthened by Philips' partnership with the World Green Building Council,



committing to improving the energy efficiency of cities by 40 per cent over the next decade to 2020. Similarly, in late 2009, the World Business Council for Sustainable Development (WBCSD) published a manifesto for Energy Efficiency in Buildings²⁰, and called on companies to sign up and send out a strong signal of intent on energy performance of commercial buildings. Philips has become a signatory to this manifesto, and has pledged to carry out the series of actions outlined in the document. Going forward, Philips has dedicated itself to ensuring that global political leaders are fully informed of the latest technological capabilities and innovations in energy efficiency. At the COP15 United Nations Climate Change Conference in Copenhagen, Denmark (December 2009), Philips showed world leaders how innovation in lighting can help mayors and municipal leaders to significantly improve a city's energy efficiency. One example was a concept demonstration of new solarpowered LED lighting.

Facilitating dialogue

In tandem with its engagement with governments, policy-makers and similar representatives, Philips believes that understanding how cities function and how their inhabitants live, work and interact is best realized by encouraging an extensive and thorough consultation with citizens. And Philips is facilitating such ongoing discourse and stakeholder partnership at local, national and international levels.

Complementing its various studies on health and consumer lifestyle-related issues, the Philips Center for Health and Well-being is continuing to progress highlevel dialogue and analysis on *Livable Cities* through the formation of a global think tank which will be addressing all of these aspects from an international perspective. In addition, the Center is monitoring vital trends such as the use and influence of technology in everyday life, perceptions on life expectancy and views on other modern-day influences.

Similarly, Philips has been active in facilitating ongoing discourse among leading urban planners and local authorities. For example, the Urban Regeneration conference organized by Philips and the Financial Times brought together senior figures from across the UK – architects and urban planners, government decision makers, property developers and sustainability experts – to discuss strategies for enhancing the economic vitality of the UK's urban centers through innovative approaches in designing and financing urban regeneration.

Finally, alongside mayors and elected representatives, individual citizens are hugely influential on how the *Livable Cities*



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message is spread. If strong momentum can be generated and maintained at a public opinion level, other stakeholders will follow. Initiatives such as World Health Day (the 2010 theme for which was Urban Health Matters, entitled '1,000 Cities, 1.000 Lives') involve citizens on a mass scale, and help to reconnect people with global issues surrounding health and wellbeing in their daily environment. Given the complex infrastructures that comprise a city, a public policy of "open innovation" in relation to Livable Cities - where a system of 'ownership' is replaced by shared responsibility - could be an interesting route to explore.

This was confirmed at the Philips Center for Health and Well-being 'Making Cities Livable' Consultation event, where a clear view emerging from the discussions was that greater deregulation was important if a city and its citizens were to flourish.

Conclusion

Philips' approach to *Livable Cities* is a people-focused motivation. The phrase itself, *Livable Cities* implies 'habitation' in an urban environment. The reality, of course, is that many people from outside city boundaries spend more time working in and travelling to and from cities each day, than they do at home. These are a vital audience, and inherent in the term 'livable' city is 'workable' and 'navigable'.

Cities - whether big, small, so-called 'memory' cities, 'accelerator' cities, 'iconic' cities, 'connection' cities, 'megacities', 'slow cities', 'expanding' cities or 'regressing' cities - are facing new challenges as we begin the second decade of the new millennium.

Faced with the reality that many urban practices are unsustainable, society at a wider level looks to be gradually waking from its collective slumber. The *Livable Cities* agenda is not a movement linked to a specific ideology or cultural style. It is a *modus operandi*, incorporating the movements and actions of all citizens of all ages and backgrounds. Not the preserve of planners or politicians, it is a public forum, encompassing every layer of society, where citizens should be empowered through the 'design', 'build' and 'operate' phases.

The Livable Cities vision is achievable if one develops the right technology, the right business model, the right alliances, the right cooperation models between public and private sectors, the appropriate regulation environment and, most importantly, the optimum relationship with the end user – the citizen.

While there is still some considerable distance to travel in order to secure a far-reaching global agreement on the many factors critical to the livability of our cities, progress is clearly taking place on a number of levels. Indications are that Governments and citizens are now going that bit further and becoming participative advocates and agents of change.

There is ample evidence to point to when advancing the argument that poor urban planning can take a generation or longer to rectify. But one need not necessarily be 'futuristic' in planning for the future. Pragmatic innovation - solutions firmly grounded in practical applications that are available today - is what will help secure the long-term future of our cities and their citizens.

The Livable Cities agenda is also not an 'ownable' space. It is, and should remain, a shared area, civically and commercially. It is, however, also an increasingly noisy space. In parallel with the rollout of its diverse solutions in areas of lighting, consumer living and healthcare, Philips continues to gauge the optimum manner, frequency and degree of their participation, and, in so doing, differentiate white noise from constructive noise for the benefit of the citizen.

By deepening engagement with citizens, *Livable Cities* aims to provide prescient and timely input into the public debate. Living in cities should not be burden but an opportunity to thrive and it is time that the public be given the full range of opportunities for this to occur.

This is a booklet in the series of Philips Publications, published by Philips Professional and Public Affairs.

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