

REPORT OF THE TECHNICAL COMMITTEE 2020 GUANGZHOU INTERNATIONAL AWARD FOR URBAN INNOVATION CYBERSPACE, 1-23 DECEMBER 2020

I. Introduction

Owing to COVID-19 related travel restrictions, the Technical Committee (TC) met in cyberspace from 1 to 23 December 2020. Its members came from different geographical regions and represent different areas of expertise.

The Committee met to select deserving and shortlisted initiatives with a view to enhancing the implementation of sustainable urban development through inspiration and knowledge sharing. It took into consideration the goal of the Guangzhou International Award for Urban Innovation (Guangzhou Award) to recognize innovations in improving the social, economic and environmental sustainability in cities and local governments worldwide and more specifically:

- To highlight exemplary models of innovative policies and practices in the local implementation of the Sustainable Development Goals (SDGs) and the New Urban Agenda;
- To motivate cities and local authorities to further promote innovation and to learn from each other;
- To improve city governance.

The TC took also into consideration the objectives of the City of Guangzhou to promote the sharing of lessons learned from urban innovations between cities, regions, countries and thematic areas.



The TC wishes to express its appreciation to City of Guangzhou, United Cities and Local Governments (UCLG) and World Association of the Major Metropolises (Metropolis) for their vision in establishing the Guangzhou Award.

The TC commends the Secretariat for the Guangzhou Award in the way it handled the call for submissions as well as the transparency in its guidelines and processes. It further commends the City of Guangzhou for its intention to invite all 15 shortlisted cities and local governments (hereinafter referred to as cities) to present their initiatives as was the case in 2012, 2014, 2016 and 2018, and to allow the Jury to make its final decision after the conference.

The 2020 Guangzhou Award received 273 initiatives submitted from 175 cities and from 60 countries and territories, among which 239 submitted from 158 cities and from 55 countries and territories were considered valid. The TC would like to recognize all submissions for their commendable efforts in making their respective communities more sustainable. Of these 158 cities, 45 were identified as deserving cities. Of these 45 cities, the TC further shortlisted 15 cities representing outstanding initiatives from the 45. These 15 cities are presented in Annex I, including the reasons behind the TC's choice.

II. Evaluation Process

The TC assessed each submission using the main criteria established by the Guangzhou Award namely:

 Innovativeness: the extent to which the use of knowledge and information has been generated, configured and applied in developing new policies, practices and/or business models to address major urban issues and challenges;



- Effectiveness: the extent to which the initiative has achieved or is well on its way to achieve its stated objective(s) and effective social impact;
- Context: innovation was also considered within the social, economic and political context of each initiative;
- Replicability/scalability: the positive demonstration effect and scalability of the
 initiative in inspiring others to adopt new ideas, policies or practices, including
 replication in other locations of the city, region or country for greater impact and
 sustainability;
- Significance: strategic importance and cross-cutting nature of the initiative; the importance of the initiative in addressing the problems of public concern.

III. Changes to previous working methods

All previous Technical Committee meetings were held in person. The 2020 TC meeting was held virtually. Time zone differences allowed for small windows of opportunity for working group meetings and minimal windows of opportunity for plenary meetings. For this reason, the following procedures and working methods were adopted:

- (a) To shorten the time required in inter-active working group and plenum discussions, the Secretariat of the Award introduced two score sheets. The first score sheet was designed to facilitate the work of the 'elimination' round. A simple score sheet was used to including three criteria. This score sheet is presented in Annex IV;
- (b) The second score sheet was used to assist the TC in selecting a long list of 45 city initiatives. It provided a set of 20 probing questions totalling up to 60 points. As not all questions are necessarily applicable to all types of initiatives, the score sheet does not penalize such cases and calculates a percentage score based on applicable questions only. This score sheet is contained in Annex V;



- (c) In both rounds, the Secretariat of the Award compiled consolidated score sheets that were then used to assist the working groups in their decision making;
- (d) Four plenary sessions were held, one to launch the process, and one at end of each round, and one to adopt the report of the TC;
- (e) Use was made of ICT applications to allow for the online sharing of documents, comments, chats, etc.

IV. Selection Procedure for the Shortlisted Initiatives

The TC adopted a three-step assessment process.

In its first step, the TC reviewed the initiatives of each geographic region by the respective regional experts. This resulted in a first list of 87 cities.

In its second step, the members of the TC re-organized into two groups (A and B) with the purpose of identifying 45 deserving cities. The second score sheet was used to facilitate the process. Each group came up with a list. The two lists were compared in plenary. Those common to both lists were unanimously admitted to deserving initiatives list. Those remaining were discussed in plenary until consensus on the final list of 45 cities was reached.

In its third step, the members of the TC were re-organized into Groups C and D with the purpose of identifying 15 shortlisted cities. The same methodology was applied and resulted in the shortlist.

The TC prepared a brief for each shortlisted initiative to inform the Jury of the rationale of its selection. These briefs are contained in Annex III.





At its conclusion, the TC finalized the current report. It also presented the results of its deliberations to a special event hosted in Beijing, 23rd December 2020¹.

V. Recommendations of the TC to the Secretariat

The TC commends the Secretariat for enabling the evaluation of the submissions to the 2020 award, which for the first time took place entirely remotely. The TC members recognize the efforts put in by the Secretariat to adapt to these unprecedented conditions and feel that this did not adversely impact the quality and transparency of the assessment process. Members of the TC suggest the following comments and recommendations to inform the award process going forward:

(a) Nature and quality of proposals

- While the overall number of proposals has been increasing over the past years, geographical representation remains uneven. Going forward, more multipliers should be actively involved in disseminating the Award, perhaps by forming linkages to additional city networks in the future in order to broaden the knowledge and awareness about the Awards especially in regions that have attracted less proposals (e.g. North America, Sub-Saharan Africa).
- Many proposals to this edition of the Award privilege sectoral processes and projects over complex, comprehensive and participatory integrated urban management and development plans and projects. This partly reflects different regional, political and developmental contexts and levels of decentralization.

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¹ Note: The special event, originally scheduled on 23rd December 2020, was called off due to the technical breakdown. This TC report was finally unveiled on 3rd February 2021 in Guangzhou, China.



However, considering the importance of integrated and conceptually innovative plans for achieving the Climate Change Goals, New Urban Agenda and the SDGs, the TC recommends that special recognition is reserved in future Award rounds for integrated city-wide efforts and policy initiatives that have a comprehensive conceptual orientation, in what could be called 'city projects'.

Context-specific innovation should be appraised that truly make significant changes
in specific regions or cities. This means not just responding effectively to the
problems of the present (what the TC has seen in most of the present submissions),
but innovation also entails developing integrated local plans and steering new
public policies that build resilience, preparedness and opportunities for the future.

(b) Selection process and methodology

- Noting that a number of cities submitted an extensive number of proposals, the TC recommends that future Award rounds limit the number of proposals per city to a maximum of 2. Each proposal can include up to 3 sub-proposals, as long as they speak to the same conceptual or thematic issue or belong to the same integrated policy.
- Previous Guangzhou Award applicants should be flagged for the TC in advance, so that their progress can be assessed.
- Consistency in early bird applications should be maintained for instance: language, policy impacts, initiative timeline, etc. Inconsistencies should be highlighted earlier by the Secretariat to cities in advance and if revisions are not made, those proposals should be disqualified before entering the selection stage.
 Rather than submitting numerous attachments to the proposal, one page in the



proposal template could be reserved for cities to include any supporting graphic material.

- In addition to tagging proposals per region, the Secretariat could consider differentiating the proposals in accordance with topic diversity (i.e. food systems, jobs, waste management, energy, transportation, governance, etc.) in order to highlight thematic representation. The submission and selection could also be revised based on innovation categories, e.g. policy innovation, technology innovation, etc.
- The inclusion of more content and process-focused questions in the proposal template around the way in which the initiative concretely differs from existing policies and practices, the practical ways in which the initiative was developed and how obstacles were identified and overcome, could contribute to further sharing of the lessons learned from the submissions.
- The TC should have a clear set of guidelines or basic definition of what it means
 by the way in which impact is documented and assessed in order to allow for a
 clearer differentiation between accomplished and aspirational impact, as well as
 achieved or targeted beneficiaries and milestones.
- Overall, the questions and use of online tools for each round of assessment were helpful, but there were different elements to each round in terms of content and technology, requiring more or less time. Overall, the TC found the scoring method of round II useful, but time consuming. The second round could be simplified by limiting the number of sub-categories of evaluation.

V. TC Members

- Mr. Ali Cheshmehzangi, Head of the Department of Architecture and Built Environment and Director of the Centre for Sustainable Energy Technologies (CSET), The University of Nottingham Ningbo China;
- Ms. Sylvia Croese, Senior Researcher, South African Research Chair in Spatial Analysis and City Planning School of Architecture and Planning, University of the Witwatersrand; Chair, Technical Committee, 2020 Guangzhou International Award for Urban Innovation;
- 3. Ms. Kirstin Miller, Executive Director, Eco-City Builders;
- Ms. Sheila Ochugboju, Regional Coordination Specialist (Consultant), UNDP; Former Ambassador for Transformative Science and Urban Resilience, Kisumu County, Kenya; Co-Founder, Africa Knows;
- 5. Mr. Jorge Pérez Jaramillo, Architect, Independent Advisor; Senior Consultant, World Bank; Former Dean School of Architecture FAUPB; Former Deputy Planning Director Area Metropolitana del Valle de Aburra 2004-08, Former Planning Director of Medellin 2012-15, Leader for Medellin's team awarded with Lee Kwan Yew World City Prize 2016;
- 6. Mr. Serge Salat, President, Urban Morphology and Complex Systems Institute, Paris;
- 7. Mr. Enrique R. Silva, Director of International Initiatives, Lincoln Institute of Land Policy (LILP);
- 8. Ms. Azza Sirry, Professor of urban planning, Housing and Building National Research Center, Cairo, Egypt; Director of Regional Branch for Africa and the Middle East, Metropolis International Training Institute (MITI), Cairo;
- 9. Mr. Ajay Suri, Former Regional Manager Asia, Cities Alliances;
- 10. Mr. Anthony G.O. Yeh, Chan To-Hann Professor in Urban Planning and Design, Chair Professor of Department of Urban Planning and Design, Director of GIS Research



- Centre, University of Hong Kong; Academician, Chinese Academy of Sciences; Academician, Academy of Social Sciences, UK;
- 11. Ms. Monika Zimmermann, Expert, Consultant, Moderator, Monika B. Zimmermann Consult; Former Deputy Secretary General of ICLEI-Local Governments for Sustainability.

VI. Members of the Secretariat

- 1. Mr. Nicholas You, Executive Director, Guangzhou Institute for Urban Innovation;
- 2. Ms. Yinghong Zhou, Deputy Director General, Guangzhou Award Secretariat;
- 3. Ms. Shulin Tan, Manager, International Programs and Partners, Guangzhou Award Secretariat;
- 4. Mr. Rongqian Yang, Coordinator, International Programs and Partners, Guangzhou Award Secretariat.



ANNEX I

List of 15 Shortlisted Cities

(In alphabetical order of the country/region)

No.	City/Local Government	Initiative
1.	City of Unley, Australia	Cohousing for Ageing Well – Designing Urban Infill for Ageing in Place
2.	Vienna, Austria	Werkstadt Junges Wien
3.	São José dos Pinhais, Brazil	Digital Technology and Social Participation in Surveillance and Definition of Priority Areas and Act
4.	Chongqing, China	Innovative Emergency Solutions to the Pandemic Challenge for Urban Medical Wastes Disposal
5.	Capital Region, Denmark	Cycle Superhighways in Capital Region of Denmark
6.	Quito, Ecuador	Eco-Efficiency Tool for the Metropolitan District of Quito
7.	All 114 Urban Local Bodies (ULBs) of Odisha, India	The Urban Wage Employment Initiative – Reducing Vulnerabilities and Enhancing Resilience of the Urban



8.	Berhampur, India	Promoting Sustainable Environment Conservation and Women empowerment through Faecal Sludge and Septage Management (FSSM) in Berhampur
9.	Bandung City Government, Indonesia	The Roles of Public Health Service through OMABA Cooking Centre for Managing Malnourished and Stunting Children
10.	Union of Dannieh Municipalities, Lebanon	Engaging the Citizen to be Part of the Emergency Response Plan to Fight against COVID-19
11.	Municipality of Antananarivo, Madagascar	Building Resilience in the City Food System of Antananarivo through Adapted Production Systems: - Share and Learn about Urban Agriculture Practices through 'Mamboly Aho' (I FARM); - Monitoring the Local Food System (Implementing the MUFPP Monitoring Framework of Indicators); - Better Food for Kids: Vegetable Gardens in Schoolyards to Contribute to Better Nutrition for Children
12.	Breda, Netherlands	GreenQuays-Urban River Regeneration through Nature Inclusive Quays
13.	Departmental Council of Saint Louis, Senegal	Inter-municipal approach for the safeguard and enhancement of the Mangrove by the Local Authorities
14.	City of Cape Town, South	Western Cape Industrial Symbiosis Programme



	Africa	(WISP) delivered by GreenCape
15.	Los Angeles, United States of America	Open-Source Tools for Action on the SDGs



ANNEX II

List of 30 Deserving Cities

(In alphabetical order of the country/region)

No.	City/Local Government	Initiative
1.	Buenos Aires, Argentina	'BOTI' The WhatsApp chatbot of Buenos Aires City
2.	Buenos Aires, Argentina	Buenos Aires' Barrio 31 Social & Urban Integration Plan
3.	Rosario, Argentina	Alliance for Local Food Policy Transformation in the Post-Pandemic World
4.	Singra Municipality, Bangladesh	Promoting e-Rickshaws as Public Transport and e-Ambulance for Emergency Health Supporting Services
5.	Bogota City, Colombia	Bogotá's Temporary Cycle-tracks Strategy is Contributing to Face the COVID19, Fostering Bike Usage as a Social Distance Instrument
6.	Curridabat, Costa Rica	Curridabat, Sweet City: A Model of Urbanism Based on Pollinators and Ecosystem Services
7.	Trinidad, Cuba	Local Development from Creative Economies: 1. Agricultural Development and Zero km Policies of Gastronomy;



No.	City/Local Government	Initiative
		2. Crafts and Traditional Habitat Development
8.	Copenhagen, Denmark	Copenhagen Cloudburst Management Plan, Managing Heavy Rains and Stormwater in Copenhagen
9.	Aswan, Egypt	City of Development, Creativity and Renewable Energy
10.	Paris, France	The Oasis Schoolyard Project
11.	Senate of Berlin, Germany	Easy-to-access Information Strategy on the Corona Virus for Refugees and Immigrant Communities in Berlin
12.	Puri Municipality, India	DRINK FROM TAP MISSION – Pure for Sure Drinking Water Delivered to Each Home 24X7
13.	Tehran Municipality, Iran	Preparation of Neighbourhood Risk Mitigation Plan against Natural Hazards
14.	Netanya, Israel	A Breakthrough City that Serves as an Example to Many Local Authorities When it Comes to Urban Innovation
15.	Yokohama, Kanagawa, Japan	SDGs Future City Yokohama
16.	Changwon City, Korea (Republic	Green Hydrogen City of Changwon, the New



No.	City/Local Government	Initiative
	of)	Hydrogen-centred City of Changwon
17.	City of Suwon, Korea (Republic of)	Smart Rain City Suwon
18.	Goyang City, Korea (Republic of)	The 'world first innovation' series of Goyang city to respond to COVID-19
19.	Jeonju, Korea (Republic of)	COVID-19 Reaction Policy of Jeonju
20.	Songpa-gu, Korea (Republic of)	Smart Doctor
21.	Guadalajara, Mexico	Metropolitan Agency for Urban Forests of the Metropolitan Area of Guadalajara (AMBU)
22.	Conseil Régional de l'Oriental, Morocco	Territorial Coaching Program: Accelerator of Change at the Service of Citizens
23.	Kerkrade, Netherlands	Super Circular Estate
24.	City of Gdynia, Poland	Gdynia: The Learning City at Home. Municipal Institutions and Units in Contact with Gdynia's Citizens
25.	Departmental Council of Kaolac, Senegal	Moving from a poor and neglected economic sector to a renewed and development-promoting sector
26.	Tivaouane, Senegal	Preservation of an agricultural environmental Promotion of sustainable and decent



No.	City/Local Government	Initiative		
		employment for young people		
27.	Gauteng Provincial Government, South Africa	Quality of Life in the Gauteng City-Region: a partnership-based approach to understanding: 1. The Gauteng City-Region Observatory's Biennial Quality of Life Survey; 2. Data-driven Support of Government Decision Making and Relationship-building in Managing, Mitigating the COVID-19; 3. Enhancing and Monitoring Multidimensional Well-being through a Single Index Measure		
28.	Gaziantep Metropolitan Municipality, Turkey	Oğuzeli Central Biogas Power Plant		
29.	Kahramanmaras Metropolitan Municipality, Turkey	Smart Elder Care System (YADES)		
30.	Dubai, United Arab Emirates	Role of Dubai Municipality in Mitigating Impact of COVID-19 Pandemic via Artificial Intelligence		



ANNEX III

Summaries of the 15 Shortlisted Cities' Initiatives

1. CITY OF UNLEY, AUSTRALIA

Cohousing for ageing well – Designing for ageing in place

Adelaide is one of the most populous metropolitan regions in Australia, with a population of 1.3 million people. The City of Unley, a local government area in the Adelaide metropolitan region with a resident population of approximately 39,145 people, proposed novel and age-friendly community co-design principles with older residents to inform new co-housing options. In response to the challenges that older individuals wishing to age in place in their community often find limited options to downsize when their housing no longer suits their needs, the initiative aims to establish a new concept and principles of cohousing with shared amenities and desirable environment to enhance social cohesion. It included a suite of innovative cohousing designs sympathetic to local housing styles. The initiative can benefit the elderly population (i.e., aged 60 and above) in the city of Unley, which constitutes 22.6% of the city's population. It directly enhances the well-being of older community dwelling adults in metropolitan South Australia who wish to stay in their communities yet need to down size their property because their physical or financial needs have altered. The initiative is innovative by using the 'Alternative Infill' housing model and principles of cohousing in involving older residents in the codesign of cohousing that adapts to local culture and needs.

The TC recommends this initiative to the Guangzhou Award because it presents a good methodology that could be replicated for other types of housing development, innovative in terms of pushing boundaries of existing urban planning codes. It also tackles zoning and



construction regulations that makes the housing market more elastic and responsive to demographic and economic trends.

This initiative is highly relevant to Sustainable Development Goals 1 (End poverty in all its forms everywhere), 3 (Ensure healthy lives and promote well-being for all at all ages), 11 (Make cities and human settlements inclusive, safe, resilient and sustainable), and 13 (Take urgent action to combat climate change and its impacts).

2. VIENNA, AUSTRIA

Werkstadt Junges Wien

The goal of *Werkstadt Junges Wien* is to make Vienna the most child-and youth-friendly city in the world. Over the past 50 years, Vienna has shifted from a shrinking and aging city into a young and growing one. As such, the city decided it was crucial to create meaningful opportunities for children and young people to experience democracy in a positive, hands-on way. By showing them that their opinions and ideas matter, *Werkstadt Junges Wien* creates a feeling of self-efficacy through many small-scale participation offers. But the initiative goes the next step by aiming for a more structural, long-term and large-scale approach. The objective is to put social inclusion of all children and young people living and growing up in Vienna at the heart of policy-making and city administration. The innovative process is enabling children and young people of all age groups and backgrounds to connect to a process where they can freely articulate their own ideas for the city. To date, the impressive result is 193 specific measures and actions underway across the city. The strategy has been adopted by the Vienna City Council and thus is a binding commitment.

The TC selected this initiative for several reasons: 1. Leadership in Governance - It



Innovation - It also shows innovation, in that the focus on youth ultimately touches all parts of city administration; 3. Empowerment and Inclusiveness - This initiative not only empowers children and young people, it also empowers the city government and administration; 4. City Learning and Adaptation - At first, Vienna wanted children and young people to think about their city, but in the end, the city is now thinking about children and young people. There is an entirely new awareness that goes beyond the conventional ideas of democracy.

This initiative touches upon all of the SDGs but has the most direct relevance to Goal 3: ensure health and well-being for all, at every stage of life. Under the New Urban Agenda, *Werkstadt Junges Wien* is particularly a good example of the commitment to 'Ensure that all citizens have access to equal opportunities and face no discrimination'.

3. SÃO JOSÉ DOS PINHAIS, BRAZIL

Digital technology and social participation in surveillance and definition of priority areas and act

The municipality of São José dos Pinhais (pop. 265,000) forms part of the south eastern edge of the metropolitan area of the city of Curitiba in the southern Brazilian state of Paraná. The municipality covers that sensitive area where urban expansion encroaches upon and interacts with wildlife habitats, exposing both human beings and animals to diseases. Despite years of successful containment, Brazil and states such as Paraná, have seen a spike in Yellow Fever, which is transmitted from animals to human beings via mosquitoes. To prevent outbreaks in São José dos Pinhais, the municipality has designed a public health campaign anchored by a mobile application (app) designed by the Brazilian government,



SISS-Geo. SISS-Geo allows anybody with a mobile phone to register and geo-code any sighting of dead animals or potentially contaminated areas with the municipal health department. The app transforms regular citizens into public health scouts, which helps public health departments expand their capacity to scan and scope environmental conditions. Data collected by the department is then used to identify and project potential viral outbreaks, which then informs the roll out of vaccination campaigns. The campaign has proven that the use of the SISS-Geo Platform for monitoring non-human primate health in real time cannot only give public health officials up to 2 months advance notice of an outbreak, time enough to inoculate thousands of people, but it also allows time to develop animal protection initiatives that help protect wildlife.

The TC recommends this initiative for the multiple objectives it achieves through a concerted effort to make a mobile app accessible to residents of all ages and backgrounds: greater public awareness of public health issues and the interaction between human settlements and wildlife; involvement of residents in their own public health system and initiatives; vaccination campaigns that are timely, at scale, and equitable; as well as wildlife protection and conservation. This initiative reduces health risks and enhances regional equity. The initiative's reliance on an affordable, accessible and proven app makes it very replicable within and outside of the country. The successful implementation of the process will deliver outcomes consistent with the SDG 3, Good Health and Well-being; SDG 4, Quality Education; SDG 6, Clean Water and Sanitation; SDG 11, Sustainable Cities and Communities; and SDG 15, Life on Land.

4. CHONGQING, CHINA

Innovative Emergency Solutions to the Pandemic Challenge for Urban Medical Wastes Disposal



Chongqing is one of the 4 central-administered cities in China with a population of 31,243,200 people. The Chongqing Municipal Ecological Environmental Bureau used an innovative emergency solution of '3-Level Emergency Mechanism' to dispose urban medical waste in response to growing urban medical wastes due to the COVID-19 pandemic. These solutions, combining novel technology to deal with urban medical waste disposal and strict supervision for hospitals, were implemented in Chongqing to ensure effective regulation of medical wastes, thus preventing secondary infection and virus spread. Chongqing also helped Wuhan to construct and operate an emergency disposal centre for medical wastes of COVID-19 to process medical wastes from Lei-Shen-Shan and Huo-Shen-Shan's makeshift hospitals and other 16 districts. This initiative directly benefits citizens of Chongqing and Wuhan during the most challenging period of COVID-19 pandemic. It facilitates the city of Chongqing with a medical waste disposal capacity of 90 tons per day. It also led to the development of an emergency medical waste disposal centre in Wuhan, serving 388 hospitals in the city. The initiative is innovative by providing a model of collaboration, which involves a large number of people, including government officials, experts, technicians, medical staff and volunteers, based on a clear division of responsibilities, thus enabling quick responses to emergency, such as building an emergency disposal centre in just 14 days.

The TC recommends this initiative to the Guangzhou Award because it provides innovative emergency solutions to the disposal of urban medical waste which is important to avoid the spreading of virus. It presents an excellent example of one city (Chongqing) helping another city (Wuhan) in dealing with COVID-19. This initiative is replicable within the country. It provides a good model for emergency disposal of medical waste for improving urban safety resilience under pandemic and also alerts other cities in the world the importance of medical waste disposal in controlling the spread of disease.



This initiative is highly relevant to Sustainable Development Goals 6 (Ensure availability and sustainable management of water and sanitation for all), 9 (Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation), and 11 (Make cities and human settlements inclusive, safe, resilient and sustainable).

5. CAPITAL REGION, DENMARK

Cycle Superhighways in Capital Region of Denmark

Copenhagen, the capital city of Denmark, is known world-wide for its exemplary shift in urban mobility, with cycling and walking as backbone. Together with the neighbouring towns in the capital region of Denmark (1,800,000 inhabitants), a next step was taken to allow fast, safe and enjoyably cycling. 30 municipalities have joined forces to create the cycle superhighways – a regional network of cycling infrastructure that gives long distance commuters the opportunity to commute by bicycle across municipal borders on cohesive and correlating routes.

So far nine routes have been implemented. With 174 km of cycle superhighways today, the aim is to make more than 850 km of cycle superhighways in the region helping to decrease congestion, improving health and saving the cities and municipalities in the region from large amounts of CO₂ and NO_x. Effects of this new infrastructure are already showing. On the cycle superhighways there has been an average 23% increase in number of cyclists. 14% of new cyclists used to travel by car. And the cyclists ride long distances, an average trip is 11km (one way).

The TC recommends this initiative for several reasons: 1. Scale and strategy – promoting



cycling is not new as such, but the vision behind the initiative and its dimension is impressive. **2. Combining experience with new targets** – the superhighways show that exemplary work at one place can be enlarged through multiple action. **3. Institutional success** – organizing such huge infrastructure projects in an entire region with so many institutional actors (30 municipalities) is impressive. **4. Results are visible** – this initiative is far beyond a planning phase; it can report a real shift of mobility patterns, proving that people are ready to change their behaviour. **5. Direct contribution to climate mitigation and urban development** – the results so far indicate that a real CO₂ reduction can be achieved and new opportunities for car-light urban development are opening. **6. Lighthouse initiative for many more** – the capital region of Denmark provides an excellent model and is likely to encourage many cities and regions around the world.

The superhighways initiative contributes particularly to SDG 3 (good health), 9 (innovation& infrastructure), 11 (cities), 13 (climate) and 15 (life on land).

6. QUITO, ECUADOR

Eco-Efficiency tool for the Metropolitan District of Quito

In 2016, Ecuador's capital city, Quito (pop. 1,847,000), passed the Eco Efficiency Ordinance for the Metropolitan District of Quito, which incentivizes the construction of high density 'green' buildings (energy and water efficient, sustainably sourced construction materials) on key transportation nodes and with provisions for affordable housing. As important, the Ordinance deploys the concept of land value capture to ensure that the city retains its share of the land value increments generated by greater density and land use allowances in designated zones. The Ordinance not only helps create the conditions for sustained demand for its new public transit system (Metro) and curbs on urban expansion, but it also bolsters community and developer support for green building construction and



a more equitable distribution of the financial benefits associated with denser development. To take effect, the Ordinance also has relied on partnerships with community leaders and universities to determine the parameters of local area plans around transit stations, but also ways to calculate and recover the uplift generated by development in those areas. The city calculates that it has generated approximately \$10.7 million in revenue from the sale of development rights.

The TC celebrates Quito's embrace of the latest approaches to promote transit-oriented development and land value capture as a form of project financing, many of which have been adapted from examples in neighbouring countries like Brazil and Colombia. The Eco-Efficiency tool for the Metropolitan District of Quito is innovative for its purposeful combination of environmental, transportation, housing, and public financing objectives and planning innovations. The use of land value capture also signals the city's determination to ensure that the benefits and burdens of urban development (densification) are equitably shared by the public and private sectors. The initiative is a strong example of ecologically and financially sustainable urban development practices, a core objective of the New Urban Agenda. The successful implementation of the Ordinance will deliver outcomes consistent with the SDG 3, Good Health and Well-being; SDG 6, Clean Water and Sanitation; SDG 11, Sustainable Cities and Communities; SDG 12, Responsible Consumption and Production; and SDG 13, Climate Action.

7. ALL 114 URBAN LOCAL BOGIES OF ODISHA, INDIA

The Urban Wage Employment Initiative – reducing vulnerabilities and enhancing resilience of the urban

COVID-19 induced national lockdown in India highlighted the economic and housing vulnerabilities of urban labour force, composed largely of migrants from lagging parts of



the country working in informal sector in the primary cities. The lockdown stress led to the reverse migration of the labour force in large numbers. Migrants from Odisha, a lagging province in India, also returned to their home state. In response, the provincial government launched Urban Wage Employment Initiative (UWEI) whereby the urban workforce has been guaranteed a minimum number of workdays annually at specified daily wage. The workers are being engaged in public works and the resources are drawn from on-going welfare schemes of the national and provincial governments. In addition to mitigating the economic stress due to the pandemic of the impoverished urban labour force, the provincial government has adopted the initiative as a long-term measure for poverty alleviation.

The TC recommends this initiative for consideration to the Guangzhou Award because this is an excellent example of regional/city government providing a safety net during the pandemic for the vulnerable population which also helps build city resilience through the public works. UWEI is relevant, replicable and innovative in similar contexts in developing cities. Odisha is the first province in India to launch urban wage employment scheme though the national government is implementing rural wage employment scheme.

This initiative is highly relevant to SDGs 1, 3 and 11.

8. BERHAMPUR, INDIA

Promoting sustainable environment conservation and women empowerment through Faecal Sludge and Septage Management (FSSM) in Berhampur

Berhampur is a secondary city in Odisha province in India, with a population of nearly 400,000 (2011). Historically, the city does not have an underground sewer system and the toilets are connected to septic tanks. Disposal of faecal sludge creates health and environmental challenges for the city. In response, Berhampur Municipal Corporation



passed a resolution to adopt the Faecal Sludge and Septage Management (FSSM) Regulations 2018 making it mandatory for all cesspool emptier vehicles to dispose faecal waste at the treatment plant. In addition, it also passed resolutions to partner with local women' collectives, in each component of FSSM value chain, for promotion of mechanized desludging, and operation and management of the septage treatment plant in the city through a service contract. Women Self-Help Groups have been engaged in building sanitary toilets for safe containment of faecal waste, promoting mechanized emptying of septic tanks, operation and management of septage treatment plants and reuse of treated sludge. The initiative has enhanced the incomes of the collectives, ensured community participation and ownership for sustainable FSSM and promoted women empowerment.

The TC recommends this initiative for consideration to the Guangzhou Award because this initiative is relevant to most secondary cities in developing countries, where underground sewer systems are non-existent. It promotes various aspects of sustainability while also being gender sensitive. It builds local capacities, empowers women and raises their self-esteem, and helps solve an environmental problem most appropriate to local context. FSSM is cost effective and can be replicated in similar context.

This initiative is highly relevant to SDGs 6, 8, 11 and 14.

9. BANDUNG CITY GOVERNMENT, INDONESIA

The Roles of Public Health Service through OMABA Cooking Centre for Managing Malnourished and Stunting Children

Bandung is the second largest city of Indonesia with a population of 1,699,719 people. The Riung Bandung Public Health Service proposed an initiative in an attempt to overcome the



challenges of malnourished and stunting children and to reduce stunting rate and mortality. The initiative adopts strategies to ensure that the supplementary food is not only conveyed to the targeted children, but also totally eaten up without compulsion, such as to improve the taste in addition to nutrition of the processed food. The food is delivered to target children with motorcycle taxis by women organization. The initiative has directly improved a nutritional status of children under-five in the pilot district. Malnourished children status decreased from 29 cases in 2013 to 0 cases in 2019. The initiative also has facilitated its members, who are almost females, with food producing skill and entrepreneurship passion. The initiative is innovative because it goes beyond the conventional programs of supplementary food distribution, which have led to mismatch between supply and demand due to government limitations and agency loss in bureaucracy. By developing community-based cooking centre that empowered local communities in handling malnutrition, processing healthy food, as well as conveying the food to children, the initiative succeeded in reducing the prevalence rate of malnourished and stunting children.

The TC recommends this initiative to the Guangzhou Award because it presents an excellent example of local/subnational government stepping in to fill and redress central government failures with particular attention to children and their access to food/nutrition, based on community participation, involving women organization. This is the equivalent of town planners thinking about addressing the last mile - identifying that last, smallest, but often most important link between people and the services they need. The food chain is as good as its connection to those who need the food.

This initiative is highly relevant to Sustainable Development Goals 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture), 3 (Ensure healthy lives and promote well-being for all at all ages), 5 (Achieve gender equality and



empower all women and girls), and 11 (Make cities and human settlements inclusive, safe, resilient and sustainable).

10. UNION OF DANNIEH MUNICIPALITIES, LEBANON

Engaging the citizen to be part of the Emergency Response Plan to fight against COVID-19

The Union of Dannieh Municipalities is a union within Lebanon, a country facing many economic and political difficulties even before the COVID-19. Dannieh, although a region rich in its resources, has a seasonal economy that depends on agriculture and tourism and is affected during the wintertime. It was overwhelmed by the challenges and tasks it was facing, such as the shortage in staff, funding along with social and economic challenges. It was facing extreme challenges brought about by Lebanon crisis along with the COVID-19 lockdown. The budget is limited and the needs are excessive.

The Union of Dannieh Municipalities has established an Emergency Response Plan with 15 committees of volunteers from youth with a high level of education and specialization after a session held with stakeholders from the community who agreed upon the importance and need of establishing the Crisis Cell. The Union has coordinated with the 17 municipalities that were under its umbrella and has cooperated with active people in the civil society to provide funding and support.

This initiative had relied on the use of technology. The collected data that covered different criteria such as age, gender, income, disabilities and so on within one committee inside the Cell was shared with other committees, which is considered an innovation in the area. The use of shared folders and WhatsApp groups has helped facilitating communication between



committees inside the cell and with people. Priority of work was dedicated to the marginalized groups.

The initiative connects the municipal staff, other municipalities under its umbrella, the 15 committees, citizens and the community at large with information quickly and effectively, through using multimedia and technology as well as traditional means. It encouraged citizens to be more active and involved, and it has shown their abilities and skills. They were attending meeting, suggesting ideas and implementing projects.

The initiative efficiency has improved over time compared to the beginning of the crisis as new ideas came from the community. It is now more credible and includes more citizens and entities. Thus, it has proved to be sustainable and can be replicated within the country and region. It has provided assistance to citizens linking a wide range of social and community resources.

The TC recognizes the value in the initiative because of its engagement with different partners especially the youth. It shows a capacity to be collaborative and flexible during emergency to advance higher goals. It demonstrates the ability of the community to put the necessary structure to find help within the community. The initiative evolved and is sustainable and enables the community to face any other future crisis.

The TC recommends the initiative as it encouraged the youth and citizens and give them the opportunity to play a role in their community and to feel responsible of themselves and others. They are now part of the Union; they participate in its periodic meetings as well as in proposing development projects. Moreover, the efficiency of the initiative has improved compared to the beginning of the crisis. It is now more credible and includes more people



and cover larger areas. Locals and residents became more cooperative, aware and integrated. The initiative can be replicated within the country and the region.

11. MUNICIPALITY OF ANTANANARIVO, MADAGASCAR

Building resilience in the City food system of Antananarivo through adapted production systems:

- Share and learn about Urban Agriculture practices through 'Mamboly Aho' (I FARM);
- Monitoring the local food system (Implementing the MUFPP Monitoring Framework of Indicators);
- Better Food for Kids: Vegetable gardens in schoolyards to contribute to better nutrition for children

The Municipality of Antananarivo is enhancing the resilience of the city food systems through three innovative initiatives, to support the city of 1,500,000 inhabitants. Together they promote urban agriculture, monitor the urban food policies and produce food in schoolyards to improve the nutrition of children.

Madagascar is an island in the Indian Ocean, off the coast of East Africa. It is one of the poorest countries in the world – nearly 78 per cent of the population, that is 25.6 million people, live below the poverty line and it is extremely vulnerable to natural disasters, which leads to drought and increases food insecurity. Children are the hardest hit by poverty with more than 80% of those under 18 living in extreme poverty. Additionally, UNICEF declares that chronic malnutrition affects almost half of children under five, with stunted growth being a major concern. The Municipality of Antananarivo therefore developed three highly effective initiatives which increase the synergies between multi-sectorial actors in the City to coordinate actions for increasing resilience.



The first initiative aims to promote Urban Agriculture (UA) using a mobile application named 'Mamboly Aho' which is translated as 'I Farm' in English. It allows information sharing between the Municipality and its inhabitants about urban agriculture, breeding, and waste management. The members also share their own projects to the online community, exchanging ideas and discussing best practices through the forum. A geolocation visualization capacity is also included in the app, to locate the individual projects, to encourage expansion of the network. They aim to create an active community of urban farmers involved in growing their own food and even composting at home. This is particularly important during the COVID-19 crisis, as it reduces physical contact and provides new sources of food which have been severely depleted as farmers were forced to stay at home.

The second initiative aims to implement the Milan Urban Food Policy Pact monitoring framework (MUFPP), which is the first global existing monitoring tool to measure City's performance on Food Policy making processes. The signing of Milan Pact was an open door for multiple opportunities. Thus, the Monitoring Framework was opportune for Antananarivo to monitor and evaluate its priorities. The initiative is revolutionary due to the fact that very few Cities in the world have been implementing it. The Antananarivo experience can encourage other Cities in the region to implement the framework. Antananarivo has selected 6 from the 44 MUFPP indicators (3 criteria of selections) to be used to revise the City's priorities related to Food.

The Third initiative called Better food for Kids is an initiative of the municipality which consists of installing vegetable gardens in these schools in order to fight against malnutrition among schoolchildren by offering them a balanced meal while offering a program of community production, environmental education, and thus avoid dropping out of school.



The Technical Committee recommends this group of initiatives because it represents a comprehensive approach to enhancing, from increasing food production to improving policies which drive food systems to expanding access for vulnerable groups.

12. BREDA, NETHERLANDS

GreenQuays-Urban River Regeneration through Nature Inclusive Quays

Breda is a municipality in the Netherlands with 185,000 inhabitants. As in many cities and towns, Breda houses rivers and creeks, often constrained in concrete, deep walls and lacking green areas. Breda's initiative 'GreenQuays' addresses current challenges, such as unsustainable urbanization, degradation of urban ecosystems, and lack of resilience to climate change.

Breda is planning nature inclusive green quays linked to public green spaces as part of a bigger scheme targeting the urban restoration of the river Mark. This initiative is centred on an innovative Nature Inclusive Quay (NIQ) technology that is specifically designed to support the development of a complex vertical ecosystem, providing favourable conditions for flora and fauna.

Newly developed materials (type of brick stone) and innovative technical implementation approach (including different quay angles, protruding bricks, backspace, platform for riparian plants, shelters for macro fauna, specific rainwater runoffs) shall replace traditional concrete walls and extend below the parallel walkway or street, allowing trees and bushes to grow their roots and local flora and fauna to prosper.



Thus, Green Quays will test a complex set of transferable and innovative solutions for renaturing urban rivers in dense downtown areas, where there is insufficient space for developing natural riverbanks. This technical solution is supported by social innovation, through applying an intensive participatory co-design process, targeting the engagement of external stakeholders and citizens.

The TC recommends this initiative for several reasons: 1. Combination of technical innovation and new planning approaches – the City together with a local university have developed a new building material which is applicable in underused city spaces. 2. Positive impacts for ecosystems and citizens – everybody walking and cycling along can enjoy additional green space while ecosystems can develop. 3. Easy to extend and replicate – many cities and towns manage small rivers, canals and creeks, they can easily and affordably take up this initiative and scale it up. 4. Wider approach to new mobility solutions – the initiative not only improves the zone along streaming water, it also includes the redesign of streets (smaller), crossing (safer) and enlarges public space for walking and cycling. 5. Broad partnership – 2 universities, small companies and civil society are providing input and solutions and thus the process engages the municipality far beyond the river.

The quays initiative contributes particularly to SDG 6 (water), 11 (cities), 13 (climate) and 15 (life on land).

13. DEPARTMENTAL COUNCIL OF SAINT LOUIS, SENEGAL

Inter-municipal approach for the safeguard and enhancement of the Mangrove by the Local Authorities



The Departmental Council of Saint Louis in Senegal developed an innovative approach to environmental governance, which integrated the restoration of mangroves ecosystems across three municipalities with strategies for addressing urgent urban climate challenges and enhancing livelihoods through the promotion of resilient and structured economic activities around mangroves. The objective of the initiative was to restore the mangroves of Saint-Louis of Senegal (1000 ha.), which are threatened with extinction due to climatic and anthropogenic pressures, with a rate of loss of 9 ha./year, mostly due to the deforestation for firewood and farming activities. Mangrove restoration activities are critically important to global climate action, as they sequester carbon at a rate of two to four times greater than mature tropical forests and store three to five times more carbon per equivalent area than 'tropical forests' like the Amazon rainforest.

The department has a population of over 312,369 and is located in the Sahelian Region of West Africa, where poverty is most widespread and where resilience is weakened by environmental, political, demographic, economic and security challenges. The mangroves segment 3 municipalities in the Department of Saint-Louis and prior to the initiation of the initiative, local elected officials had not sufficiently integrated mangrove protection into their local sustainable development policies. The community-based conservation initiatives were not coordinated. Urban development strategies did not allow the mangrove to play its role.

Over the nine years of the intervention, more than 50 ha. of mangrove have been regenerated, which is equivalent to a sequestration rate of 350 tons of carbon annually. The mangrove growth rate has risen to 7% per year and the clearance rate is down by 25%. Nearly 80,000 people from over 50 organizations were involved in the initiative, representing local authorities, academics and environmental experts who were engaged to support the local private sector, civil society organizations and community organizations.



Alternative fuel sources in the form of biogas, were offered to households previously dependent on mangroves for firewood and an effective community awareness programme was launched, including inter-generational dialogues in schools, inviting elders to tell historical stories about the times when mangroves were abundant in order to encourage young people to actively contribute to its regeneration.

The Technical Committee recommends this initiative for consideration because it is an important and replicable best practice model to be shared during the forthcoming UN Decade on Ecosystems Restoration 2021-2030. It is an innovative approach to safeguarding mangroves through an inter-communal approach and participatory local development. The TC also commends the department for knowledge sharing and collaboration with other communities in Mauritania, Gambia and Guinea Bissau to preserve and enhance mangroves.

14. CITY OF CAPE TOWN, SOUTH AFRICA

Western Cape Industrial Symbiosis Programme (WISP) delivered by GreenCape

Cape Town is the second most populous city in South Africa with both industrial economy alongside with informal economy that presents both potentials and challenges. The Western Cape Industrial Symbiosis Program (WISP) has developed a platform that aids with transforming the largely consumptive and wasteful linear economy model into a more circular economy model. 'One company's waste is another company's resource'. The initiative is a free facilitation service that seeks to create mutually beneficial links or 'synergies' between member companies. It connects companies so that they can identify and realize the business opportunities enabled by utilizing unused or residual resources



(materials, energy, water, assets, logistics, expertise).

WISP is available to all companies in the manufacturing sector, no matter the company size or industry formal or informal. The resource exchanges facilitated by WISP divert waste from landfill, generate financial benefits for members, reduce the carbon intensity of production processes and create jobs; ultimately making the manufacturing sector more competitive and resilient to climate change. Thus, it addresses SDGs 9 and 11 as well as the New Urban Agenda.

The initiative although funded by the City of Cape Town as part of Sustainability Initiatives is delivered by Green Cape, a not-for-profit company in collaboration with University of Cape Town. This Collaboration helps identify resource efficiency and cleaner production.

Along the years since its establishment 2013 it adopted a more progressive approach beyond landfill diversion to conducting material flow analysis (MFA) on industrial areas to determine opportunities for interventions to increase resource efficiency. It has evolved and its efficiency has improved. As resource exchanges were completed, and case studies created, WISP's credibility was established and the programme was better able to recruit new members into the network. Thus, gain sustainability. Also, Efforts are put into integrating informal businesses from neighbouring communities like waste pickers with established businesses for mutual benefit.

The TC recognizes the pressing issue of industrial waste and the importance of collaboration to reuse and reduce it. The TC applauds the initiative development over time making sure the work done is still relevant in the changing waste economy landscape. Each subsequent year a new layer is added to the traditional core activities of the initiative, the work has grown from making individual business resource efficient to optimizing



production.

The TC recommends the initiative for fostering resource efficiency not only through the initiative, but it helps the businesses in the network to practice resource efficiency in one form or another through commitments to divert waste from going to landfill by utilizing more sustainable value-added waste treatment options.

The TC commend the initiative for its promotion of sharing resources between companies thus cutting costs, increase profit, improving their business processes and learn from each other how to operate more sustainably. This program is needed in the country and in the region and across the globe and could be replicated elsewhere after adaptation to the industrial model and the countries context.

15. LOS ANGELES, UNITED STATES OF AMERICA

Open Source Tools for Action on the SDGs

Seeking to improve the lives of L.A. residents via the Sustainable Development Goals (SDGs), and in order to develop and share SDG tools in a transparent way, Los Angeles is pioneering two open-source mechanisms for SDG action at the sub-national level: the SDG Data Reporting Platform (Open SDG) and the SDG Activities Index. While Open SDG was developed for national statistics, L.A. is the first city to adapt it for sub-national reporting. The SDG Activities Index is a living, crowd-sourced encyclopaedia of organizations advancing the SDGs in L.A. It is searchable, exportable, and allows residents to build shared capacity and learn about the SDGs. Both of these tools have wikis, and their code can be reused by other cities and organizations. The platform was chosen and implemented by the City of L.A.'s Information Technology Agency (ITA) in partnership



with the Mayor's Office of International Affairs (MOIA) and the Mayor's Fund for Los Angeles (MFLA).

The TC recommends this initiative for several reasons: **1. Leadership** - L.A. is the only global city currently reporting directly on the SDG indicators; **2. Transparency and Replicability** - The tools are easily replicated by any sub-national government or organization who wishes to do the same; **3. Innovation** - L.A. is the only city in the world aggregating projects and organizations across the public, private, and non-profit sector and linking them to the SDGs, actively building capacity to achieve the Goals within the community and 4. **Foresight** - L.A. is actively using the SDG monitoring and mobilization data to identify gaps to 2030, developing new analysis and visualization tools that will help them and other cities.

Although data are collected and tracked against all 17 SDGs, this initiative is most highly relevant to Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. It also monitors a complete set of indicators relevant across the New Urban Agenda.



ANNEX IV

The 5th Guangzhou International Award for Urban Innovation Score Sheet for the 1st (Elimination) Round

This first round is undertaken regionally. Its purpose is to extract the ± -100 qualifying initiatives. The method is simple: Yes/No and In/Out [3 NOs = Out]

Eligibility	
Is this initiative a bona fide local government led action?	
Is the submission complete and does it conform with the information required?	Yes/No
Credibility	
Is this initiative a credible innovation (new policy, new strategy, new business model new partnership, new governance framework, or use of technology) and not just a new project?	Yes/No
D.I	
Relevance	X7 /NT -
Is this initiative relevant to urban innovation?	Yes/No
Does this initiative contribute to the realisation of the Global Agendas?	Yes/No
Comment	In/Out



ANNEX V

The 5th Guangzhou International Award for Urban Innovation Score Sheet for the 2nd Round

Criteria	Score	(0-3)
Idea or Concept		
To what extent did the leadership of the initiative/local government 'think		
out of the box' in conceiving this initiative?		3
To what extent is the idea behind the initiative an original one?		3
If borrowed from others, to what extent has the idea/concept been adapted		
to the local context?		3
	S-Tot	9
Advocacy and Communications		
To what extent did the local authority inform and solicit the inputs of the		
community or local stakeholders?		3
To what extent is the initiative co-created or co-owned by the community		
or stakeholders?		3
To what extent are the policy or strategic objectives clear and compelling		
to all and have been communicated effectively?		3
	S-Tot	9
Change		
To what extent does this initiative bring about changes in attitudes,		
behaviour, and/or administrative culture?		3
To what extent does the initiative bring about changes in the way decisions		
are made and resources are allocated?		3
	S-Tot	6
Implementation and operating at scale		
To what extent is the initiative being rolled-out or implemented?		3
To what extent is the initiative making a social, economic or environmental		
difference?		3
To what extent is the initiative making a difference in improving		
governance and breaking down silos?		3
	S-Tot	9
Replicability and learning	1	T
To what extent have the lessons learned been described and identified?		3
To what extent can these lessons learned be applied in other cities/regions		
and contexts?		3



	S-Tot	6
WOW factor		
To what extent would you use this initiative in your		
advocacy/research/capacity-building work?		3
To what extent should this initiative be used for educational and learning		
purposes?		3
	S-Tot	6
Contextual challenge		
To what extent does the contextual environment (social, political,		
environmental, etc.) make a difference to the merit of this initiative?		3
Is the initiative being implemented in a least developed country or a post-		
disaster situation?		3
	S-Tot	6
Relevance to SDGs and the NUA		
To what extent is the initiative relevant to the Global Agendas (SDGs,		
NUA, etc.)?		3
To what extent can the initiative be considered as a model for the local		
implementation of the SDGs?		3
	S-Tot	6
Social inclusion, cultural diversity and gender equality		
Does this initiative promote social inclusion, cultural diversity and gender		
equality and leave no one behind?		3
	S-Tot	3
Total (Maximum score)		60