



WORLD BEST PRACTICES 全球最佳范例

ASIA-PACIFIC EDITION 亚太版



Global Alliance
for Buildings and
Construction

2019.12 Vol.34
总第三十四期



Harnessing the Power of Digital Revolution for Urban Sustainability and Prosperity
— 14th Global Forum on Human Settlements Productively Convened at UN Conference Center in Addis Ababa

利用数字技术促进城市繁荣与可持续发展
—— 第十四届全球人居环境论坛在亚的斯亚贝巴成功举办 (P014-P084)



绿城 扫一扫
关注范例新城、您的宜居生活!

Sustainable City and International Green Model
City Workshop 2019 Successfully Held in Qingdao
2019 可持续城市暨国际绿色范例新城研讨会在青岛成功举办 (P156-P159)



THE 15th ANNUAL SESSION OF GLOBAL FORUM ON HUMAN SETTLEMENTS (GFHS 2020) 第十五届全球人居环境论坛年会

THEME: GLOBAL GREEN NEW DEAL TO ACHIEVE THE SDGs –
GREEN CITY, HEALTHY PEOPLE AND BLUE ECONOMY

主题：全球绿色新政，实现可持续发展目标：绿色城市、健康人类与蓝色经济

Date: July 21-22, 2020 时间：2020 年 7 月 21 日—22 日



▲ Venue: IMPACT Arena and IMPACT Exhibition and Convention Center
地点：泰国曼谷 IMPACT 国际会展中心

应泰国政府有关机构邀请，第十五届全球人居环境论坛年会（GFHS 2020）将与 2020 联合国区域贸易与发展论坛合办，包含会议与展览两大部分。作为世界范围内聚焦可持续城市与人居环境发展最重要的盛会之一，GFHS 2020 旨在为全球的利益相关者提供一个高级别的对话与合作平台，分享绿色智慧城市的创新政策、策略、技术与范例；研讨健康海洋、滨海城市与人居环境等前瞻性议题，推动蓝色经济和贸易可持续发展；促进城市基础设施投融资与“一带一路”倡议背景下的务实合作；加强能力建设，培育持久的新型伙伴关系，加速城市创新与有效的行动，推动实现可持续发展目标和《新城市议程》。泰国及相关国家政要、联合国等国际组织高级官员、领袖城市市长、跨国企业负责人、知名专家学者将出席会议并发表演讲，出席会议的代表预计 800 余人。



International Platform Creating International Brand
GFHS：国际平台成就国际品牌



▲ 2019 可持续城市与人居环境奖获奖单位与颁奖嘉宾合影
Awarders and awardees at Sustainable Cities And Human Settlements Awards Ceremony 2019

● 联合主办

泰国商务部国际贸易与发展研究院（ITD）
联合国贸易和发展会议（UNCTAD）
全球人居环境论坛（GFHS）

● 合作伙伴（拟）

泰国商务部（MOC）
泰国农业合作部（MOAC）
泰国工业部（MOI）
泰国自然资源与环境部（MNRE）
泰国外交部（MOFA）
泰国能源部（MOE）
泰国交通部（MOT）
联合国粮农组织（FAO）
联合国亚太经社理事会（UNESCAP）
联合国开发计划署（UNDP）
国际电信联盟（ITU）
世界卫生组织（WHO）
世界气象组织（WMO）
世界一带一路组织（GOBA）
世界区块链联盟（GBA）
国际海洋研究院（IOI）
世界城市运动（WUC）
亚太水产养殖中心（NACA）
中国城市发展研究会（CRSUD）
东南亚渔业发展中心（SEAFDEC）
世界和平联盟（UPF）
世界非政府组织联合会（WANGO）

● 活动内容

为期两天的会议活动包括开幕式、主旨演讲、高层对话、专题论坛、“可持续城市与人居环境奖”盛典、闭门会议、项目考察等。主要会议提供中英泰三种语言同传服务。

展览会日期为 7 月 21 日 -23 日，面积不低于 5000 平米。

● 可持续城市与人居环境奖盛典（SCAHS 2020）

城市（区、镇）、景区、社区、特色小镇、建筑、规划设计、绿色技术、绿色出行、个人包括少儿均可申报“飒飒奖”。

欢迎相关城市、企业、科研机构和专业人士报名参会参展，申报“飒飒奖”，申请演讲机会，申办分论坛，和国际社会分享创新技术和成功经验，合作共赢。



▲ 联合国新闻报道 United Nations News report

更多信息请浏览论坛官网：www.gfhsforum.org
联系人：陈新（女士）电话：0755-83288289 手机：18948331309
E-mail: kim.chen@gfhsforum.org



贯彻新城市
议程

Colors of the Year 2020

2020 的色彩

2020 注定是个不寻常的年份。曾经以为遥远，一度憧憬它的色彩。进入新世纪以来，地球人所做的将很大程度决定 2020 及下一个十年的基色。

人类进入城市时代。这个星球面临着三大挑战：环境退化、气候变化和贫富分化。道法自然，绿城如树。基于 “碳基” 的绿色和基于 “硅基” 的智能是未来城市发展的两大趋势，也关系到上述挑战是否能有效解决。最终，人们追求的还是亦橙黄绿青蓝紫和谐搭配、平安健康、适足多彩的幸福生活。

2019 年 7 月发布的《2019 年可持续发展报告》指出，在减少极端贫困、免疫普及、降低儿童死亡率和增加人民获得电力的机会等领域取得进展。但报告发出警告，气候变化的影响以及国家内部和国家之间日益加剧的不平等正在破坏可持续发展议程的进展，有可能扭转过去几十年使人民生活改善的许多成果。

2019 年 8 月 2 日，埃塞俄比亚启动大规模植树活动，在 12 小时的时间内，全国共种下了超过 3.5 亿株树苗，创造了世界纪录。埃塞俄比亚的可再生能源占比高达 97%。该国总理也获得了本年度诺贝尔和平奖。第十四届全球人居环境论坛年会就选择在这个绿色发展潜力巨大的国家举办。用埃塞水务、灌溉与能源部部长西莱希·贝克莱阁下在年会开幕致辞的话说“埃塞俄比亚是人类的起源，露西（Lucy）的遗骸已有 320 万年历史。因此，在这里举办全球人居环境论坛是最优选择。”年会取得了历史性成功，发表了《亚的斯亚贝巴宣言》，并促成了一系列务实有效的合作。至此，全球人居环境论坛年会完成了在五大洲的首轮巡回举办，致力于让“飒飒”绿色之风，飞遍世界。

岁末，原定由智利主办的 COP25 因国内政治动荡，几经周折，最终由西班牙马德里接盘举办。会前环境署发布的年度《排放差距报告》指出，为实现 1.5°C 目标，各国的国家自主贡献目标须提升至少 5 倍，为实现 2°C 目标，各国目标须提升 3 倍。压力山大，倍感悲情！会议虽然有不少亮点，但我们对可能取得的谈判成果谨慎乐观。因为这个星球治理的基调没变。

知易行难。很多国家正面临经济下行的压力或社会动荡冲突，眼前的生活都成了问题，谁还顾得上气候变化和环境退化呢？富有远见的政治意愿、稳健的经济与和平的社会缺一不可。

秘书长古特雷斯 9 月在联合国大会第 74 届会议开幕致辞中说：“由于我们正进入可持续发展目标行动十年，由于我们要求在气候变化方面有更多的紧迫性和雄心，2020 年将是关键的一年，我们必须让人们相信联合国与每一个人息息相关，多边主义能够提供全球挑战的真正解决方案。”

做想做且应做的，终将获得想得且应得的。2020 全球人居环境论坛年会将于 7 月再度在“微笑之国”泰国曼谷举办，主题为：全球绿色新政，实现可持续发展目标：绿色城市、健康人类、蓝色经济。期待与你再度同行。

在此恭祝你圣诞快乐，2020 新年快乐，中国春节快乐！

2020 is destined to be an unusual year. We used to think it would be far away, and once dreamed of its color. What mankind has done since entering the new century will largely determine the base color of 2020 and the next 10 years.

We have entered an urban era. The planet faces three major challenges: environmental degradation, climate change, and the gaps between rich and poor. Like Tao that closely follows nature, green cities resemble trees. The two major trends of future urban development are "green" and "smart", meaning one is "carbon-based" and the other is "silicon-based", which will also determine whether the above challenges can be effectively resolved. In the end, what mankind pursues is a harmonious combination of red, orange, yellow, green, blue, and purple - a colorful happy life characterized by safety, health and sufficiency.

The Global Sustainable Development Report 2019, released in July 2019, states that progress has been made in areas such as reducing extreme poverty, immunization, reducing child mortality and increasing people's access to electricity. But the report warns that the effects of climate change and growing inequality within and across countries are undermining progress on the Sustainable Development Agenda, with the potential to reverse many of the results that have improved people's lives over the past few decades.

On August 2, 2019, Ethiopia launched a large-scale tree planting activity. In 12 hours, more than 350 million saplings were planted across the country, setting a world record. Ethiopia's renewable energy accounts for 97%. The country's Prime Minister also won the Nobel Peace Prize this year. The 14th Annual Session of Global Forum on Human Settlements (GFHS 2019) was chosen to be held in this country with great potential for green development. Dr. Eng. Seleshi Bekele, Minister of Water, Irrigation and Energy of Ethiopia, said in his opening speech of GFHS 2019 that "Ethiopia is the origin of mankind, where the remains of Lucy 3.2 Million year old. Therefore, it is the right place to hold such meeting on Global Forum on Human Settlements." The Forum was a historic success, the "Addis Ababa Declaration" was adopted, and a series of pragmatic and effective cooperation was facilitated. So far, the annual session of Global Forum on Human Settlements has completed its first round of tours on Five Continents, and is committed to making the green wind of "SCAHS" fly all over the world.

At the end of this year, the 25th United Nations Climate Change Conference (COP25), originally scheduled to be hosted by Chile, is now being held in Madrid, Spain after several twists and turns due to the domestic political turmoil in Chile. The annual "Emissions Gap Reports" released by the UN Environment before the conference pointed out that in order to achieve the 1.5°C target, the target of nationally determined contributions (NDCs) must be increased at least 5 times, and in order to achieve the 2°C target, the target of NDCs must be increased 3 times. The pressure is great and I feel deeply sad. Although there were many highlights in the conference, we were cautiously optimistic about the outcome of the negotiations. Because the tone of the planet's governance has not changed.

Easier said than done. Many countries are facing downward economic pressure or social turmoil and conflicts. Their people have to overcome the living difficulties, so who will care about climate change and environmental degradation? A visionary political will, a robust economy and a peaceful society are indispensable.

In his opening speech to the 74th session of the UN General Assembly in this September, Secretary-General António Guterres said that "As we are entering this crucial Decade of Action for the Sustainable Development Goals, we must convince people that the UN is relevant to all and that multilateralism offers real solutions to global challenges".

Do what you want and should do, and you will eventually get what you want and deserve. The 15th Annual Session of Global Forum on Human Settlements (GFHS 2020) will be taking place again in Bangkok, Thailand, the "land of smiles" next July, with the theme of "Global Green New Deal to Achieve the SDGs: Green City, Healthy People, and Blue Economy". Looking forward to working with you again.

I wish you a Merry Christmas, Happy New Year 2020 and Happy Chinese New Year!

前沿资讯 FRONTIER INFORMATION



008 前沿 · 关注 Frontier · Focus

010 前沿 · 数据 Frontier · Data

专题报道 SPECIAL REPORT



014 利用数字技术促进城市繁荣与可持续发展
—— 第十四届全球人居环境论坛在亚的斯亚贝巴成功举办
Harnessing the Power of Digital Revolution for
Urban Sustainability and Prosperity
— 14th Global Forum on Human Settlements Productively
Convened at UN Conference Center in Addis Ababa

023 年会演讲精选
Collection of Speeches of GFHS 2019



054 2019 “飒飒奖” 荣誉榜
Honor Roll of 2019 Sustainable Cities and Human
Settlements Awards

061 图片报道 PHOTO NEWS

066 2019 可持续发展目标承诺仪式
Ceremony of Making Commitments to SDGs 2019

070 成果文件 Outcome Document

最佳范例 BEST PRACTICES



086 坚持生态优先绿色发展
打造长江经济带高质量发展典范新城
Stick to Ecology Priority and Green
Development to Forge a High-Quality Development
Model City along the Yangtze River Economic Belt



096 碧桂园森林城市
产能合作新城 未来城市榜样
FOREST CITY
An Emerging Futuristic Urban Development
A Prime Model of Future Cities

飒飒风采 SUSTAINABILITY EXPERIENCES



108 中建·生态智慧城、中建·壹号府分别荣膺
全球人居环境规划设计奖及全球绿色示范社区奖
CSCEC • Eco-Smart City CSCEC • Top Mansion
Respectively Won the Global Human Settlements
Awards on Planning and Design & Global Green Model
Community

116 潼南人民生态公园景观设计
The Landscape Design of People's Eco-Park



124 南海新区市民文化中心设计方案说明
Weihai Nanhai New District City Cultural
Center Design Plan



128 江宇梦想小镇：一个旅行、度假和居住目的地
Jiangyu Dream Town: A Destination for All



134 爱琴海购物公园一站式的购物体验，引领购物新潮流
Leading the New Trend of Shopping Aegean Palace
Brings You One-stop Shopping Experience



138 隆基股份：光伏科技让人居环境更美好
LONGi: Photovoltaic Technology Unlocks Better
Settlements for Human Being



144 镜湖宸院—肇启全球人居环境的中国封面
THE SINO PARK – Ushers into a Chinese Cover of
Global Human Settlements

会议活动 CONFERENCE



150 第十二届亚洲政府间区域环境可持续交通论坛通过了
《河内宣言》
Ha Noi Declaration adopted at the
“12th Intergovernmental Regional Environmentally
Sustainable Transport Forum in Asia”



156 2019 可持续城市暨国际绿色范例新城研讨会
在青岛成功举办
Sustainable City and International Green Model
City Workshop 2019 Successfully Held in Qingdao



授权 AUTHORIZATION

联合国人类住区规划署《全球最佳范例》杂志亚太区办事处
UN-HABITAT World Best Practices Magazine Asia-Pacific Office

主 办 Host

全球人居环境论坛 (GFHS)
Global Forum on Human Settlements
中国城市发展研究会可持续城市专业委员会
Special Committee of Sustainable Cities of China Research Society of Urban Development
深圳美好城市研究院
Shenzhen Better City Institute

中国办公室 China Office

地 址：深圳福田区福虹路世贸广场 C 座 701 室
Address: Suite 701, Block C, World Trade Plaza, Fuhong Road, Shenzhen, China
Tel: 0755-83288289 83288296 Fax: 0755-83288619
地 址：北京市海淀区三里河路 9 号住建部南附楼 2308 室 100044
Address: Suite 2308, South Annex Building, MOHURD, No. 9 Sanlihe Road, Haidian District, Beijing 100044
Tel: 010-57811456

美国办公室 USA Office

地 址：美国纽约市曼哈顿滨水广场 20-E 室
Address: 10 Waterside Plaza, Apt 20-E New York, 10010
E-mail: gfhhs@gfhhsforum.org

网 址 <http://www.gfhhsforum.org>

国际刊号 Issues No. ISSN 2072-392X

中国国际图书贸易集团有限公司深圳分公司

期刊刊号 Journal No.G290Y0100

社 长 President 维克多·费什特 Victor Fersht

执行社长兼总编辑 Executive President & Chief Editor
吕海峰 Lu Haifeng

特邀撰稿人 Guest Writers

薛杰 科斯汀·米勒 戴维·B·萨顿 贝一明 赛能·安东尼奥
崔元星 王天送
Serge Salat, Kirstin Miler, David B. Sutton, Emanuel Yi Prestreich, Senen Antonio
Cui Yuanxing, Wang Tiansong

编辑部主任 Editorial Director

陈 新 Chen Xin

责任编辑 Executive Editors

赫雪 Sabrina He 何 莲 Christine He

采 编 Reporters & Editors

王 平 王伟迪 莫翹义 秋 石 田 野
Wang Ping, Eva Wang, Mo Kuiyi, Stone, Tian Ye

美术编辑 Art Editor 继 辉 Jihui

发 行 Distribution 安 娜 Anna

法律顾问 Legal Advisor

北京中银律师事务所 谢兰军 朱耀龙 Xie Lanjun, Zhu Yaolong

声明：本刊选用了部分媒体作者的图片与文字资料，请未及通知到的作者与本刊联系，以便支付稿酬。
版权所有，未经许可不得转载。

WORLD BEST PRACTICES 全球最佳范例

ASIA-PACIFIC EDITION 亚太版

顾 问：（排名不分先后）

安瓦尔·乔杜里 联合国前副秘书长暨高级代表、全球人居环境论坛主席

杨 慎 建设部原副部长、全国工商联房地产商会名誉会长

王扬祖 国家环保局原副局长、研究员

戴维·安德森 联合国环境规划署管理委员会前主席、加拿大前环境部部长

理查德·瑞吉斯特 国际生态城市建设者协会主席

郝圣锟 中国社会工作协会副主任，原建设部体改法规司副司长、办公厅副主任

徐宗威 亚洲建筑学会副主席、中国建筑学会副理事长

原住房与城乡建设部法规司副司长、巡视员

维克多·考斯科夫 联合国教科文组织俄罗斯联邦委员会远东区执行主任

联合国教科文组织“海洋生态学”教席副主席

王田良 深圳市新闻人才基金会理事长、原深圳报业集团总编辑兼深圳特区报
总编辑

编 委：（排名不分先后）

朱铁臻 中国城市发展研究会副理事长、中国社会科学院研究员

王德辉 中国环境保护部国家环境评估中心顾问、原国家环境保护总局

自然生态保护司副司长（正司级）兼中国履行生物多样性公约办公室主任

泰吉·哈马德 全球人居环境论坛副主席、世界非政府组织联合会秘书长

拉尔夫·万查福特 可持续发展问题与政策高级顾问

科斯汀·米勒 国际生态城市建设者协会执行主任

维克多·费什特 联合国人居署最佳范例杂志执行秘书

张克科 深港产学研基地副主任、深港发展研究院执行院长

深港科技合作促进会会长

吕海峰 全球人居环境论坛秘书长、深圳美好城市研究院院长

陈可石 北京大学教授、博士生导师、北京大学中国城市设计研究中心主任

旷建伟 中国城市发展研究会秘书长

张柏龄 深圳市循环经济协会创会会长

侯百镇 《规划师》杂志社社长、教授级高级规划师

周国忠 联合国人类住区规划署《全球最佳范例》杂志亚太区办事处总干事

杨晓鸿 城乡小康发展促进中心小康惠民工作委员会副主任

全球人居环境论坛副秘书长

林姚宇 城乡规划学博士、哈尔滨工业大学深圳研究生院城市规划与管理

学院副教授、深圳美好城市研究院副院长

王少峰 全球人居环境论坛教科文委员会顾问、香港孔教学院名誉院长

范志刚 环境景观策划及规划设计专家、国际企业四级教练

Editorial Board 杂志编委会

Advisors （Names Listed in No Particular Order）

○ Ambassador Anwarul K. Chowdhury Former Under-Secretary-General and High Representative of the United Nations, Chairman of Global Forum on Human Settlements

○ Yang Shen Former Vice-Minister of Ministry of Construction, Honorable President of China Real Estate Chamber of Commerce (CRECC)

○ Wang Yangzu Former Deputy Director of State Environmental Protection Administration; Researcher

○ David Anderson Former President of UNEP Governing Council, Former Minister of Environment Canada, Senator

○ Richard Register President of Eco-City Builders

○ Hao Shengkun Deputy Director, China Association of Social Workers; former Deputy Director, Department of Restructuring and Regulations and the General Office, Ministry of Construction, People's Republic of China

○ Xu Zongwei Vice Chairman of Asia Architectural Society, Vice President, Architectural Society of China, former Inspector and Deputy Director, Dept. of Policies and Laws, MOHURD

○ Victor Korskov Executive Director of UNESCO Russian Federation Commission, Far East Branch and Deputy Chairman of UNESCO Chair "Marine Ecology"

○ Wang Tianliang President of Shenzhen Media Talents Foundation, former Chief Editor of Shenzhen Newspaper Group and Shenzhen Special Zone Daily

Editorial Board （Names Listed in No Particular Order）

○ Zhu Tiezhen Deputy President of China Research Society Of Urban Development; Researcher of Institute of Economics, Chinese Academy of Social Sciences

○ Wang Dehui Consultant to China Environmental Assessment Center, Ministry of Environmental Protection of the PRC, Former Deputy Director-General of the Nature and Ecology Conservation Department, Concurrently Director of China Implementing CBD Office, SEPA

○ Taj Hamad Vice Chairman of Global Forum on Human Settlements, Secretary General of the World Association of Non-Governmental Organizations (WANGO)

○ Ralph Wahnschafft Independent Consultant on Sustainable Development Policies

○ Kirstin Miller Executive Director of Eco-City Builders

○ Victor Fersht Executive Secretary of Best Practices Magazine Promotion Centre

○ Zhang Keke Deputy Director of PKU-HKUST Shenzhen-HongKong Institution, Executive Dean of Shenzhen-HongKong Research Institution, President of the Council for the Shenzhen-HongKong Technology Cooperation

○ Lu Haifeng Secretary General, Global Forum on Human Settlements and President of Shenzhen Better City Institute

○ Chen Keshi Professor, Doctorial Tutor of Peking University; Director of Chinese Urban Design Research Centre of Peking University

○ Kuang Jianwei Secretary General of China Research Society of Urban Development (CRSUD)

○ Zhang Bailin Chair of Shenzhen Association of Circular Economy

○ Hou Baizhen Professorial and Senior Urban Planner, Proprietor of Urban Planner Magazine

○ Zhou Guozhong Director-General of UN HABITAT World Best Practices Magazine Asia-Pacific Office

○ Yang Xiaohong Assistant Director, Housing Project Working Committee, Urban and Rural Well-off Development Promotion Center, Deputy Secretary General, Global Forum on Human Settlements

○ Lin Yaoyu Doctor for Urban and Rural Planning, Associate Professor of Urban Planning and Management Department, Shenzhen Graduate School, Harbin Institute of Technology, Vice President of Shenzhen Better City Institute

○ Wang Shaofeng Consultant, Educational, Scientific and Cultural Committee, Global Forum on Human Settlements (GFHS), Honorary President, The Hong Kong Institute of Confucianism

○ Fan Zhigang Landscape Planning Export, Senior Corporate Training Instructor

Frontier · Focus

前沿 · 关注

《2019 年可持续发展报告》新鲜出炉



2019 年 7 月 9 日，联合国可持续发展高级别政治论坛在联合国纽约总部举行。论坛开幕式上，《2019 年可持续发展报告》新鲜出炉，该报告审视全球状况，考察《2030 年可持续发展议程》通过四年来，联合国 193 个成员国在实现 17 项目标方面的进展，进而衡量与目标间差距。

《2019 年可持续发展报告》指出，在减少极端贫困、免疫普及、降低儿童死亡率和增加人民获得电力的机会等领域取得进展。但报告也同时警告，全球行动还缺乏雄心，最弱势的人口和国家仍遭受着痛苦。

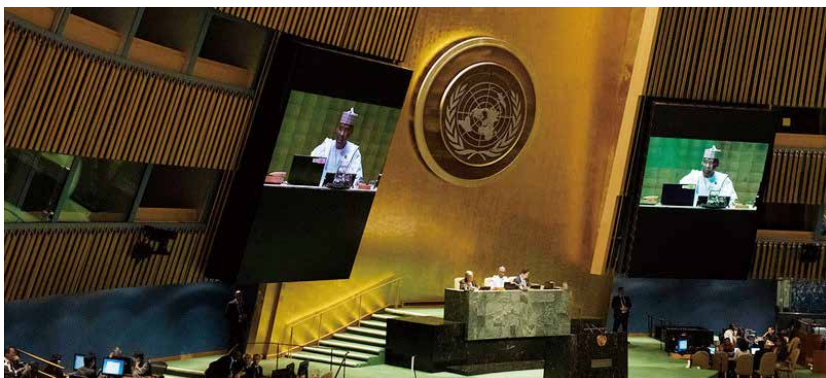
报告发出警告，气候变化的影响以及国家内部和国家之间日益加剧的不平等正在破坏可持续发展议程的进展，有可能扭转过去几十年使人民生活改善的许多成果。

联合国大会第 74 届会议开幕 多边主义方能提供全球挑战的真正解决方案

9 月 17 日，联合国大会第 74 届会议在联合国纽约总部隆重开幕。在联大开幕阶段，联合国将举行五次重要峰会，分别关注气候行动、可持续发展目标、发展筹资、全民医疗保健和小岛屿发展中国家。

班迪发表了主席致辞。他表示，本届联大的愿景宣言关注的是消除贫困、零饥饿、高质量的教育、气候行动和包容。班迪说：“尤其是在我们准备庆祝联合国成立 75 周年之际，我们必须要以符合联合国创立者愿景的方式，推动相互信任，加深伙伴关系，只有这样才能够应对各种挑战，为所有人造福。”

秘书长古特雷斯在致辞中说：“由于我们正进入可持续发展目标行动十年，由于我们要求在气候变化方面有更多的紧迫性和雄心，2020 年将是关键的一年，我们必须让人们相信联合国与每一个人息息相关，多边主义能够提供全球挑战的真正解决方案。”古特雷斯说：“我们还需要与其他国际和区域组织建立新的合作形式，即网络化的多边主义，同时与企业、民间社会和其他利益攸关方更密切地联系，即包容性的多边主义。网络化和包容性的多边主义将帮助我们克服当前时代的挑战。”



欧洲经委会：《哥德堡议定书》修正案生效是清洁空气和气候行动的里程碑

10 月 7 日，联合国欧洲经济委员会成员间的《空气公约哥德堡议定书》修正案将正式生效，该议定书将帮助区域国家减少空气中的悬浮颗粒物等污染物质。

根据世界卫生组织的数据，空气污染每年造成 700 万人死亡，是全球最大的单一环境健康风险，也是癌症致死的主要原因。空气污染也与气候变化密切相关，是造成环境退化的主要原因，威胁着欧洲近三分之二的生态系统。这使得空气污染成为了可持续发展的关键障碍。

经修订的议定书是根据欧洲经委会《远程跨界空气污染公约》（《空气公约》）进行谈判而制定的。该公约生效已近 40 年，它确立了对 2020 年及以后的主要空气污染物具有法律约束力的减排承诺，包括二氧化硫（SO₂）、氮氧化物（NO_x）、氨（NH₃）、挥发性有机化合物（VOC）和细颗粒物（PM_{2.5}）。

《哥德堡议定书》修正案已经开始在许多国家支持清洁空气行动。欧盟成员国根据修正案修订了在《2016 年国家排放上限指令》中做出的 2020 年和 2030 年减排承诺。



世界人居日：发挥前沿技术 变废为宝，加强可持续废物管理

10 月 7 日世界人居日，联合国呼吁利用前沿技术实现可持续废物管理，同时减轻其可能对经济、社会和政治造成的不利后果。技术在改善人们的工作和生活方式、显著加快实现可持续发展目标和应对气候变化的努力方面具有巨大潜力。自动化、机器人技术、电动汽车、可再生能源技术、生物技术和人工智能等前沿技术在社会、经济和环境领域促进改变的同时，可以为废物管理等日常问题提供更好、更便宜、更快、可扩展和易于使用的解决方案。

去年世界人居日的主题主要侧重于垃圾管理——“城市固体废物管理”。在此基础上，今年世界人居日的重点是促进创新性前沿技术对可持续管理更广泛废物的贡献，以实现可持续发展目标 11：建设包容、安全、有抵御灾害能力和可持续的城市。今年的主题涵盖人类活动产生的对气候变化、公共卫生和环境有巨大影响的固体、液体、家庭、工业和商业废物等所有废物。



世界市长峰会：联合国秘书长强调 “城市是气候战役成败的关键”

2019 年 10 月 11 日，联合国秘书长古特雷斯在丹麦首都哥本哈根举行的世界市长峰会上发表讲话指出，城市拥有世界一半以上的人口，它处于可持续发展的前沿，今天人们看到商业、城市和社会比政府前进的步伐要快，继续向政府施加尽可能多的压力、以确保他们始终接受 2050 年碳中和的目标至关重要。



古特雷斯表示，环境退化推动了人们向城市地区迁移，人们寄希望于城市成为多样性、社会凝聚力和创造就业的避风港。城市有着巨大的气候足迹，消耗了世界三分之二以上的能源，占全球二氧化碳排放量的 70% 以上。未来几十年城市基础设施的选择——建筑、住房、能效、发电和交通——将对排放曲线产生巨大影响。

他说，现在有 80 多个城市致力于“2020 年最后期限计划”，以实现《巴黎协定》目标。此外，在“40 城市全球健康饮食倡议”的背景下，市长们将与其他层面的政府和企业合作，利用他们的采购和其他权能来帮助人们消费更健康、更环保的食物，这对于气候变化也至关重要。WBP

Frontier · Data

前沿 · 数据

海平面上升和灾难性的风暴潮可能会导致 2.8 亿人流离失所



根据最新联合国政府间气候变化专门委员会 (IPCC) 的研究报告显示, 除非采取更多的温室气体排放限制措施, 否则灾难性的超级风暴所带来的破坏再加上海平面上升, 将使得全世界海岸线的数亿人口流离失所。

该报告模拟未来地球的严峻形势, 即海洋变暖后将在全球产生灾害效应, 包括鱼类资源减少、海水融化冰和冰川, 以及人类流离失所的增加。除非大量性地削减人为温室气体排放, 否则至少有 30% 的北半球地表永冻土层可能在 80 年内融化, 这种融化现象将释放出目前多年永冻土地区所储存的数十亿吨碳, 进一步加速全球变暖的速度, 结果将是海水变暖和海岸线上升, 并可能会立即威胁到 2.8 亿的人口。

埃塞俄比亚一天内种下 3.5 亿多株树苗 创下世界新纪录

2019 年 8 月 2 日, 非洲国家埃塞俄比亚启动大规模植树活动, 以应对森林砍伐和气候变化所造成的影响。据该国政府统计, 在 12 小时的时间内, 全国 1000 多处不同地点共种下了超过 3.5 亿株树苗, 打破了 2016 年由印度创造的一天 5000 万棵树木的吉尼斯世界纪录。

植树活动由埃塞俄比亚总理阿比牵头, 全国许多政府机构和学校均放假一天, 以便公务员和学生参加植树活动。

联合国粮农组织和环境署的统计数据显示, 在 20 世纪初期, 埃塞俄比亚约有 35% 的国土被森林所覆盖, 但到 2000 年, 森林覆盖率已大幅下降至 4% 左右。在 1990 到 2015 年间, 该国失去了大约 260 万公顷的森林。

其中, 人口迅速增长导致对农田和木材的需求增加是森林遭到砍伐的主要原因之一: 目前埃塞俄比亚的人口数量已经超过 1 亿, 与 1960 年相比增加了近五倍。

联合国环境署表示, 树木对于生态系统和地球环境至关重要, 森林能够吸收导致全球变暖的二氧化碳, 《科学》杂志近期出版的一份研究报告显示, 全球范围的植树造林工程能够将因人为活动所造成的二氧化碳排放减少近三分之二。



未来 10 年全球碳排放量每年须下降 7.6% 才能实现 1.5°C 温控目标

环境署的年度《排放差距报告》指出, 即使当前《巴黎协定》中的所有无条件承诺都得以兑现, 全球气温仍有可能上升 3.2°C, 从而带来更广泛、更具破坏性的气候影响。全球的整体减排力度须在现有水平上至少提升 5 倍, 才能在未来 10 年中达成 1.5°C 目标所要求的碳减排量。



报告发现, 在过去 10 年中, 温室气体排放量每年增长 1.5%。如果将森林砍伐等因土地用途改变而增加的碳排放量包含在内, 2018 年总排放量达到了 553 亿吨二氧化碳当量的历史新高。

若将升温幅度限制在 2°C 内, 2030 年的年排放量必须在各国提交的无条件的国家自主贡献减排方案的基础上, 再减少 150 亿吨二氧化碳当量; 若要实现 1.5°C 的目标, 则须减少 320 亿吨二氧化碳当量。具体到年减排幅度, 这意味着从 2020 年到 2030 年, 若要实现 1.5°C 目标每年须减少 7.6% 的排放量, 实现 2°C 目标则对应着每年 2.7% 的减排量。

为实现 1.5°C 目标, 各国的国家自主贡献目标须提升至少 5 倍, 为实现 2°C 目标, 各国目标须提升 3 倍。

沙漠化造成全球每年高达 15 兆美元的经济损失

联合国环境规划署的官员日前指出, 每年发生的森林大火、干旱与其他形式的土地退化, 将造成全球高达 15 兆美元的年度经济损失, 同时加剧气候变迁的危机。联合国防治荒漠化公约 (UN Convention to Combat Desertification, UNCCD) 的执行秘书 Ibrahim Thiaw 表示, 土地退化使得全球经济衰退 10% 至 17%, 按世界银行 (World Bank) 的估计损失每年可达 85.8 兆美元。换言之, 各国政府若投资在土地复育工作, 将可做为改善国民生计、减少因气候变迁造成的脆弱性, 以及降低经济风险的一种方式。

干旱与沙漠化每年侵袭约 70 个国家, 而沙尘暴正在成为全球越来越严重的威胁, 因其导致人民哮喘、支气管炎与其他健康问题。目前可确定的是利用技术、科学与知识等方法可确实改善土地退化, 并彻底解决该现象。全球干旱正在恶化, 预期在 2025 年之前, 约有 18 亿人口将面临严重的水资源匮乏, 而全球有 2/3 的人口将生活于缺水的环境之中。



超 20 亿人口！世界最大自贸区呼之欲出

11月4日，第三次区域全面经济伙伴关系协定（RCEP）领导人会议在泰国曼谷举行。与会领导人在会后发表联合声明宣布，RCEP15个成员国结束全部文本谈判及实质上所有市场准入谈判，明年正式签署协议，这是区域经济一体化取得重大突破性进展，一个世界上人口最多、成员最多元、发展潜力最大的自贸区呼之欲出。东亚国家正朝着构建东亚共同体的目标不断迈进。

国务院总理李克强出席会议，他在发言中表示，RCEP谈判历时7年，15个成员国整体上结束谈判，有利于地区国家在面临经济下行压力背景下，加快区域经济一体化进程，也有利于在保护主义抬头的背景下，提振各国携手抵御风险挑战的预期。



深圳重磅官宣：发起 30 平方公里召集令！

深圳‘30平方公里产业用地计划布局图



备注：深汕合作区范围内可供的5平方公里产业用地主要分布在前湾片区、前湾片区及小漠片区，产业发展方向以智能制造、新一代信息技术、海洋经济为主。

高质量发展等；深圳将重点布局重大创新载体、新兴产业集群、产业链重点领域关键环节三个方面。WBP

11月5日上午，深圳30平方公里产业用地全球推介计划新闻发布会在市政府新闻发布厅举行。深圳市委常委、市政府常务副市长刘庆生指出，深圳过去40年，是改革开放的试验田，先行区。展望未来，到2035年，深圳更重要的是面向全球的价值，以先行示范区的姿态成为全球标杆城市。从深圳经济结构看，第二产业和第三产业，总体比例是4:6。工业在经济发展中的地位不言而喻。

深圳批量推出产业用地，面向全球招商。总供应35块地，面积超过30平方公里，其中深汕特别合作区约5平方公里；深圳面向未来发展方向，促进新兴产业集成化发展。如鼓励5G产业

SPECIAL REPORT

专题报道

第十四届全球人居环境论坛年会（简称GFHS 2019）于9月5日—6日在位于埃塞俄比亚首都亚的斯亚贝巴的联合国会议中心成功举办。来自50多个国家的500多位主要利益相关者汇聚一堂，分享创新的解决方案，建立可持续的伙伴关系。会议通过了成果文件《亚的斯亚贝巴宣言》，也为2020年2月将在阿布扎比举行的世界城市论坛的筹备做出了贡献。本刊特此刊登了会议精彩盛况，以飨读者。

As one of the most important global congresses on urban agenda, sustainable cities and human settlements, as well as an observance of Urban October, GFHS 2019 was successfully held on 5-6 September at UN Conference Center in Addis Ababa, Ethiopia. Approximately 500 major stakeholders from more than 50 countries joined many ministers, mayors, well-known experts, business and social leaders in working out innovative solutions and fostering partnerships. The outcome document – Addis Ababa Declaration was adopted at the closing session, thus providing inputs to the World Urban Campaign activities and World Urban Forum 2020 in Abu Dhabi in February 2020. Here we share the highlights of the Forum with our readers.



▲ 开幕式全体参会代表合影 Group photo of all participants at the opening session

Harnessing the Power of Digital Revolution for Urban Sustainability and Prosperity

— 14th Global Forum on Human Settlements Productively Convened at UN Conference Center in Addis Ababa

利用数字技术促进城市繁荣与可持续发展 ——第十四届全球人居环境论坛在亚的斯亚贝巴成功举办

第十四届全球人居环境论坛年会（简称 GFHS 2019）于 9 月 5 日—6 日在位于埃塞俄比亚首都亚的斯亚贝巴的联合国会议中心成功举办。埃塞俄比亚水务、灌溉与能源部部长西莱希·贝克莱、肯尼亚前总理、非盟基础设施发展高级代表拉伊拉·欧丁嘉、联合国非洲经济委员会负责人奥利弗·钦甘亚等出席大会并讲话。会议通过了成果文件《亚的斯亚贝巴宣言》，也为 2020 年 2 月将在阿布扎比举行的世界城市论坛的筹备做出了贡献。

As one of the most important global congresses on urban agenda, sustainable cities and human settlements, as well as an observance of Urban October, GFHS 2019 was successfully held on 5-6 September at UN Conference Center in Addis Ababa, Ethiopia. Dr. Eng. Seleshi Bekele, Minister of Water, Irrigation and Energy of Ethiopia, H.E. Raila Odinga, former Prime Minister of Kenya, High Representative for Infrastructure Development at the African Union Commission, and Mr.



▲ 西莱希·贝克莱
Dr. Seleshi Bekele



▲ 拉伊拉·欧丁嘉
H.E. Raila Odinga



▲ 奥利弗·钦甘亚
Oliver Chinganya



▲ 吕海峰
Lu Haifeng

GFHS 2019 以“数字时代城市与人居环境的可持续发展”为主题，旨在为全球的利益相关者提供一个高级别的对话与合作平台，把握数字革命为可持续城市与人居环境带来的新机遇，发展绿色智慧城市；促进非洲地区充分利用后发优势发展数字经济，推动可持续的城镇化进程；促进“一带一路”倡议背景下的多边务实合作。

埃塞俄比亚水务、灌溉与能源部部长西莱希·贝克莱在欢迎词中提到“在埃塞俄比亚，使用现代和数字技术为提高效率提供了巨大的机会。我们正在努力提高创新技术的使用率，以改变城市和整个国家的生活质量。”

肯尼亚前总理、非盟基础设施发展高级代表拉伊拉·欧丁嘉在特别致辞中指出，“这次论坛在非洲举办非常重要。非洲正面临着巨大的发展机遇，我们需要大力发展基础设施，包括交通、能源、住房、数字设施，同时要将资源变成产品出口。非洲是一只沉睡的雄狮，现在是时候唤醒这只雄狮了。”

联合国非洲经济委员会负责人奥利弗·钦甘亚代表主办方在开幕式中强调，“非洲有九亿人住在非正式住区，60-70% 的城市居民住在贫民窟。在讨论智慧城市和数字公民时，同样重要的是要记住，也许只有三分之一的非洲人在使用互联网，一半的人拥有手机。在速度、容量和可靠性方面，数字基础设施远非世界上最好的。预测表明非洲每年需要大约 50 亿美元的 ICT 基础设施投资。”

全球人居环境论坛秘书长吕海峰在开幕致词中说，“碳基”的绿色和“硅基”的智慧是当今城市发展的两大趋势。整合这两大趋势也将有助于经济的可持续与绿色发展。全球人居环境论坛将积极促进非洲和其他地区全方位的经济文化交流合作，包括一带一路倡议，推动非洲可持续发展。

Oliver Chinganya, Director, African Center for Statistics and Officer-in-Charge of the United Nations Economic Commission for Africa (UNECA) attended and addressed the forum. The outcome document – Addis Ababa Declaration was adopted at the closing session, thus providing inputs to the World Urban Campaign activities and World Urban Forum 2020 in Abu Dhabi in February 2020.

Themed as “Sustainable Development of Cities and Human Settlements in the Digital Era”, GFHS 2019 was designed to provide a valuable platform for high-level dialogue among participating stakeholders from around the world and to look for leapfrogging opportunities that digital revolution is bringing for making cities greener, smarter and more sustainable. It also commits to support Africa in developing digital economy, to drive progress towards sustainable urbanization, and to enhance pragmatic cooperation in the context of the “Belt and Road Initiative”.

Dr. Eng. Seleshi Bekele stated that “Ethiopian’s effort to use modern and digital technologies offers tremendous opportunities to improve efficiency. We are trying to upscale the use of innovative technology to transform the quality of life in cities and in the nation at large.”

H.E. Raila Odinga pointed out in his special remarks that “this forum is very important. Africa is facing tremendous opportunities for development. We need to strive for infrastructure development, including transportation, energy, housing, digital facilities, and turn resources into product exports. Africa is a sleeping lion, and it is time to wake up this lion.”

GFHS 2019 由全球人居环境论坛 (GFHS)、联合国非洲经济委员会 (UNECA)、国际电信联盟 (ITU)、世界城市运动 (WUC) 联袂主办, 世界和平联盟 (UPF)、世界一带一路组织 (GOBA)、世界区块链联盟 (GBA)、世界非政府组织联合会 (WANGO)、一带一路非洲研究联盟、丝路可持续发展研究院等国际组织、埃塞俄比亚相关部门与中国城市发展研究会协办支持。

埃塞俄比亚住房与城市发展国务部长梅斯分·阿塞法, 乌干达地方政府国务部长詹妮弗·卡茶·娜姆颜古, 国际电信联盟非洲区域主任安德鲁·鲁加吉, 世界气象组织非洲区域办公室主任阿莫斯·马卡鲁博士, 联合国人居署世界城市运动项目负责人罗伊·希迪, 联合国区域发展中心环境部门协调员乔杜里·鲁德拉·查兰·莫汉迪, 全球人居环境论坛副主席泰吉·哈马德博士, 世界一带一路组织主席王鸿宾教授, 联合国环境署国际资源小组成员、国际绿色范例新城标准 3.0 首席专家薛杰, 西班牙巴塞罗那市前首席建筑师、加泰罗尼亚高级建筑研究所 (IAAC) 联合创始人比森特·瓜里亚尔特, 联合国环境署国际资源小组专家, 荷兰乌得勒支大学未来城市工作室马藤·哈杰尔教授, 以色列智慧城市技术与战略发展有限公司执行总裁、建筑师拉非·里奇以及众多部长、市长、知名专家、商界领袖等来自 50 多个国家的 500 多位主要利益相关者汇聚一堂, 分享创新的解决方案, 建立可持续的伙伴关系。10 位来自城市、企业和民间社会的代表为可持续发展目标 (SDGs) 在地方层面的实施作出庄严承诺。

GFHS 2019 非常及时、精准地探讨了关键议题: 智慧与可持续的城市和社区, 非洲数字技术、创新与可持续性, 可

Mr. Oliver Chinganya emphasized that "in Africa, 900 million people live in informal settlements, and 60-70% of urban residents reside in slums. When discussing smart cities and digital citizenry, it is equally important to remember that perhaps only a third of Africans are on the internet and half own a mobile phone. The digital infrastructure is far from the world's best in terms of speed, volume and reliability. Early estimates suggested that Africa needs about \$5 billion a year for ICT infrastructure."

GFHS Secretary General Mr. Lu Haifeng shared that "carbon-based green city" and "silicon-based smart city" are the two major urban development trends. Combining the two will help sustain and green the economy while making cities and communities smart and sustainable. The Global Forum on Human Settlements will actively promote a full range of economic and cultural exchanges and cooperation in Africa and other regions, promoting sustainable development particularly in Africa in the context of the "Belt and Road Initiative".

The forum was co-organized by Global Forum on Human Settlements (GFHS), United Nations Economic Commission for Africa (UNECA), International Telecommunication Union (ITU), the World Urban Campaign (WUC), in cooperation with Universal Peace Federation (UPF), Global One Belt One Road Association (GOBA), Global Blockchain Alliance (GBA), World Association of Non-Governmental Organizations (WANGO), Belt and Road African Studies Alliance, Silk Sustainable Development Institution and concerned Ethiopian government agency.



▲ 2019 IGMC 倡议授牌仪式, Commemorative plaques are awarded to the new partners of International Green Model City Initiative

持续的城市基础设施投融资, 绿色智慧建筑、可再生能源与城市弹性, 国际绿色范例新城倡议, 世界城市运动, 区块链技术与智慧城市管理, 家庭价值观与幸福城市等。这些深入的交流讨论有助于把握数字时代机遇, 支持智慧城市发展和数字技术运用以建设包容、安全、有复原力与可持续的城市与人居环境。

2019 可持续城市与人居环境奖颁奖盛典 (SCAHS•飒飒奖) 于 9 月 6 日晚揭幕, 再次成为本届年会的一大亮点。当晚共有来自全球的 26 个单位和个人荣膺桂冠, 包括西班牙维多利亚市、武汉长江新城起步区城市设计、肯尼亚马赛马拉保护区、亚的斯亚贝巴霍马博物馆、美国圣路易斯市绿道规划设计、隆基绿能科技股份有限公司创始人兼总裁李振国、国际知名建筑师米克·皮尔斯、南非约翰内斯堡社会住房项目、中国贵阳·融创城、重庆潼南人民生态公园景观设计、常德中建·生态智慧城等 (完整获奖名单可在全球人居环境论坛官方网站 www.gfhsforum.org 查询)。

此外, 国际绿色范例新城倡议 (IGMC) 全球网络又添新伙伴, 南非约翰内斯堡市、加纳阿克拉市、碧桂园马来西亚森林城市、武汉长江新城管委会、西班牙托罗埃利亚-德蒙特格里、红星美凯龙控股集团有限公司、贵阳经开区贵阳·融创城等单位获颁 IGMC 倡议伙伴牌匾。

Approximately 500 major stakeholders from more than 50 countries joined many ministers, mayors, well-known experts, business and social leaders in working out innovative solutions and fostering partnerships. Some of the distinguished guests include Mr. Mesfin Assefa, State Minister, Ministry of Urban Development and Housing, Ethiopia; Ms. Jenipher Kacha Namuyangu, Minister of State for Local Government, Uganda; Mr. Andrew Rugege, Regional Director for Africa, ITU; Dr. Amos Makarau, Director, Regional Office for Africa, World Meteorological Organization; Mr. Roi Chiti, Project Leader, World Urban Campaign; Mr. Choudhury Mohanty, Coordinator of Environment Programme, UNCRD/UN DESA; Dr. Taj Hamad, Vice Chairman of Global Forum on Human Settlements; Prof. Oudom Wang, Chairman of Global One Belt One Road Association; Mr. Serge Salat, Member of International Resource Panel, Leading Expert of International Green Model City Standards 3.0; Mr. Vicente Guallart, Founder, Institute for Advanced Architecture of Catalonia; Former Chief Architect of Barcelona City Council; Prof. Maarten Hajer, Expert on International Resource Panel, UNEP, Professor of Urban Futures, University of Utrecht, among others. Ten delegates representing cities, businesses, academia and civil society announced commitments to support the implementation of the 17 Sustainable



▲ 2019 可持续城市与人居环境奖获奖单位与颁奖嘉宾合影

Awarders and awardees at Sustainable Cities And Human Settlements Awards Ceremony 2019

《亚的斯亚贝巴宣言》呼吁：数字技术应用与数字经济的发展应坚持以人为本，安全第一。城市总体规划应考虑绿色城市与智慧城市的融合，倡导紧凑型与多中心的城市形态，建设混合功能社区，强调便利宜居、环境清洁、资源循环、智慧高效、多产繁荣。智慧城市发展的基础是整合数据、互通共享、深度开发。采用适用的、负担得起的数字技术为城市规划、建设和管理服务，确保人人共享数字技术带来的益处。教育先行，加强人的能力建设，培育创新精神，推动数字经济。社区与建筑的设计建设应充分适应数字时代的特点：创新、便捷、高效、绿色、包容。

Development Goals, which will scale up the local efforts towards achieving the SDGs.

GFHS 2019 happened very timely in addressing the key issues including: smart sustainable cities and communities; digital technology, innovation, and sustainability in Africa; the World Urban Campaign: connecting global sustainability agendas and private sector local actions; smart green building, renewable energy and urban resilience; International Green Model City Initiative: greener, smarter future cities; financing for sustainable urban infrastructure; blockchain technology and smart city governance; family values and happiness in cities, among others. These in-depth discussions help to capture opportunities in the digital age, support smart city development and the use of digital technologies to make cities and human settlements inclusive, safe, resilient and sustainable.

The 2019 Sustainable Cities and Human Settlements Awards Ceremony (SCAHS) once again became a highlight of the event. 26 organizations and individuals from around the world were commended, such as City of Vitoria-Gasteiz, Spain; Wuhan Changjiang New Town Starting Area Urban Design; Mara Naboisho Conservancy, Masai Mara; Zoma Museum,

Addis Ababa, Ethiopia; Greenway planning and design: Growing an Urban Mosaic in Saint Louis; Li Zhenguo, Founder and CEO of LONGi Green Energy Technology; well-known architect Mick Pearce; Social housing project from Johannesburg; Guiyang•Sunac City. The complete list of award winners can be accessed by clicking the link: <http://www.gfhsforum.org/award>.

In the meantime, the International Green Model City Initiative welcomed new partners through presenting commemorative plaque to Wuhan Changjiang New Town Administration Committee, China; City of Quezon, the Philippines; City of Johannesburg, South Africa; City of Accra, Ghana; Forest City, Malaysia; Red Star Macalline Holding Group, China, and others.

The forum finally adopted the outcome document – Addis Ababa Declaration which emphasizes: the development of digital technology should adopt a people-oriented approach and put safety as the top priority; the urban master plan should integrate green city and smart city development, advocating compact and polycentric urban form, promoting a mixed-use and more livable community, ensuring environmental efficiency by encouraging the reuse and recycle of different resources, as well as improving productivity and prosperity; the foundation of a smart city is to integrate data, enable sharing of information, strengthen connectivity and realize in-depth development of digital resources; using applicable and affordable digital technologies in urban planning, construction and management is vital in ensuring that the benefits of these technologies are shared by all; it is essential to invest in expanding the people's digital capacity through education, cultivating the spirit of innovation, and promoting the development of green economy; and the design and construction of communities and buildings should be fully adapted to the characteristics of the digital age, that is "innovative, convenient, efficient, green and inclusive".

GFHS 2019 开幕式演讲

Remarks at the Opening Ceremony of GFHS 2019



▲ 从左至右：泰吉·哈马德博士、王鸿宾教授、西莱希·贝克莱阁下、安德鲁·鲁加吉、奥利弗·钦甘亚、吕海峰、罗伊·希迪
From left to right: Dr. Taj Hamad, Prof. Oudom Wang, H.E. Dr. Eng. Seleshi Bekele, Andrew Rugege, Oliver Chinganya, Lu Haifeng, Roi Chiti

全体会议 1 Plenary Session 1

数字化革命为可持续城市与人居环境带来的机遇和挑战

Digital Revolution Challenges and Opportunities for Sustainable Cities and Human Settlements - Inspirational Developments



▲ 从左至右：詹妮弗·卡茶·娜姆颜古阁下、安德鲁·鲁加吉、阿拉布·霍巴拉、比森特·瓜里亚尔特、薛杰、尚耀华
From left to right: H.E. Jenipher Kacha Namuyangu, Andrew Rugege, Arab Hoballah, Vicente Guallart, Serge Salat, Shang Yaohua

全体会议 2 Plenary Session 2

安全、包容、有弹性和可持续的城市——政策、技术和实践

Safe, Inclusive, Resilient and Sustainable City – Policies, Technologies and Practices



▲ 从左至右：梅沙克·范维克、马藤·哈杰尔教授、阿莫斯·马卡鲁博士、乔杜里·鲁德拉·查兰·莫汉迪、帕姆·奥康纳、阿杰伊·塔瓦、沈涛

From left to right: Meshack Van Wyk, Prof. Maarten Hajer, Dr. Amos Makarau, Choudhury Rudra Charan Mohanty, Pam O'Connor, Adjei Tawiah, Shen Tao

平行会议 3a Parallel Session 3a

非洲地区的数字技术、创新与可持续发展

Digital Technology, Innovation, and Sustainability in Africa



▲ 从左至右：达维特·贝克尔、伊斯兰·哈姆扎·阿布·埃尔麦格·埃尔托尼迪教授、奇武萨·基布瓦纳教授、奥利弗·钦甘亚、冯盖·曼迪维伊、德斯塔·麦布拉图教授

From left to right: Dawit Bekele, Prof. Islam Hamza Abou El-Magd El Genidi, Prof. Kivutha Kibwana, Oliver Chinganya, Fungai Mandiveyi, Professor Desta Mebratu

平行会议 4a Parallel Session 4a

世界城市运动：连接全球可持续发展议程与私营部门地方行动

The World Urban Campaign: Connecting Global Sustainability Agendas and Private Sector Local Actions



▲ 从左至右：格蕾斯·薇舒薇妮阁下、穆鲁肯·阿耶忽、安德莱姆·特纳·哈布提、罗伊·希迪、安妮·凯拉巴、阿德尼·欧鲁瓦萨米·阿德坎耶、彭惠鑫、李成莉

From left to right: H.E. Grace Kwiwucwiny, Muluken Ayehu, Andualem Tenaw Habtie, Roi Chiti, Annie Kairaba, Adeniyi Oluwasanmi Adekanye, Peng Huixin, Li Chengli

平行会议 4b Parallel Session 4b

绿色智慧建筑、可再生能源与城市弹性

Smart Green Building, Renewable Energy, and Urban Resilience



▲ 从左至右：屈浚、米克·皮尔斯、艾帕里博·班尼戈、阿拉布·霍巴拉、霍尔迪·科洛米、克雷格·柏金斯、甄光明

From left to right: Qu Yang, Mick Pearce, H.E. Dr. Mrs. Ipalibo Banigo, Arab Hoballah, Jordi Colomi, Craig Perkins, K. Jim Jem

平行会议 5a Parallel Session 5a

国际绿色范例新城倡议——更加绿色、智慧的未来城市

International Green Model City Initiative: Greener, Smarter Future Cities



▲ 从左至右：亚历山大·杰斯诺、何莲、王继赢博士、李强、拉尔夫·万查福特、戈尔卡·犹塔然·阿吉、穆蓉倩、周春鹏、陈泽鲲

From left to right: Alexander R. Jachnow, Christine He, Dr. Kelly Wang, Li Qiang, Ralph Wahnschafft, Gorka Urtaran Agirre, Jessica Mu, Zhou Chunpeng, Chen Zekun

平行会议 6a Parallel Session 6a

区块链技术与智慧城市管理
Blockchain Technology and Smart City Governance



▲ 从左至右：王志军、拉菲·里奇、吴艾伦博士、王鸿宾教授、艾哈迈德·阿塔克、周岳陵博士、史攀

From left to right: Wang Zhijun, Arch. Rafi Rich, Dr. Allen Yaobian WU, Prof. Oudom Wang, Ahmet Atac, Dr. Zhou Yueling, Shi Pan

COLLECTION OF SPEECHES OF GFHS 2019

年会演讲精选

埃塞俄比亚水务、灌溉与能源部部长 西莱希·贝克莱
Dr. Eng. Seleshi Bekele, Minister of Water, Irrigation and Energy of Ethiopia

联合国非洲经济委员会负责人 奥利弗·钦甘亚
Oliver Chinganya, Director, African Center for Statistics and Officer-in-Charge of the United Nations Economic Commission for Africa (UNECA)

肯尼亚前总理、非盟基础设施发展高级代表 拉伊拉·欧丁嘉
H.E. Raila Odinga, former Prime Minister of Kenya
High Representative for Infrastructure Development at the African Union Commission

全球人居环境论坛秘书长 吕海峰
Lu Haifeng, Secretary General, Global Forum on Human Settlements (GFHS)

国际电信联盟非洲区域主任 安德鲁·鲁加吉
Andrew Rugege, Regional Director for Africa
International Telecommunication Union (ITU)

联合国人居署世界城市运动项目负责人 罗伊·希迪
Roi Chiti, Project Leader, World Urban Campaign, UN-Habitat

世界气象组织非洲区域办公室主任 阿莫斯·马卡鲁博士
Dr. Amos Makarau, Director, Regional Office for Africa, World Meteorological Organization
加泰罗尼亚高等建筑研究院创始人；巴塞罗那市议会的前首席建筑师 比森特·瓜里亚尔特
Vicente Guallart, Founder, Institute for Advanced Architecture of Catalonia;
Former Chief Architect of Barcelona City Council

以色列智慧城市技术与战略发展有限公司执行总裁、建筑师 拉菲·里奇
Arch. Rafi Rich, CEO, SUIITS Smarter Urban iT&S Strategies LTD, Israel



西莱希·贝克莱 Dr. Eng. Seleshi Bekele

埃塞俄比亚水务、灌溉与能源部部长
Minister of Water, Irrigation and Energy of Ethiopia

各位来宾，女士们，先生们，

我非常荣幸代表埃塞俄比亚联邦民主共和国水务、灌溉与能源部以及我自己欢迎各位的到来。埃塞俄比亚是人类的起源，露西（Lucy）的遗骸已有 320 万年历史，而就在 6 天前，380 万年前的早期人类祖先被发现。人类从世界各地移居于此，因此，在这里举办全球人居环境论坛是最优选择。

在此次论坛上，我希望从来自世界各地的参会者那里获得有关可持续城市、数字技术和城市发展新创新方面的具体信息和全球视角。

埃塞俄比亚正处于政治、经济和社会转型中，以期拥有美好的未来。水和能源领域的全面发展对于在城乡地区实现富裕和可持续发展至关重要。

尊贵的来宾，女士们，先生们，

尽管撒哈拉以南非洲地区 (SSA) 被视为世界上快速城镇化区域，但埃塞俄比亚等国家的城市人口水平却很低。埃塞俄比亚目前的城市人口约为 20%，城市增长率为 4.1，而人口增长率仅为 2.4%。具体来说，全国超过 20,000 人口的城市区域有 117 个。未来将有一亿多人口移居到城市地区或新兴城镇。

尽管科技的出现有助于创造更多可能性，但在埃塞俄比亚等许多发展中国家仍面临着众多挑战：

- 大多数定居点仍散布在广大的农村地区，因此发展基础设施并不容易；

Distinguished Guests, Ladies and Gentlemen,

I am highly delighted and honored to welcome you all on behalf of the Ministry of Water, Irrigation & Energy of the federal Democratic Republic of Ethiopia, and my own. Ethiopia is the origin of mankind, where the remains of Lucy 3.2 Million year old and recently an early human ancestor of 3.8 Million years old, discovered just 6 days ago. Human being migrated and settled everywhere and therefore, it is the right place to hold such meeting on Global Forum on Human Settlements.

In this forum, from participants who come from various corners of the world, I expect you would obtain sufficient details and global perspectives of sustainable cities, digital technologies and new innovations in urban development.

Ethiopia is in the middle of political, economic and social transformation for a bright future, and comprehensive development of the water and energy sectors has paramount importance for the realization affluent and sustainable settlements in both urban and rural areas.

Honorable Guests, Ladies and Gentlemen,

Although SSA is regarded as the world's rapidly urbanizing region, countries like Ethiopia has low level of urban population. Ethiopia currently having about 20% urban and with 4.1 urban growth rates, compared to the population growth rate of about 2.4%. To be more concrete there are 117 urban areas in the nation with population that has greater than 20,000. The future of



埃塞俄比亚的优势之一是其可再生能源高达 97%，同时还具有适应气候变化和绿色经济的战略。因此，无论是现代城市的轻轨交通系统，或是未来的电动汽车，亦或是工业和服务业的能源消耗都将由清洁能源提供。这意味着该国不仅使用可持续和可再生能源，而且贡献于全球抵消碳排放以及优化可持续能源结构。

One of the comparative advantage Ethiopia has is its energy is 97% renewable, concomitant with climate resilient and green economy strategy it has. Thus, the modern city light rail transit system or the future electrified vehicles or energy consumptions for industries and service sectors will be provided from clean energy. It means the country not only using sustainable and renewable energy sources, but also contributes to the world's effort to offset the carbon emissions and enhance sustainable energy mix.



- 由于疾病和战略防御，传统上是定居在高地或是严重拥挤、生产力低下和退化的地区，因此使大多数人口陷于贫穷和脆弱生活中；

- 城市居住区也未规划或配备必要的设施。

另一方面，因为城镇化起步较晚和快速增长的需要，埃塞俄比亚以及类似的国家应该采用最新技术。城市环境变化的主要驱动力，如信息和通信技术、创新、清洁和可再生能源，电动汽车和火车，高效能建筑、废物管理等方面的推进，将有助发展中国家创造新的、现代化的城市和近郊定居点，因为不受局限，这些进步（有时称为颠覆性技术）会带来后发优势。

尊敬的来宾，女士们，先生们，

就我在埃塞领导的这个部门而言，需要许多配套服务和供应，包括供水和卫生，电力和能源，城乡结合地区的水系管理。

1. 在供水和卫生方面：所有城市地区的需求都在快速增长，并根据城市的发展阶段，从人均 40 升到人均 100 升提供充足的清洁水。

除亚的斯亚贝巴外，几乎所有城市都没有现代化的废物管理，雨水管理也很少。

固体废物的管理正在改善，特别是随着新的 25 兆瓦容量的废物转化为能源设施的建成，该设施每天可在亚的斯亚贝巴处理利用多达 4,000 吨的废物，这在 SSA 也是首例。类似的做法也会被推广到其他地区首府，甚至亚的斯亚贝巴的次级城市。

2. 在能源方面：众所周知，可持续城市需要在可再生能源，水和能源的使用效率，紧凑型城市的设计和和实施，建

100 Million plus population settlement will yet to come in the urban areas and newly emerging towns and cities.

Though the emergence of technologies helps better possibilities, there are numerous challenges in many developing countries like Ethiopia:

- Most of the settlements are still scattered in the wide span of rural areas and hence in not easy reach to develop infrastructure;

- Settlements, because of diseases and strategic defenses, have been traditionally in the highland, in heavily congested, in low productive and degraded areas and thus they have trapped majority of population in poverty and vulnerability;

- Urban settlements are not also planned or equipped with necessary facilities.

On the other hand, as late starters in the urbanization and rapid growth, similar countries and Ethiopia should utilize newest technologies. The major drivers of change in urban settings such as ICT, innovation, clean and renewable energy, electrified vehicles and trains, advancement in efficient buildings, waste management, and the like will leapfrog developing countries to create new and modern urban and peri-urban settlement, as there is no lock in and these advancements (sometimes called as disruptive technologies) provide late comer advantage.

Honorable Guests, Ladies and Gentlemen,

In the context of the Sectors I am leading in Ethiopia, many service areas and provisions are needed including water supply and sanitation, electricity and energy, watershed management with rural and urban linkage areas.

1. In Water Supply and Sanitation: all urban areas demand with the rapid growth and provision of adequate



筑物的翻新和绿化面积的增加，快速、可靠和可负担的公共交通和已改善的废物回收系统等方面进行投资。基于包容性和多用途发展要求，所有这些服务都需要在水、食物、能源和气候方面采取关联方法。

埃塞俄比亚的优势之一是其可再生能源高达 97%，同时还具有适应气候变化和绿色经济的战略。因此，无论是现代城市的轻轨交通系统，或是未来的电动汽车，亦或是工业和服务业的能源消耗都将由清洁能源提供。这意味着该国不仅使用可持续和可再生能源，而且对抵消全球碳排放和优化可持续能源结构做出贡献。

3. 在总理阁下的倡议下，政府最近动员了全体民众，根据人均 40 棵树的原则启动了种植 40 亿棵树的全国绿化倡议。该倡议的主要目标是协同人力、财力和机构资源，将最大程度地扩大城市和农村地区的绿化面积，从而扭转全国森林砍伐的水平。为此，埃塞俄比亚实施了一项雄心勃勃的方案，即在 6 月 -8 月的一个季节内种植 40 亿棵树木，并以每天种植超过 3.53 亿棵树来打破世界纪录。在这 40 亿棵树中，有 5.33 亿棵树苗在城市和城市周边地区种植。该倡议的重点之一是通过种植 5.33 亿棵树木，实现在全国范围内的城市更新和绿化。鉴于可持续发展，提出以下：

- 河道测绘和缓冲区建立
- 固体废物清理与管理
- 废水和雨水管理

and clean water from 40 litres per capita to 100 liters per capita, depending on the stage of growth of the city.

Except Addis Ababa, almost all cities have no modern waste water management, and storm water management is also scanty.

Management of solid waste is improving, especially with completion of the new waste to energy facility of 25MW capacity that can utilize upto 4,000 tonnes of waste per day in Addis Ababa and first of its kind in SSA. Similar efforts will expand to other regional capitals and even sub cities of Addis Ababa.

2. In Energy: As it is well known, sustainable cities require investment in renewable energy sources, efficiency in the use of water and energy, design and implementation of compact cities, retrofitting of buildings and increase of green areas, fast, reliable and affordable public transportation and improved waste recycling systems. All of these services need a nexus approach in water, food, energy and climate in view of inclusive, and multi purpose development.

One of the comparative advantage Ethiopia has is its energy is 97% renewable, concomitant with climate resilient and green economy strategy it has. Thus, the modern city light rail transit system or the future electrified vehicles or energy consumptions for industries and service sectors will be provided from clean energy. It means the country not only using sustainable and renewable energy sources, but also

- 部分城镇目前正在实施的城市绿化和都市农业

4. 关于亚的斯亚贝巴，阿比总理阁下的另一个重要举措就是美化和建立现代化的亚的斯亚贝巴，通过实施绿色走廊、清洁的河流系统和分水岭的管理，开始将城市完全转变为现代化城市，所需投资 10 亿美元。

此外，一个更广泛的国家更新议程要求除亚的斯亚贝巴之外的 22 个城市也采取相同的措施，但也增加了：

- 为每个城镇设计范例厕所
- 在每个城镇的选定地点建造范例厕所
- 采购真空吸污车来收集和处理废水
- 建立监督机制

总预算为 4 亿美元。

尊敬的来宾，女士们，先生们，

如前所述，现代科技特别是数字技术的应用，在提高资源利用效率方面提供了巨大的机会，例如通过自动水表或数字用户收费，无论是读取水表还是支付账单；还是为了提高能源效率来管理能源系统，如使用数据采集与监视控制系统（SCADA）、智能电表或是现收现付制，或是通过企业资源管理来实现有效的人力和资本管理，仅仅举这几个例子，我们都已经开始利用这些真正的机会。这些技术通过快速的经济转型、环境管理和城乡转型对社会产生了前所未有的影响。因此，扩大创新技术的使用可以改变非洲和世界的城镇化，人居和生活质量。

最后，我要向论坛的组织者表示感谢和赞赏，并祝大家在美丽而历史悠久的亚的斯亚贝巴过得愉快。

contributes to the world's effort to offset the carbon emissions and enhance sustainable energy mix.

3. Government, with the initiative of HE the Prime Minister, has recently mobilized the entire public by initiating a 4 Billion Trees National Greening Program based on the principle of 40 Tree Per Head. The major objective of the initiative is to synergize human, financial, and institutional resources to maximize green urban and rural areas thereby reversing national level of deforestation. In this endeavor, Ethiopia delivered on ambitious project of planting 4 Billion trees in a season from June to August, and break the world record by planting over 353 Million trees a day. Out of the 4 Billion, 533 Million seedlings were planted in the urban and peri urban areas. One of the key focuses of the initiative is

the urban renewal and greening throughout the nation where 533 million trees were planted. In view of the sustainable development:

- River corridor mapping and buffer zone establishment
- Solid waste cleaning and management
- Wastewater and storm water management
- Urban greening and gardening are currently under implementation in selected towns

4. In relation to Addis Ababa, the other very big initiative of HE PM Abiy is the beautifying and modernizing Addis Ababa, that has started to completely transform the city to modern one with provision of green corridor, cleansed river systems, stewardship for the watersheds, with a needed investment of a billion dollars.

Associated to these also, a broader national agenda beyond Addis for renewal includes 22 cities to follow the same specific areas but also add

- a. Design model toilets for each town
- b. Construction of model toilets at the selected sites in each town
- c. Procuring vacuum trucks for wastewater collection and disposal
- d. Establish monitoring mechanism with the budget of 400 Million dollars.

Honorable guests, Ladies and Gentlemen,

As I stated earlier, use of modern technologies specially digital technologies, offer tremendous opportunities in improving resources use efficiency like through automated water meter or digital user fee collection, be it for reading the meter or paying the bills, for energy efficiency whether to manage energy systems like using scada or use of smart meters, or pay as you go, for enterprises resources management for efficient human and capital management, to mention few are the real opportunities that we have started to use. These technologies have unprecedented impact on society through rapid economic transformation, environmental management and urban and rural transformations. So upscaling the use of innovation and technology transforms Africa and the world in urbanization, settlements, and quality of life.

Finally, I would like to extend my thanks and appreciation to the organizers of the forum and a pleasant stay for the participants in a beautiful and historic city of Addis.



奥利弗·钦甘亚 Oliver Chinganya

联合国非洲经济委员会负责人

Director, African Center for Statistics and Officer-in-Charge of the United Nations Economic Commission for Africa (UNECA)

我很荣幸能在非洲政治之都亚的斯亚贝巴的非洲经济委员会总部欢迎大家。我希望您会感受到我们的热情好客，也会认为我们的会议中心适合探讨数字时代的人居环境。我们希望覆盖在几乎我们所有服务中的数字技术将改善您在 UNECA 的互动和体验。

各位来宾，

我们在非洲这里举行第十四届全球人居环境论坛年会非常契合。我们在非洲的住区正在快速转型——甚至可以说是以历史上前所未有的速度。我们甚至可以说，非洲崛起的故事最好地诠释了人居环境和数字技术的变革。

以非洲城市为例。在过去的三十年中，许多非洲城市见证了多功能场所的兴起——从商业和技术园区，到金融中心以及众多的学习和医疗机构，再到各种私人 and 公共事业。所有这些都改善了居民的生活质量。

加蓬的利伯维尔和博茨瓦纳的哈博罗内等城市的人均 GDP 超过 7,500 美元。根据世界银行的定义，这些城市属于高收入城市，非洲的大多数中产阶级也居住在这些城市。还必须指出的是，非洲的城市化发展趋势是随着居住在城市地区的占总人口 42.5% 的消费阶层而增长。这强调了城市作为投资、创新、增长和创造财富的驱动力的重要性，对城市就业和减贫具有倍增效应。

非洲近些年取得的另一个突出成就是它应用数字技术的速度。超过三分之一的非洲人使用互联网，超过三分之二的人使用移动电话。这已经带来了深刻的变革。非洲大

I am honoured and delighted to welcome you all at the headquarters of the Economic Commission for Africa here in Addis Ababa - Africa's political capital. It is my hope that you will find our venue the UN Conference Centre of the UNECA hospitable and fit for the discussion on human settlements in the digital era. We hope that the digital technologies that we have integrated in almost all services will improve your interactions and life experience here at UNECA.

Excellencies,

It is fitting that we are holding the 14th Annual Session of Global Forum on Human Settlements here in Africa. Our settlements in Africa are transforming at a rapid rate - some may even say at unprecedented rate in our recent history. We can even argue that the narrative of a rising Africa is perhaps best seen through the lenses of the transformation in human settlements and digital technologies.

Take the case of African cities as an example. Over the last three decades, many African cities have witnessed the rise of multi-purpose use facilities - from business and technology parks, financial centres and multitudes of learning and healthcare institutions, to diverse private and public utilities. All of which have improved the quality of life of inhabitants.

Cities such as Libreville in Gabon, and Gaborone in Botswana have GDP per capita of over \$7,500. These are some of the high-income cities by World Bank definition and most of Africa's middle-class dwell

陆越来越多的国家拥有更多的移动银行帐户（比如手机银行），从而推动和深化了金融包容性，促进了经济增长。人们普遍认识到，数字技术正在改变非洲社会的各个领域，帮助农村和城市地区的医生、教师、警察、妇女和农民达到事半功倍的效果。毫无疑问，非洲在改善其公民生活方面取得了不可逆转的进展。

各位来宾，

虽然成绩斐然，但我们还必须关注到生活在农村和城市的非正式住区，或是从事非正规经济活动的广大民众。据估算，有 60-70% 的城市家庭生活在贫民窟，非洲近 90% 的人口生活在非正式住房中。很大一部分人口生活在人满为患、不健康和危险的环境中。它缺乏我们这里许多人认为理所当然的基本服务和社会保护，例如清洁和安全的水，像样的厕所，产权契约或租赁协议等。

此外，约有 85.8% 的劳动力在没有基本法律、社会保护和工人权利的非正规部门就业。在某些情况下，非正规部门中近三分之一的工人，大多数是妇女和儿童，靠自己低技能、低生产力的工作获取的低收入贡献于家庭成员。他们没有退休计划、医疗保险或法定的节假日。

正规和非正规住区的并存于一个看似和平，实则不安的环境中，必须加以解决。首先，非正规部门提供了宝贵的服务，并贡献于国家的 GDP——肯尼亚和赞比亚等国家的 GDP 超过四分之一的部分来源于此。另据了解，一些正式就业的工人居住在非正规住房中。

同样，非正规部门和正规部门是相互联系、相互影响的。霍乱在非正规住区的爆发和迅速蔓延也会影响正规住区和企业。因此，我们有责任制定解决方案，改善非正规和正规住区人民的生活。

女士们，先生们，探讨技术作为催化剂，推动了可持续的人居环境。技术不断改变着人居环境的规划、开发和管理，进而对经济、社会和环境产生重大影响。以摩天大楼为例，它们不仅变得更高，而且使城市能够在占地很小的土地上容纳数以百万计的居民和工人。同样，电力确实是许多现代文明背后的力量，它降低了能源成本，为城市和家庭提供照明并为工厂供电；它减少了室内烟尘的吸入，改善了生活质量，并减保护原本需要用作房屋供暖和照亮城市的森林。这些是重大的科学、技术和工程成就。

这让我又回到本次会议的焦点。在数字时代，那些基于纸张的处理、存储、检索和数据分析显得非常落后。多种的数字工具使得社区和国家能够获得关键服务，改善交通流动，加强信息和知识流动，提高业务竞争力并确保我们的住区安全。

in these cities. It is also important to note that the trend towards urbanization in Africa has been accompanied with the growth of a consumer class with about 42.5% of the region's population now living in cities. This underscores the significance of cities as drivers of investment, innovation, growth and wealth creation with multiplier effects on urban jobs and poverty reduction.

Another notable area of Africa's recent success is the pace at which it has adopted digital technologies. More than a third of Africans are on the internet and over two thirds have access to mobile telephone. This has driven profound changes. A growing number of countries on the continent have more mobile banking accounts (i.e. on the phone) than traditional bank accounts- thus promoting and deepening financial inclusion as a catalyst for economic growth. It is recognized that digital technologies are transforming all sectors of the African society -empowering doctors, teachers, policemen/women and the farmers in the rural and urban areas to do more with less. There is no doubt that Africa has made irreversible strides to improve the lives of its citizens.

Excellencies,

While the successes grab headlines, we also must be concerned with the large numbers of our people that live in informal settlements and operate in the informal economies both in rural and urban areas. It is estimated that 60-70% of urban households live in slums and close to 90% of the population in Africa live in informal housing. This is a large share of the population that live in overcrowded, unhealthy and risky environments. It lacks the basic services and social protections that many of us here take for granted - such as clean and safe water, a decent toilet, title deeds or rental agreements, among others.

In addition, about 85.8% of the total workforce is employed in the informal sector where the basic legal and social protections and rights of workers do not exist. In some cases, close to a third of the workers in the informal sectors are contributing family members with low skills profile and low productivity resulting in low earnings -especially among women and children. They have no retirement plans, medical cover or defined leave days.

Both formal and informal settlements coexist in a seemingly peaceful and uneasy environment that need to be addressed and should not be dismissed. First, the informal sector provides valuable services and contribute to the GDP of the country - over a quarter for countries such as Kenya and Zambia. It is also known that, a number of the workers in formal employment live in informal housing.

以前，远程办公仅限于雅虎和谷歌等高科技公司。如今，如联合国等组织和芬兰等国家正在采取措施，使工人能够决定在何时与何地工作。在时间和金钱上为工人节省成本，以及避免了下班途中的交通压力，而工人每小时的生产率可能会大幅提高。

我们必须从生活质量和基本需要的满足程度来考虑人居环境。这些可能包括就业、住房、医疗、教育、娱乐和商业机会等的可获得性、可负担性和高质量。正是这些服务使城市吸引了那些寻求提高生活质量的人们。

城市的经济作用不能过分强调。城市是生产力、投资、市场、城市工作和巨大商机的中心。因此，城市是为多种目的而存在，适应不同发展需求的区域，吸引了不同类型的人在此工作和互动。从这个角度来看，我们需要包容、安全 and 环境友好的人居环境。公共和私人支持和服务的机构在此合作、竞争并相互支持，以实现变革和推动创新。

有些人反驳说，密度（而不是规模），以及具有广泛和多种创新特征的人和机构才是吸引和留住不同经济和社会地位的人的关键。确实，那些提供大量社区和工业空间以满足注重质量的富人和重视成本的客户的地方，很可能会吸引和发展小型和大型公司，吸引更多的人，也会更加热情好客。

因此，当您探讨智慧城市和数字公民时，也要牢记，也许只有三分之一的非洲人在使用互联网，一半的人拥有手机。在速度、容量和可靠性方面，数字基础设施远远落后。初步估计，非洲每年需要大约 50 亿美元的信息和通信技术基础设施投资。

因此，我们希望政府、部委和市政府的领导以及杰出的学者、思想家和研究人员能够对现有和新的挑战提出解决方案。他们还可以提出一些方法，使我们能够快速地利用数字解决方案来改善非正规和正规住区人民的生活。

最后，女士们，先生们，请允许我提出联合国非洲经委会在这方面正在实施的一些倡议。非洲经委会通过卓越数字中心实施了一项数字身份识别的重要项目，以减少无身份人的数量。它将不仅改善了所有人的民事登记，还使市政当局能够有规划地为市民提供相应的服务。非洲经委会还与非洲联盟委员会合作，制定了非洲大陆数字化转型战略，其中包括多部门的目标和政策框架，利用数字技术带来的社会和经济利益，促进包容性增长和发展，人居环境也包含在其中。

我们还有一个关于气候变化的重大计划：城市化与技术创新。本次会议将会对这些倡议中的一些内容进行探讨，包括数字和智慧城市的讨论，并寻求提高人居环境复

Similarly, the informal sector and formal sector are linked and affect each other. A cholera outbreak in informal settlements quickly spreads or affects formal settlements and businesses. We therefore have a responsibility to devise solutions to improve the lives of people in informal as well as formal settlements.

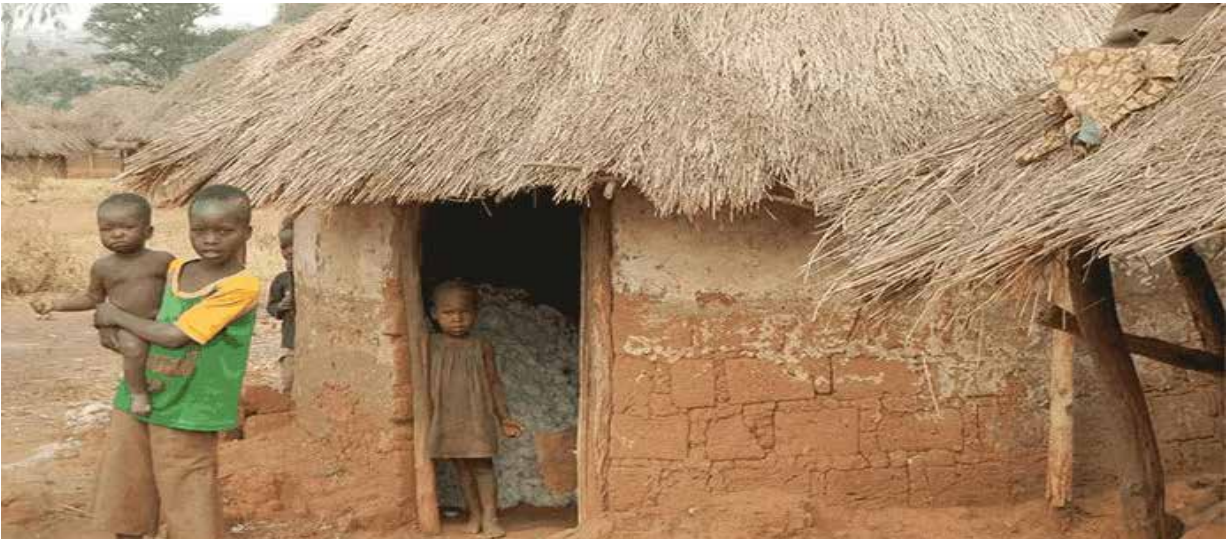
Ladies and gentlemen, - Talking about Technology as catalyst for moving towards sustainable human settlements. **Technology continues to transform the planning, development and management of human settlements which in turn have major economic, social and environmental implications.** Take the case of Skyscrapers, they have not just gotten taller but also enabled cities to accommodate millions of dwellers and workers in a small space of land. Similarly, electricity is truly the power behind many of the modern civilizations - reduced the costs of energy, lighting up cities and homes and powers factories; it has reduced indoor smoke inhalation and improved the quality of life, as well as saving acres of forests that would otherwise be harvested to heat up homes and light up cities. These are major scientific, technological and engineering accomplishments.

This brings me to the focus of this conference. The digital age is making paper-based processing, storage, retrieval and analysis of data seen as medieval or primitive. Numerous digital tools are enabling communities and countries access key services, improve flow of transportation, enhance information and knowledge flows, drive business competitiveness and keep our settlements safe.

Telecommuting was confined to high tech firms such as Yahoo and Google. Today organizations such as the United Nations among others, and countries such as Finland are introducing measures that will enable workers to decide where and when they work. The savings for workers in terms of time and money, as well as stress of transiting to and from work could be significant while the gains from worker productivity per hour could be enormous.

We must think of human settlement in terms of quality of life and levels of satisfaction of basic needs. These may include the availability, affordability and quality of employment, housing, health, education, recreation and business opportunities among others. It is these services that make cities magnets for people seeking to enhance their quality of life.

The economic role of cities cannot be overemphasized. Cities are centres of productivity, investment, markets, urban jobs and immense business opportunities. Thus, cities are nerves of development



原力的措施。我希望各位能抽出时间与我的同事就潜在的合作与协作领域进行磋商。

现在，让我借此机会祝大家讨论富有成果，并期待各位最佳的建议。

感谢各位。

of the existence of areas that serve multiple purposes which in turn attract different type of people that perform different jobs to interact. From this perspective, we need human settlements that are inclusive, safe and environmentally conducive. They must be places where public and private support and service institutions collaborate, compete and support each other to bring about change and drive innovation.

Some have argued that, density -and not size - and the wide range and diverse innovative characters of the people and institutions that attract and retain people of different economic and social status. Indeed, locations that offer a wide array of neighborhoods and industrial spaces to meet the needs of quality-conscious wealthier individuals as well as cost-conscious clients with limited budget are likely to attract and grow both small and large firms, attract more people and be more hospitable.

Therefore, as you discuss smart cities and digital citizenry, it is equally important to remember that perhaps only a third of Africans are on the internets and half own a mobile phone. The digital infrastructures are far from the world's best in terms of speed, volume and reliability. Early estimates suggested that Africa needs about \$5 billion a year to for ICT infrastructure.

It is thus our hope that the Heads of Governments, ministries and municipalities as well as distinguished scholars, thinkers and researchers will help provide solutions to existing and emerging challenges. They will also come up with ways in which we could quickly capitalize on digital solutions to improve the lives of people in informal and formal settlements.

Excellencies, ladies and gentlemen, in conclusion, allow me to highlight some of the initiatives that UNECA is implementing in this regard. **Among others, ECA has a major programme on digital identification through the Digital Centre for Excellence to help reduce the number of people that remain invisible. It will not only improve civil registration of all but also enable municipalities to plan the growth and provision of services to the citizens. ECA is also working with the African union Commission in the development of the Continental Digital Transformation Strategy that encompasses multi-sectoral targets and policy framework for harnessing the socio-economic benefits of digital technologies for inclusive growth and development, human settlement being among them.**

We also have a major programme on climate change: urbanization and technology and innovation. Some of these initiatives will be discussed in this meeting including on digital and smart cities and seek measures to improve resilience of human habitations. It is my hope that your excellences will find time to engage with our senior colleagues on potential areas of cooperation and collaboration.

Let me now take this opportunity to wish you fruitful deliberations and look forward to what, I am sure will be first-rate recommendations.

I thank you! 



拉伊拉·欧丁嘉 H.E. Raila Odinga

肯尼亚前总理、非盟基础设施发展高级代表

Former Prime Minister of Kenya, High Representative for Infrastructure Development at the African Union Commission

非常荣幸来到这里谈论我们的城市和人居环境的未来。

从现在开始，我们在未来几十年如何生活是非洲如何走向并保持繁荣，以及我们能否为子孙后代创造机遇的关键。这是因为世界正在向城市转移。与此同时，即使老城在城乡移民的重压下挣扎，它们仍在扩张。随着经济的增长和新的中产阶级的兴起，新的城市正在遍及整个非洲大陆。

非洲的城市人口增长最快。1950年约为27%，2015年增至40%，预计到2050年将达到60%。过去，许多非洲国家政府通过阻止城乡移民和鼓励民众返回农场的方式来应对快速城市化，但这种方法从未奏效。

相反，非洲拥有世界上最年轻、增长最快的人口，其城市化进程比世界上任何其他地方都更加迅速。举例来说，据预测，非洲最大的城市拉各斯，一直到2030年，都将以每小时新增77名新移民的速度扩张。紧随其后的是金沙萨、开罗、罗安达、瓦加杜古、内罗毕、喀土穆、阿比让、约翰内斯堡和巴马科。

由于未能阻止快速的城市化进程，我们必须现在有所行动。我们必须确保我们的城市和住区的可持续发展。这包括实现智能化和数字化，并确保采用技术促进社会指标，包括医疗、教育、安全、旅游、文化、交通、公民管理和参与等。

那些将要繁荣发展并服务于公民的城市和住区需要加强能力建设，以确保每个居民都能获得诸如停车位和交通

It is a great honour to be here and talk about the future of our cities and human settlements.

How we live in the decades ahead beginning now is key to how Africa is going to become and remain prosperous and whether we are going to create or kill opportunities for our children and grandchildren. This is because the world is moving to the cities. At the same time, old cities are expanding even as they struggle under the weight of rural-urban migration. And new cities are sprouting across the Continent as economies grow and a new middle class emerge.

Africa's urban population has been among the fastest growing. It stood at about 27 per cent in 1950, grew to 40 per cent in 2015 and is projected to reach 60 per cent by 2050. In the past, many African governments responded to rapid urbanization by discouraging rural-urban migration and encouraging citizens to return to the farms. This approach never worked.

Instead, Africa, which is home to the world's youngest and fastest-growing population, has continued to urbanize more rapidly than any other part of the planet. For instance, it is predicted that Lagos, which is already Africa's largest city, is expanding by 77 new people every hour and this will be the case up to the year 2030. It is closely followed by Kishasha, Cairo, Luanda, Ouagadougou, Nairobi, Khartoum, Abidjan, Johannesburg and Bamako.

“

世界期待这样的城市，在那里设计公园是为了促进生物多样性，减少碳排放，并提供免费的Wi-Fi连接。因此，确保我们城市和住区实现可持续发展是一项基础设施挑战。我们的城市需要持续的重大基础设施的建设和投资。

The world is looking for cities where parks are designed to promote biodiversity, reduce Carbon emissions and give free Wi-Fi connectivity. The challenge of ensuring sustainable development of our cities and settlements is therefore an infrastructure challenge. Our cities need continuous major infrastructure developments and investment.

”

等的实时信息；回收箱的位置，回收箱是否已满，或是哪里有空置房屋可供租赁或购买等。

世界期待这样的城市，在那里设计公园是为了促进生物多样性，减少碳排放，并提供免费的Wi-Fi连接。因此，确保我们城市和住区实现可持续发展是一项基础设施挑战。我们的城市需要持续的重大基础设施的建设和投资。

投资必须以长期规划为推动力，以解决交通拥堵、成本和污染等问题。如果政策不完善，就无法实现城市的智能化。在重建我们的城市或开发新城市时，我们需要确保各级政府与当地社区和商业部门坐在一起，制定一个共同的计划，确保城市提供就业、住房、交通和环境。

非洲大陆在建设这类城市和住区方面已经落后了。正如我们所说，非洲正在遭受严重的城市基础设施缺口。世界经济论坛评测，非洲每年在基础设施上的国民公共支出非常低。在2005年至2015年期间，平均占国内生产总值的2%。而与此同时，印度和中国分别将其GDP的5.2%和8.8%用于城市基础设施建设。

结果是，60%的非洲城市居民生活在人满为患和服务水平低下的贫民窟。由于缺乏可负担的和可靠的交通，约有25%-45%的人选择步行上班。

作为一个大陆，我们要确保从一开始就要可持续的建设新兴城市和社区，同时提升现有城市的可持续性。从一开始，城市就必须建设高效的基础设施，提供充足的能源以及可靠且可负担的交通和住房。

可持续的城市发展必须同时解决各种不同的问题。因此，通过技术手段采取综合方法是基本需求。我们需要通过技术来加强城市各个部门之间的顺畅联接，包括住房、水务、消防、道路、建造和教育等。

即使在非洲，开罗、突尼斯、约翰内斯堡、卡萨布兰卡和阿尔及尔等也是因其强大的基础设施而脱颖而出，被

Having failed to stop rapid urbanization, we now have to make it work. **We have to ensure sustainable development of our cities and all human settlements. This includes making them smart and digital and ensuring they adopt technology for social indicators, including healthcare, education, security, tourism, culture, transportation, and citizen management and engagement, among others.**

Cities and settlements that are going to thrive and serve their citizens are those that will develop the ability to ensure every resident can access real time information on issues like parking space and traffic movement; where the recycling bins are and whether they are full or not, where vacant houses exist for lease or purchase.

The world is looking for cities where parks are designed to promote biodiversity, reduce Carbon emissions and give free Wi-Fi connectivity. The challenge of ensuring sustainable development of our cities and settlements is therefore an infrastructure challenge. Our cities need continuous major infrastructure developments and investment.

The investment must be driven by long-term planning so that it addresses the problems of congestion, cost and pollution. Cities will not be smart when policies are not. In re-inventing our cities or developing new ones, we need to ensure all levels of government sit with local communities and business sector to come up with a shared plan that ensure the city delivers on jobs, housing, transport and the environment.

We are behind in our preparations for these kinds of cities and settlements as a continent. As we speak, Africa is suffering from a major urban infrastructure gap. The World Economic Forum estimates that Africa's annual national public spending on infrastructure is

认为是机遇之城，除了 GDP 增长、经商环境宽松和吸引外国直接投资等因素外，还为人力资本的繁荣创造了条件。我们需要技术基础设施来帮助改善当地公民的公共服务，例如交通、街道照明、能源、卫生和文化。我们需要技术来监测空气污染水平、能源使用和水消耗、资源消耗和人口变化等，从而使我们的城市更能满足其居民的需求。

我们需要高度重视和正确处理的基础设施之一是公共交通和能源。在气候变化的年代，城市交通不仅指人的流动，当然这也很重要。交通应有助于我们的城市减少碳排放，并使新住房的开发更加容易，从而减少贫民窟。便捷的公共交通将使新的居住地更具吸引力，从而吸引新的住房投资。

如果城市要刺激投资和增长，我们需要秩序，特别是在城市住房和交通方面。在大多数城市中，这些服务基本是由非正规的私人投资者提供的。据估计，非洲城市中 70% -95% 的公共交通服务由非正式和独立的运营商提供。

他们的服务虽然至关重要，但有时可能会变得不可靠、不可预测、昂贵并且不安全。他们需要专业化，否则会成为发展的障碍。不可预测和不协调的服务使我们的城市变得昂贵和不宜居。世界银行估计，非洲城市比其他城市贵出 29%。据估算，我国城市居民的交通费和住房费分别高出惊人的 100% 和 50% 以上。所有这些都抑制了商业发展和投资增长。

我们知道，可负担的清洁能源是可持续发展目标之一，也符合非洲水力发电，太阳能和风力发电的可持续能源目标，这将推动大多数可持续发展目标的实现。确保体面劳动和经济增长至关重要，这是我们的可持续发展目标 8。这反过来将成为可持续城市和社区的主要驱动力。

据预测，为了满足非洲大陆的基本基础设施需求，我们每年需要花费 1300-1700 亿美元。到 2050 年，我们还需要投入大约三分之二的资金来满足基础设施的基本需求。为了弥补城市基础设施的资金缺口，非洲必须采取正确的步骤，以吸引私人投资于城市基础设施。

我们还必须努力确保政治和经济稳定，创造可预测的监管环境，确保更强有力的私有产权和可信的发展计划。

好消息是，即使是我们的老城区，人们也已经普遍意识到他们不能停滞不前。

部分城市当局正在投资于改善风险评估、城市升级、更精明的土地利用和规划来加强环境保护。

尽管面临许多挑战，但我们仍有某些显著的优势，我们必须继续前进。我们的城市充满活力和创造力，拥有强

exceedingly low. It averaged 2 per cent of the GDP between 2005 and 2015. This at a time India and China are spending 5.2 per cent and 8.8 per cent of their GDPs respectively on urban infrastructure.

The result is that 60 per cent of all African urbanites live in over-crowded and under-serviced slums. Around 25-45 per cent walk to work due to lack of affordable and reliable transport.

As a continent, ensure that the emerging new cities and neighbourhoods are built for sustainably right from the start even as we improve the sustainability of our existing cities. From the start, cities must be built for efficient infrastructure, adequate energy and reliable and affordable transport and housing.

A sustainable urban development must tackle various different problems simultaneously. An integrated approach through technology is therefore a basic necessity. We need technology to facilitate smooth linkages between the various departments of our cities including housing, water, fire, roads, manufacturing and education, among others.

Even in Africa, cities that are cited as avenues of opportunity like Cairo, Tunis, Johannesburg, Casablanca and Algiers stand out for their strong infrastructure across the board, incubating an environment for human capital to thrive, in addition to factors like GDP growth, ease of doing business and attracting Foreign Direct Investment. We need technology infrastructure that helps improve public services for local citizens, such as transport, street lighting, energy, health and culture. We need technology to monitor air pollution levels, energy usage and water consumption, resource depletion and demographic change, among others thus making our cities more responsive to the needs of their inhabitants.

One aspect of infrastructure that we really need to pay great attention to and get right is Public Transport and energy. In the age of climate change, urban transport is not just about movement of people, important as that is. Transport should help our cities reduce carbon emissions and make it easier for new housing to develop thus helping us cut down on slums. Access to good public transport will attract new investments in housing by making new locations attractive to live in.

We need order particularly in the urban housing and transport if cities are to spur investment and growth. In most of our cities, most of these services are provided

大而充满活力的非正式部门。我们城市的非正式性往往是需求驱动的。我们必须利用这种复原力和创造力，寻求以它们为基础的融资解决方案，同时减少其不安全条件和低质量服务等弊端。

接受城市化是我们不能逃避的现实。

by informal private investors. It is estimated that between 70 to 95 per cent of public transport services in African cities are supplied by informal and independent operators.

Their services while vital can sometimes be unreliable, unpredictable, expensive and insecure. They need to be professionalized otherwise they become impediments to growth. Unpredictable and uncoordinated services are making our cities expensive and unlivable. The World Bank estimates that African cities are 29 per cent more expensive than non-African cities. It is estimated that residents of our cities pay a staggering 100 per cent more for transport and over 50 per cent more for housing. All of this slows down business and investment.

We are aware that Affordable and Clean Energy is a Sustainable Development Goal that is also in line with Africa's Sustainable Energy goal for hydropower, solar and wind power generation which is what will drive most of the SDGs. It is critical to ensuring decent work and economic growth, our SDG Number 8. This will in turn be key drivers of Sustainable Cities and Communities.

It is projected that for us to meet basic infrastructure needs as a continent, we need to spend between \$130-170 billion annually. We are yet to make about two-thirds of investment we need by 2050 to meet the basic requirements for infrastructure. To bridge the urban infrastructure funding gap, Africa has to take the right steps to attract private investment for urban infrastructure.

We must also work on ensuring political and economic stability, create predictable regulatory environments, ensure stronger private property rights, and credible development plans.

The good news is that there is general realization even by our older cities that they can't stand still.

A number of urban authorities are investing in improved risk assessment, urban upgrading, smarter land use and plans to strengthen environmental protection.

We have certain distinct advantages that we must ride on despite the many challenges we face. Our cities are dynamic and creative with strong and vibrant informal sectors. The informality of our cities is often demand-driven.

We must take advantage of this resilience and creativity to seek financing solutions that build on them while reducing their vices like unsafe conditions and low-quality services.

It begins with accepting urbanization as a reality that we cannot run away from. 





吕海峰 Lu Haifeng

全球人居环境论坛秘书长
Secretary General, Global Forum on Human Settlements (GFHS)

尊敬的各位来宾，女士们，先生们，大家上午好！

我很高兴今天和各位一起参加在亚的斯亚贝巴联合国会议中心举行的第14届全球人居环境论坛年会。来自全球52个国家的近500名参会者相聚于此，共同探讨“数字时代城市与人居环境的可持续发展”。我代表全球人居环境论坛欢迎各位，并感谢您的参与、贡献和长期合作。

此次聚会很好的诠释了可持续发展目标17提出的全球伙伴关系，即有效的公私和民间社会伙伴关系。在2018年全球人居环境论坛年会的成果文件中也强调了这一点，“我们呼吁打破政治、经济、社会、性别甚至地理等级制度，建立全面、合作、务实和平等的伙伴关系。这将有助于实施可持续发展目标和《新城市议程》。”

我要感谢联合国非洲经济委员会和维拉·松圭博士。他们的友好合作和鼎力支持对于成功举办此次会议至关重要。这里的会议设施非常先进，可以与纽约联合国总部相媲美。同事们非常热情和细致。我们很幸运能与他们一起举办GFHS 2019，为解决与非洲的可持续城市化与数字经济相关议题提供了一个很好的机会。

我也感谢世界城市运动和罗伊·希迪先生的长期合作与支持。从GFHS 2019的筹备工作开始，世界城市运动秘书处就为GFHS提供了大力支持。希望本次会议能为世界城市运动的活动提供建议和意见，也为2020年2月将在阿布扎比举行的世界城市论坛的成果做出贡献。我希望来年2月与各位在阿布扎比见面。

Dear distinguished guests, ladies and gentlemen, good morning!

It's my great pleasure to join you today at the 14 Annual Session of Global Forum on Human Settlements in the United Nations Conference Center, Addis Ababa. Nearly 500 participants from 52 countries around the world come together to focus on "Sustainable Development of Cities and Human Settlements in the digital era". On behalf of Global Forum on Human Settlements, I welcome all of you and appreciate your participation, contribution and long-term collaboration.

This gathering is a perfect reflection of global partnerships, effective public-private and civil society partnership, proposed by SDG 17. This point has also been underlined in the outcome document of GFHS 2018, "We call for breaking the political, economic, social, gender and even geographic hierarchy and building up comprehensive, cooperative, pragmatic and equal partnerships, which is essential for the implementation of the SDGs and the New Urban Agenda."

I would like to extend my grateful thanks to UNECA and Dr. Vera Songwe. Their kind collaboration and great support is critical for the successful opening of this event. The conference facility here is very advanced and can be put on a par with that at the UN headquarters in New York city. The colleagues are very warmhearted and thoughtful. We are very lucky to work together with them



“碳基”的绿色和“硅基”的智慧是当今城市发展的两大趋势，整合这两大趋势，我们的城市和社区也将被重塑。

Today, the two major trends of urban development are "green" and "smart", meaning one is "carbon-based" and the other is "silicon-based". Through combining the two, our cities and communities will be reshaped.



非常感谢国际电信联盟的专业建议和非常高效的组织团队，感谢世界一带一路组织的坚定支持和慷慨贡献，感谢一带一路非洲研究联盟与埃塞俄比亚有关政府沟通的努力，也感谢世界和平联盟的务实推动和动员工作。

当然，我们也要感谢埃塞俄比亚政府，特别感谢阿比·艾哈迈德·阿里总理阁下，埃塞外交部，埃塞城市发展和建设部，水务、灌溉与能源部等。

我们也有强大的网络，许多合作伙伴，包括来自中国的重要合作伙伴都对此次盛会给予了很大支持。很抱歉，不能在此一一列举。再次，感谢所有论坛的合作伙伴们、新老朋友们一如既往地支持我们实现可持续发展。

这是全球人居环境论坛年会首次在非洲这个未来之洲举办。非洲是人类的发祥地，拥有伟大而古老的文化、丰富的资源，充足而强大的劳动力以及后发优势。目前，建立统一的非洲大陆自贸区将给非洲带来新的机遇。全球人居环境论坛将积极促进非洲和其他地区全方位的经济和文化交流合作，包括一带一路倡议，推动非洲的可持续发展。

非洲将是全球城市化最快的大陆，有其自身特点。到2040年，非洲的城市人口将增加一倍以上，达到10亿。撒哈拉以南非洲国家主要是资源输出国，工业化与城市化发展不同步。在推进非洲绿色工业化的同时，紧凑型的绿色城市，可持续的科学规划和合理的土地利用将有助于遏制城市扩张和解决不平等问题。本次论坛将为此提供解决方案。

全球人居环境论坛（GFHS）是在美国纽约州注册成立的、具有美国501(c)(3)免税资质的非赢利国际组织。GFHS具有联合国经社理事会特别咨商地位。全球人居环境论坛年会已经在中国、美国、巴西、德国、哥伦比亚、厄瓜多尔和泰国连续成功地举办了十三届，为推动联合国千年发展目标、人居议程、可持续发展目标、《巴黎协定》和《新城市议程》的实施作出了积极的贡献。

联合国秘书长在2019年经社理事会高级别会议的报告中提到，到2050年，预计全球将有68%人口生活在城市

to put together GFHS 2019 to create a good opportunity for addressing issues related to sustainable urbanization and digital economy in Africa.

I also appreciate the long term collaboration and support from World Urban Campaign and Mr. Roi Chiti. From the beginning of preparation of GFHS 2019, World Urban Campaign Secretariat gave great support to GFHS which is an associate member. This event is expected to provide inputs to the World Urban Campaign activities and contribute to the outcomes of World Urban Forum 2020 in Abu Dhabi in February 2020. I wish to meet you all in Abu Dhabi in upcoming February.

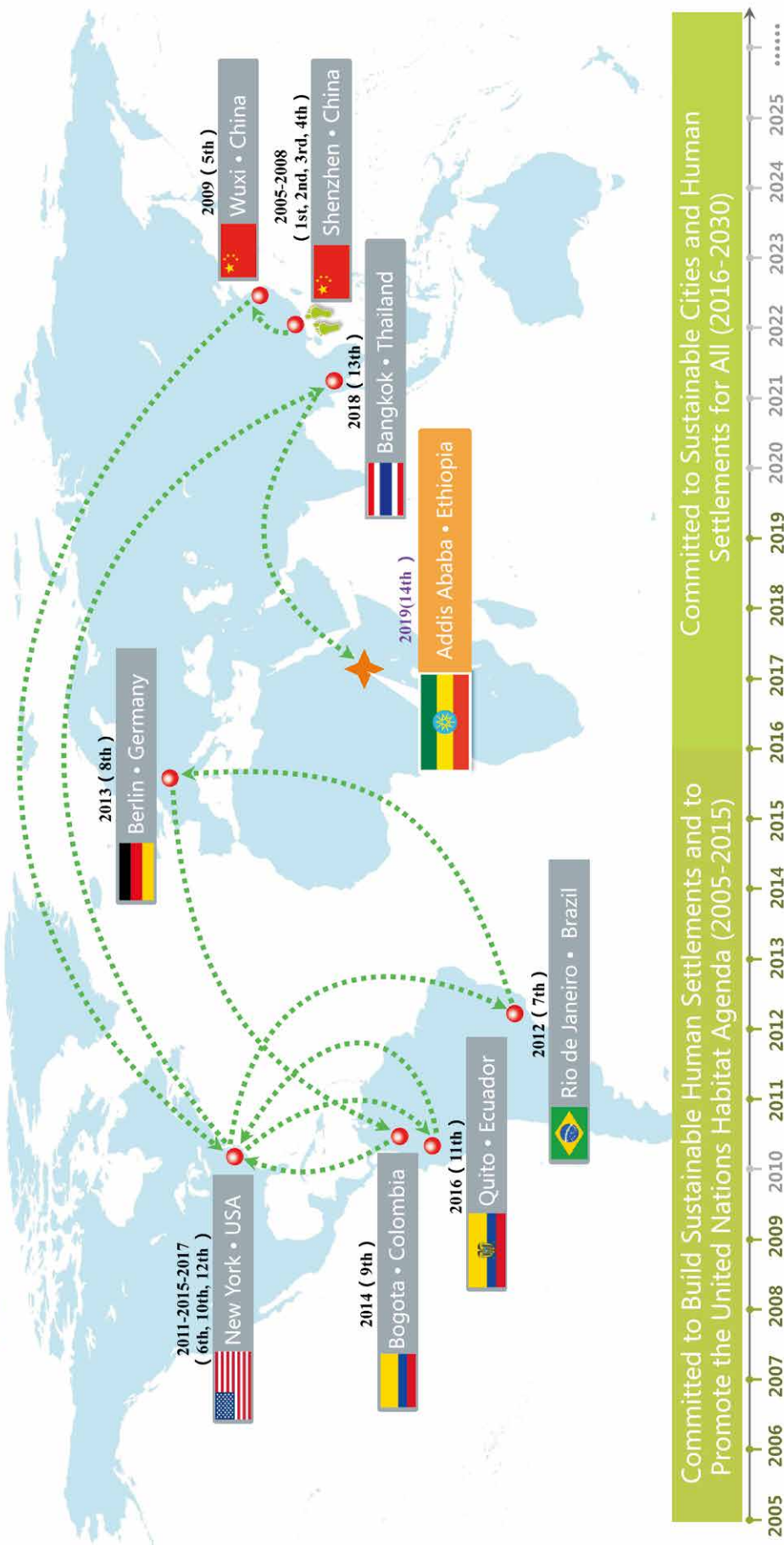
Great thanks also go to ITU for their professional technical input and very efficient organization team, to Global One Belt & Road Association for their steady support and generous contribution, to Belt & Road African Study Alliance for their effort in communicating with concerned Ethiopia governments, to Universe Peace Federation for their substantial promotion and mobilization.

Certainly, sincere thanks must go to the government of Ethiopia, especially to H.E. Mr. Abiy Ahmed Ali, Prime Minister, to the Ministry of Foreign Affairs, Ministry of Urban Development and Construction, Ministry of Water, Irrigation and Energy, etc.

We have a strong network in which plenty of partners have shown their support for this meeting including important partners from China. I'm sorry I can't list them all here. Once again, we thank all GFHS partners, new and old friends who have been supporting us along the way towards a sustainability cause.

This is the first time that the annual session of GFHS is held in Africa-the future continent. Africa is the birthplace of mankind and embraces great and ancient civilization, which is full of vitality with abundant resources, adequate and strong labor forces and advantages of backwardness. At present, building a unified African Continental Free Trade Area will bring

The Roadmap of Annual Sessions of Global Forum on Human Settlements (2005-2019)



中,目前这一比例为55%,到2030年将有43个特大城市,其中大多数是在发展中国家。“碳基”的绿色和“硅基”的智慧是当今城市发展的两大趋势,整合这两大趋势,我们的城市和社区也将被重塑。数字革命正在兴起。如何利用数字力量建设可持续和繁荣的城市?我们将在接下来的两天中深入探讨这些问题,寻求解决方案。

为了应对世界快速城镇化的严峻挑战,GFHS与联合国环境规划署以及其他合作伙伴一起发起了国际绿色范例新城(IGMC)倡议,以促进更加绿色、智慧的未来城市。IGMC倡议体现在6个基本原则“安全、可持续性、公平、个性、繁荣与幸福”,为所有人创造更好的生活。我期待在这次会议上,有新的合作伙伴加入IGMC倡议,特别是来自非洲的伙伴。

第十四届全球人居环境论坛年会又一次及时、相关和适当的活动,使国际社会对可持续城市化面临的紧迫问题保持警惕。该是我们采取积极措施解决这些问题的时候了,并在数字时代朝着可持续发展的方向大踏步前进。

最后,预祝本次论坛取得圆满成功,祝大家在会议期间身体健康、心情愉快。非常感谢。

new opportunities for Africa. GFHS would actively promote all-round economic and cultural exchanges and cooperation between Africa and other regions including the Belt and Road Initiative, thus contributing to the sustainable development in the region.

Africa will be the fastest urbanized continent in the world with its own characteristics. By 2040, Africa's urban population will more than double to 1 billion. Sub-Saharan African countries are mainly resource-exporting countries where industrialization and urbanization are not synchronized. While boosting the green industrialization in Africa, the compact green city, sustainable and scientific planning and equitable land use will help curb urban sprawl and address inequality. GFHS 2019 will provide solutions in this particular regard.

Global Forum on Human Settlements (GFHS) is a 501(c) (3) not-for-profit international organization,

legally chartered in the State of New York, USA. GFHS has been granted the Special Consultative Status with ECOSOC. The annual session of Global Forum on Human Settlements has been productively held in China, the United States, Brazil, Germany, Colombia, Ecuador and Thailand for 13 consecutive years, making great contribution to the implementation of MDGs, UN Habitat Agenda, SDGs, Paris Agreement and New Urban Agenda.

The UN Secretary-General's report for ECOSOC 2019 High-level Segment estimates that 68% of the world population is expected to live in cities by 2050, compared to 55% today, and by 2030 there could be 43 megacities, most of them in developing regions. **Today, the two major trends of urban development are "green" and "smart", meaning one is "carbon-based" and the other is "silicon-based". Through combining the two, our cities and communities will be reshaped.** The digital revolution is on the rise. How to harness the digital power for sustainable and prosperous cities? We will discuss these issues deeply in next two days to find the solution.

To tackle the challenges of rapid global urbanization, GFHS launched the International Green Model City Initiative to promote Greener and Smarter Future Cities in collaboration with UNEP and other partners. IGMC Initiative is manifested in six principles "safety, sustainability, equality, identity, prosperity and happiness" to create better life for all. I am looking forward to new partners join in IGMC initiative at this meeting especially from Africa.

The fourteenth annual forum is again another timely, relevant and appropriate initiative that makes the international community alert to the urgent issues facing sustainable urbanization. It is high time we take proactive measures in solving these problems and making great strides towards sustainable development in the digital age.

Finally, I wish this forum a great success, wish you all good health and a pleasant attendance. Thank you very much.



安德鲁·鲁加吉 Andrew Rugege

国际电信联盟非洲区域主任
Regional Director for Africa
International Telecommunication Union (ITU)

科技日新月异。非洲大陆正在进行深刻的数字化变革，巨型城市如雨后春笋般涌现出来。世界银行预测，到2040年，非洲的城市人口将增加一倍，达到10亿人。城市已然承受着极大的压力，而因工作、教育和医疗服务出现的人口流动给城市带来了更大的压力。受气候变化的影响，非洲大陆气温上升了一摄氏度，这对其造成了严重的影响。目前，全球变暖已经给人们的生活带来了环境压力。世界各地的城市都面临气候危机带来的挑战——基础设施负担过重以及城市管理、公平问题和城市卫生问题。

人工智能、区块链、物联网、5G等新技术为我们提供了新的解决方案。云计算的发展也为应对挑战提供了机遇。国际电联在数字革命的前沿发挥了以下作用：协调无线电频谱和空间许可证，制定全球通信技术和标准，协助发展中国家发展基础设施并制定政策。作为联合国信息和通信技术的专门机构，我们正在努力挖掘这些技术的巨大潜力，以服务智慧和可持续城市。我们有两个目标：一是使基础设施能够支持和强化ICT应用和服务；二是制定共同的经济标准，以确保开放性、互通性，并降低成本。

国际电联有专门的研究组从事物联网、智慧城市和社区相关的研究工作，并且聚集建筑开发商和城市建设者共同合作。作为一个枢纽，它将获取的标准经验应用到工作方式中，帮助政府改变落后的见解，并采用技术标准提高创新效率。国际电联已经重新制定了城市的网络安全标准。我们的标准阐述了如何帮助城市建设更可控和高效的能源系统。

The world of technology is changing rapidly. There is profound digital transformation taking place in the continent. Megacities are sprouting everywhere. World Bank forecasts that the population in Africa's urban areas will double to 1 Billion people by 2040. There is migration for jobs, education and health service puts tremendous pressures in cities and already under significant stress. African continent has been severely affected by increase in the temperature by 1 degree owing to climate change. Global warming has caused the environmental stress on the livelihoods already with climate change nowadays. Cities around the world are facing challenges associated with added climate crisis-overstressed infrastructure, urban governance, proper justice and urban health issues.

New technology – such as artificial Intelligence, Block chain, Internet of things, 5G offer new solutions. New development and advancement in cloud computing present opportunities for addressing challenges. **ITU forefront of the digital revolution accomplishes the following roles: harmonizing useful radio frequency spectrum and space permits, developing global standards on communication technologies and services and assisting developing countries with infrastructure and policies development.** As a UN specialized agency for ICT, we are working to develop vast potential these technologies hold for smart and sustainable cities. The objective is twofold: the first is to allow infrastructure



国际电联在数字革命的前沿发挥了以下作用：协调无线电频谱和空间许可证，制定全球通信技术和标准，协助发展中国家发展基础设施并制定政策。

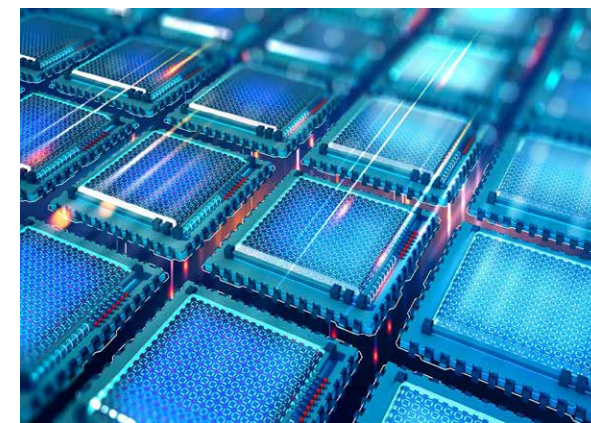
ITU forefront of the digital revolution accomplishes the following roles: harmonizing useful radio frequency spectrum and space permits, developing global standards on communication technologies and services and assisting developing countries with infrastructure and policies development.



世界无线电通信大会将于下个月在沙姆沙伊赫市举行，会议将探讨宽带通信、5G、智能运输系统、低轨道卫星网络和高空平台等关键问题。此次会议将对实现可持续发展目标发挥重要作用。为了帮助城市实现可持续发展，由国际电联和联合国16个机构组成的“智慧和可持续城市联盟”采取了具体措施和指导方针来帮助城市评估其智能项目。

世界各地的城市都有“关键业绩指标”（KPI）来汇报其智慧城市项目的成果。这些指标表明我们在建设更智能、更可持续的城市和实施政策上都取得了很大的进步。建设智慧和可持续城市需要政府、私营企业、国际机构、大学和社会团体之间开展广泛的合作。通过合作，兑现诺言。通过努力，国际电联与非洲国家领导人建立了牢固的关系。最近，他们将所有非洲国家的信息和通信技术部长聚集在一起，讨论了创新和有助于创建智慧城市的ICT技术。

总而言之，数字革命可以帮助贫困人口和乡村打造智能村镇。避免城乡差距进一步扩大，这一点至关重要。



capable of supporting and underscoring the ICT based applications and services and secondly to develop common economical standards to ensure openness and interoperability, reduce costs.

ITU uses dedicated study group for IoT and smart cities and communities bringing together building developers and city builders. It serves as a hub where standard experiences gained are incorporated into insights on how they have worked, can assist government and how governments are lagging, technical standards can help to innovate efficiency. ITU has reset the standards ensuring the security of network in urban areas. Our standards outline how to help build more controllable and efficient energy system.

Radio communication Conference in Sham El Shaik that will be held next month is set to address key issues ranging from broad band communications, 5G to intelligent transport systems, to low orbiting satellites networks and high altitude platforms. The conference will play a major role in achieving the SDGs. To assist cities in reaching this goal, ITU and United for Smart Sustainable Cities Initiative Coalition of 16 UN Bodies have developed tools and guidelines that support cities measuring their smart programs.

Cities worldwide have a set of “key performance indicators” to report the results of their smart city projects. These indicators represent a big step for making smarter and more sustainable cities and implementing policies. The condition for smart sustainable cities calls for extensive collaboration in governance, private companies, international institutions, universities and civil societies. Through such collaborations it is possible to deliver the promises. In its effort, ITU has built strong relationships with African leaders. Recently, they brought together ICT ministers from all African countries to discuss the issues of innovation and useful ICT in creating smart cities.

In conclusion, the digital revolution can help the poor and the villages to upgrade to smart villages and towns. It is necessary to avoid that the rural - urban divide will further open up. 



罗伊·希迪 Roi Chiti

联合国人居署世界城市运动项目负责人
Project Leader, World Urban Campaign, UN-Habitat

今天很高兴参加第十四届全球人居环境论坛。

首先，我要感谢组织团队的出色筹备工作，并感谢亚的斯亚贝巴市和联合国非洲经委会对我们的接待。

该论坛是世界城市运动的长期伙伴，我很荣幸代表世界城市运动，它是联合国人居署为实现可持续城市与人居环境倡导和动员行动的一项倡议。

令人鼓舞的是，每年都有来自世界各地，包括政府和非政府组织的高级代表相聚在这一峰会，探讨关于我们的城市、人民，乃至整个社会和地球的关键议题。

本次论坛的主题聚焦于我们生活的这个数字时代的机遇与挑战，以及如何采取有效的政策、策略和方法以实现可持续性和共同繁荣。

女士们，先生们！

2015年，会员国通过了《2030年可持续发展议程》和可持续发展目标，其中可持续发展目标11首次充分肯定和明确了空间发展和地方行动的重要性，呼吁“建设包容、安全、有复原力和可持续的城市和人居环境”。

2016年，联合国又通过了《新城市议程》，从那时起，它一直在指导各国政府和其他利益攸关方为加快实现可持续发展目标而努力。

《新城市议程》提供了实现可持续城市的共同标准和路线图，也强调了创新和技术作为强大工具和实施手段的

It is a pleasure for me to be here with you today for the 14th Annual Session of the Global Forum on Human Settlements.

I would like to start by thanking the organizing team for the excellent preparations as well as the city of Addis Abeba and the United Nations Economic Commission for Africa for hosting us.

The forum is a long-time member of the World Urban Campaign that I have the pleasure to represent today, and which is an initiative of UN-Habitat to advocate and mobilize actions towards realizing sustainable cities and human settlements.

I must say that it is encouraging to see how every year high level representatives from different parts of the world, including a wide range of governmental and non-governmental organizations, gather in this Summit to unfold a key topic of concern for our cities, the people, and ultimately our societies and the planet.

This year the theme of the forum focuses on the challenges and opportunities that the digital era, in which we are all increasingly living, can bring about and how effective policies, strategies and approaches can leverage it to achieve sustainability and prosperity for all.

Ladies and gentlemen!

In 2015, Member States adopted the Agenda 2030 for Sustainable Development and the Sustainable



《新城市议程》提供了实现可持续城市的共同标准和路线图，也强调了创新和技术作为强大工具和实施手段的重要性；特别是通过提供有效的城市基本服务、包容性治理和城市循证政策、战略和规划等，来提高资源和能源效率，复原力建设和气候行动。

The New Urban Agenda while providing common standard of achievement and a road map for sustainable cities, underline the importance of innovation and technology as a formidable tool and means of implementation; in particular to advance resource and energy efficiency, resilience building and climate actions, including through effective urban basic services provision, inclusive governance and evidence-based urban policies, strategies and plans.



重要性；特别是通过提供有效的城市基本服务、包容性治理和城市循证政策、战略和规划等，来提高资源和能源效率，复原力建设和气候行动。

在此背景下，各个国家，特别是城市，作为最亲近人民的民主机构，都应致力于消除任何阻碍利用技术改善我们民众生活的障碍，并提供可信赖和安全的技术、数字服务和基础设施以服务于我们的社区。

世界城市运动也欢迎本次论坛在其全球范围内关注区域发展。

非洲是一个充满机遇的大陆，快速的城市化正在以难以控制的速度改变着社会 and 空间格局。非洲国家在非洲联盟委员会的领导下通过了《2063年议程：我们期望的非洲》，该议程与《2030年可持续发展议程》完全一致，并阐明了实施《新城市议程》的条件，以适应该区域的背景和优先事项。

非洲城市人口的快速增长，加上年轻人群对技术的迅速接受，以及其在解决社会和经济问题（包括连通性和服务和市场准入）提供解决方案方面的应用，正在使数字技术成为该区域社会发展的主要推动力，并为其经济结构转型做出贡献。

女士们，先生们！

全球、区域和国家的可持续发展议程都有一个共性，即只有通过有效的伙伴关系才能确保所有行为者都为确定目标和解决方案作出贡献，才能克服我们面临的挑战。

在我们的城市和地区层面实现议程的本地化，将需要在包容、透明和负责任的框架指导下加强多方利益相关者的合作，以指导决策、投资和行动。

Development Goals, whereas for the first time, the spatial dimension of development and the importance of local actions was fully recognized and clearly captured in Sustainable Development Goal 11, which calls for “Making cities and human settlements inclusive, safe, resilient and sustainable”.

In the same spirit the New Urban Agenda was adopted in 2016 by the United Nations and since then it has been guiding efforts of governments and other stakeholders in accelerating the achievement of the SDGs.

The New Urban Agenda while providing common standard of achievement and a road map for sustainable cities, underline the importance of innovation and technology as a formidable tool and means of implementation; in particular to advance resource and energy efficiency, resilience building and climate actions, including through effective urban basic services provision, inclusive governance and evidence-based urban policies, strategies and plans.

In this context, countries and particularly the cities, as the closest democratic institutions to the people, should all commit to eliminating any impediments to harnessing technological opportunities that improve the lives of our constituents, and providing trustworthy and secure technology, digital services and infrastructures in support to our communities.

The World Urban Campaign also welcome the regional focus of this summit within its global reach.

Africa is a continent of huge opportunities, where rapid urbanization is transforming the social and spatial

在解决方案创新和投资方面，私营部门和其他利益相关者是主要推动者。可持续发展目标和《新城市议程》提供行动和影响框架，以确保“不让任何一个人掉队”，同时利用技术来加速目标的实现。

在我们即将开始为期两天的激烈讨论和商议时，我希望，通过多种互动，建立新的伙伴关系和倡议，我们联合国人居署世界城市运动也将随时准备提供支持。

最后，我诚邀各位参加将于明年2月8日至13日在阿联酋阿布扎比举办的第十届世界城市论坛。这次联合国大会的主题是“机遇之城：联结文化与创新”，它将是一个很好的平台，可以继续探讨这些基本议题，并与更多的受众分享此次论坛的成果，并为《新城市议程》的后续行动而努力。

预祝大家讨论富有成效，谢谢关注。



landscape at a pace that is difficult to govern. African countries under the leadership of the Africa Union Commission, adopted the "Agenda 2063: the Africa we want" which is completely aligned to the 2030 Agenda and allows articulating the implementation of the New Urban Agenda provisions, adapting to the context and priorities of the region.

The rapid growth of Africa urbanites jointly with the fast embracement of technology by a youthful population and its application in providing solutions

to social and economic issues, including connectivity and access to services and markets, is making digital technology a key driver for social advancement in the region and contribute to the structural transformation of its economies.

Ladies and gentlemen!

Global, regional and national agendas for sustainable development all concur on one point, that only through effective partnerships that ensure participation and contribution of all actors in defining objectives and identifying solutions, can overcome the challenges we are facing.

Localizing the agendas in our cities and territories will entail strengthening multi-stakeholder collaboration guided by inclusive, transparent and accountable frameworks to orient decision making, investments and actions.

The private sector along with other stakeholders has a key role to play as a prime promoter of solution-oriented innovation and investments. The SDGs and the New Urban Agenda are there to provide the action and impact framework ensuring that no-one is left behind, while the technology is available to accelerate the achievements.

While we are starting an intense two days of discussions and deliberations, I hope that as a result of the multiple interactions, new partnerships and initiatives will be created, and from the World Urban Campaign of UN-Habitat we will be ready to support.

In concluding, I would like to invite you to the Tenth Session of the World Urban Forum, to be held next February, from the 8th to the 13th, in Abu Dhabi, United Arab Emirates. Under the theme of "Cities of Opportunities: Connecting culture and Innovations" this United Nations Conference will be an excellent platform to continue the discussion on these fundamental topics and share the Summit's outcomes with an extended audience providing inputs to the New Urban Agenda follow up process.

Wishing us all, fruitful discussions, I thank you for your kind attention. 



阿莫斯·马卡鲁博士 Dr. Amos Makarau

世界气象组织非洲区域办公室主任
Director, Regional Office for Africa
World Meteorological Organization

背景介绍

人居环境（尤其是城市和气候）的发展、安全、复原力和可持续性之间存在着高度关联。直到近年来，天气、气候和水的问题还被认为司空见惯，不足以成为新闻。但由于极端天气事件频发，气候变化现在已成为焦点。气候问题现在被认为是社会经济发展和政治问题。

世界气象组织（WMO）获得的统计数据表明，在1998年至2017年之间，全球超过45亿人受到自然灾害的影响。其中约96%与天气有关。其中，45%受洪水（包括大城市的山洪）影响，33%受干旱影响，16%来自风暴（包括沙土），3%受地震影响，其余3%受极端温度、山火、山体滑坡、火山活动和块体运动等影响。

从2018年至今

- 在国际移民组织追踪的1770万国内流离失所者中，有200万人因与天气和气候事件有关的灾难而流离失所（2018年9月）；
- 大多是因干旱、洪水和暴风雨等灾害事件造成流离失所；
- 流离失所者往往生活在边缘地区，易受二次流离失所之害；
- 由于极端灾害事件、大雨、洪水和山体滑坡，成千上万的非洲社区遭受了二次流离失所的影响。

除此之外，2019年全球经济论坛还明确了影响2019年全球经济的主要因素，其中最大的威胁来自极端天气事件、缓解和适应气候变化的失败和自然灾害。水危机紧随其后。

Introduction: The Setting

There is a very high correlation between the development, safety, resilience, and sustainability of human settlements, more so urban cities and climate. Until recently, the issues of weather, climate and water are not news. They were taken for granted. Climate change due to extreme weather events have now taken centre stage. Climate is now recognized as a socio-economic development as well as a political issue.

Statistics obtained by the World Meteorological Organization (WMO) indicate that between 1998 and 2017, over 4.5 billion people worldwide were affected by natural disasters. Approximately 96% of them were weather related. Of these, 45% were affected by floods (including flash floods in large urban cities), 33% by droughts, 16% from storms (including sand), 3% due to earthquakes and the remaining 3% by extreme temperatures, wildfires, landslides, volcanic activity and mass movement.

From 2018 to date

- Out of 17.7 million Internally Displaced Persons tracked by IOM, over 2 million were displaced due to disasters linked to weather and climate events (September 2018)
- Droughts, floods and storms have been the events leading to most disaster-induced displacement ;
- Displaced persons often live in more marginal areas and vulnerable to secondary displacement
- 100s of thousands of African communities were affected by secondary displacement due to extreme events, heavy rain and flooding and landslides



为了使城市安全、有复原力和可持续的发展，迫切需要转变模式。在使用气象信息时，过去不再是未来的指南。随着气候变化的影响越来越大，城市当局需要制定政策以应对城市化的气象和水文方面的问题。

In order for cities to be safe, resilient and sustainable, there an urgent need for a paradigm shift. The past is no longer a guide to the future when it comes to using weather and climate information. With the increasing impacts of climate change, urban authorities need to put in place policies that address the meteorological and hydrological aspects of urbanization.



迄今为止的记录表明，2019 年将是有史以来全球最热的一年。北极圈前所未有的野火、破纪录的热浪、海冰的迅速融化以及海平面上升都证明了这一点。自工业时代以来，全球平均气温上升了约 1.1 摄氏度，其后果是令人堪忧的：

- 预报显示将出现更严重的极端天气，这也将成为常态：建议每年对此进行预测并做出相应计划；
- 冰山融化将把能量从极地转移到热带地区，导致更多的热带气旋、风暴、海岸侵蚀、山体滑坡等；
- 预计海平面上升将更加迅速，这对于小岛屿和沿海国家都是潜在的危机；

天气和气候对人居环境的影响

天气和气候对人居环境最大的影响将涉及可持续发展目标，尤其是：

目标 9：建设有复原力的基础设施，促进具有包容性、可持续性的工业化，并推动创新；

目标 11：建设包容、安全、有复原力和可持续的城市和人居环境。

恶劣天气会损坏或摧毁脆弱的基础设施，造成经济和人员损失。在这方面，国家气象报告可以保护基础设施和工业免受自然危害的破坏，而气候变化预测可为沿海和其他易受气候影响地区的基础设施的布局 and 气候防护提供指引。因此，重要的国家和地方当局应该加大对气候适应型基础设施的投资。

In addition to the above, the Global economic Forum of 2019 identified major factors that would impact the global economy in 2019 The greatest threats are from extreme weather events, failure to mitigate and adapt to climate change, and natural disasters. Water crises are not too far behind.

Lastly, records to date indicate that 2019 will be the hottest year on record, worldwide. This is evidenced by unprecedented wildfires in Arctic circle, record breaking heat waves, rapid melting of sea ice and rise in sea level. The global averaged temperature rise since industrial times is now about 1.1°C. The implications are gloomy

- more severe weather extremes are forecast and they would be the new normal: It is advisable to expect them every year and so to plan for them;
- the melting of icebergs will transfer energy from the polar regions to the tropics, leading to more tropical cyclones, storms, coastal erosion, landslides;
- sea-level rise is forecast to increase more rapidly and this is a potential problem for the small island state as well as coastal countries;

Impact of Weather and Climate on Human Settlements

The greatest impact will be on the Sustainable Development Goals (SDGs), particularly

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



国家气象服务通过帮助规划者提高城市的气候适应性，可以减少灾害造成的伤亡，赋权贫困和弱势群体，并保护文化和自然遗产。

在国际层面，世界气象组织正在推动基于影响的、多灾种预报和预警系统以及其他气象适应性方法的工作，以响应《2015-2030 年仙台减少灾害风险框架》。

在全球人口不断增加的背景下，极端天气和气候将对人居环境带来更大压力，据联合国的数据，到 2050 年，全球人口将接近 100 亿。大多数人口将居住在城市，随之而来的是空气和水污染、城乡迁移、环境难民和冲突等问题。淡水将变得越来越稀缺，内陆国家的地下水资源也在减少。这些资源的缺乏可能会引起水传播疾病，以及由于热岛（温室）效应引起的温度升高引发的与天气有关的疾病，例如霍乱、裂谷热甚至疟疾等。

总之，对城市气候的主要人为影响是化石燃料中的二氧化碳和其他温室气体的变化，例如煤、天然气和石油。其他包括：

- 水文系统的变化（水、卫生设施和个人卫生）；
 - 城市风特征的变化；
 - 太阳辐射和能源，污染及相关的健康影响；以及
 - 气温变化（热舒适指数、通风和相关的生活方式）。
- 城市化是一种可能导致局部甚至区域气候变化的现象。

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable.

Severe weather can damage or destroy vulnerable infrastructure, resulting in both economic and human losses. In this regard, national weather reports protect infrastructure and industry from natural hazards, while climate change scenarios provide guidance on the placement and climate-proofing of infrastructure in coastal and other climate-vulnerable areas. It is, therefore, important countries and local authorities should invest more in weather and climate resilient infrastructure.

By helping planners to make cities more climate-resilient, national weather and climate services reduce deaths and injuries from hazards, empower the poor and vulnerable, and protect cultural and natural heritage sites.

At the international level, WMO is responding to the Sendai Framework for Disaster Risk Reduction 2015-2030 by facilitating work on multi-hazard early warning systems, impact-based warnings, and other tools for building weather and climate resilience.

These weather and climate extremes will be exerting more pressure on human settlements against the background of a rising global population which, according to the United nations, will be approaching 10 billion by 2050. Most of the population will be in urban cities and with this are attendant problems

从世界气象组织的角度来看，从上述事实中可以得到什么启示？

为了使城市安全、有复原力和可持续的发展，迫切需要转变模式。在使用气象信息时，过去不再是未来的指南。随着气候变化的影响越来越大，城市当局需要制定政策以应对城市化的气象和水文方面的问题。包括：

- 预警、早期行动和研究是预防、缓解和备灾的关键，这是与城市规划相关的基本原则：

许多沿海城市，特别是在热带地区，容易遭受热带风暴（飓风和旋风）和风暴潮的袭击。预计海啸数量会增加，这一点要予以考虑。

- 使建筑综合规划适应区域气候是安全、包容、有复原力和可持续的城市的一个重要特征。应用生物气候学将气候参数纳入城市规划中，以避免建筑物频繁倒塌；

- 防灾和备灾需要采取协调一致的国际行动，特别是在发展中国家，以减少生命和财产损失，以及社会和经济破坏；

- 沿海城市后退线的立法和城市规划法规的实施。噪音是城市污染的一部分，需要通过立法和意识教育加以消除；

最后，必须限制住区的规模，以避免过度拥挤，减轻地方当局提供基本人权（住房、水、能源和卫生等）的压力。



of air and water pollution, rural-urban migration, environmental refugees and conflicts. Fresh water is increasing becoming scarce and landlocked countries, underground water resources are also dwindling. The scarcity of these may increase the incidents of water-borne and weather related diseases such as cholera, rift valley fever and even malaria due to the increase in temperatures from the heat island (greenhouse) effect.

In summary, the main anthropogenic influence on urban climate is due to changes in carbon dioxide and other greenhouse gases from fossil fuels such as coal, gas and oil. The others include

- Changes in the hydrological system (water, hygiene and sanitation);

- Changes in the urban wind characteristics;

- Solar radiation and energy, pollution and associated health effects; and

- Changes in rising temperatures (thermal comfort indices, ventilation and associated life styles.

Urbanization is one phenomenon that may cause changes in local and even regional climate.

What is the take away from the above from the perspective of the World Meteorological Organisation?

In order for cities to be safe, resilient and sustainable, there an urgent need for a paradigm shift. The past is no longer a guide to the future when it comes to using weather and climate information. With the increasing impacts of climate change, urban authorities need to put in place policies that address the meteorological and hydrological aspects of urbanization. Among these are:

- Early warning, early actions and research are key to prevention, mitigation, and preparedness, which are the basic principles associated with urban planning:

many coastal cities, especially in the tropical regions, are prone to tropical storms (hurricanes and cyclones) and storm surges. Tsunamis are forecast to increase and this should be factored in.

- Adaptation of buildings integrated planning to regional climate is an important feature for Safe, Inclusive, Resilient and Sustainable City. Application of bioclimatology towards integrating climatic parameters into urban planning to avoid frequent collapse of structures;

- Disaster prevention and preparedness require concerted international action, especially in developing countries, and to reduce the loss of life, property damage, and social and economic disruption;

- legislation for setback lines for coastal cities and implementation of urban planning regulations. Noise is part of urban pollution that needs to be screened out through legislation and awareness education;

Lastly, there has to be a limit to the size of settlements to avoid overcrowding, reduce pressure on local authorities to provide basic human rights (shelter, water, energy and health, among others).



比森特·瓜里亚尔特 Vicente Gualart

加泰罗尼亚高等建筑研究院创始人、巴塞罗那市议会的前首席建筑师

Founder, Institute for Advanced Architecture of Catalonia; Former Chief Architect of Barcelona City Council

重要的不是技术本身，而是如何利用技术。如果疏忽了这一点，技术将以很快的速度毁灭地球。巴塞罗那的一些项目将公共空间改造成绿色空间，将重点放在系统设计公共交通和绿化工程。试想在未来30年内，城市里不再有私家车，自动驾驶交通系统将蓬勃发展。为了实现这一目标，我们需要有远大的目光，逐步开展项目并确保项目落地，而非仅停留在达成协议和作出承诺的层面。

中心化的城市必须围绕社区、公共市场和医疗中心而建。为了应对数字革命，人们已经进行了多种尝试，包括通过开发城市运营系统为公共场所提供免费WIFI，安装不同的传感器，从而将市民和各种数据平台整合在一个公共平台。所以，收集的数据是为了更好地理解 and 改造城市。这只是短期的设想，而长期规划则需要了解明天应该如何做，才能创建不同的更公平的城市中心，并利于地方发展。

城市本身应该是多产的，能自给自足，但不应该产生垃圾。必须提倡减少运输消耗，高效利用本土制造。更重要的是，去赋能社区，使其更具生产力，并为其提供工具，减少对进口商品的依赖。

下一代物联网有助于城市开发新的分布式模式，沿用已开发的能源链条，并在社区内共享资源。这些措施旨在创建自给自足、配套完善、互联互通的城市。

数字革命与教育息息相关：比如，要有能力建造新一代能自给自足的木制建筑，为了应对欧洲城市的挑战，我

What is important about technology is not what it is but what you can do with it. We can destroy the planet faster with technology if unheeded. Some projects in Barcelona include transforming the public space into greener space, emphasizing public transportation, planting trees, in a systematic way. Assuming that within the next 30 years, private cars will be taken out of cities – then self-driving transport system will flourish. To fulfill this, it is necessary to carve strong vision and develop projects steps by step ensuring implementation and not only agreements and promises.

Centralized cities must be distributed such that cities are built around a neighborhood, public market, health centers. To address digital revolution, there have been many attempts ranging from providing free WIFI and different sensors in public places by developing city operation system in order to integrate the citizens and various data platforms into a common public platform. Thus, collected data was the representative to better understand and transform the cities. This is short term vision while it is necessary to have long term visions to know what to do tomorrow to create different centers with more equity and better local development.

Cities should be productive again in itself, be self-reliant - but not producing trash. Less transportation-based consumption must be promoted for better use where things are produced as the model in China. It is essential to empower communities to be more

们整合城市服务和基础设施，制定创建多层城市的国际标准。将数字技术与教育结合起来，至关重要。

据估计，在未来 30 年里每个月都会出现一个拥有 300 万人口的新城市。欧洲模式依赖碳资源、能耗高，过渡型城市决不能照搬这种模式。因此，非洲城市可采取不同的方式建设新城市：向森林取经，利用可再生资源，鼓励城市采取可持续的建设方式。非洲给世界的启发是：不去照搬工业城市的模式，而去打造一个有变革能力的可持续发展城市。

productive - and less dependent on the import of goods by giving tools to be productive and independent.

The next generation of internet of things will allow cities to develop a new distributed model following many developed chains of energy, share resources within a community. With their measure the vision is to create

self-sufficient city that is equipped with interventions and well connected.

Digital revolution is connected to education - capacities to be developed for producing e.g. a new generation of buildings made of wood and self-sufficient. To address the challenge of European cities, the city services and infrastructures are integrated and develop international standards on creating multi-layered city. The idea of that digital technology relates to education cannot be overlooked.

It is estimated that urban growth will be such that every month, a new city of 3 Mio people will emerge over the next 30 years. European model is carbon dependent and high energy consumption centric which must not be copied by transient cities. So in case of Africa, a different approach could be that the cities learn from the forest, opt for renewable resources to encourage sustainable construction as new ways of city building. Africa should inspire the world: not copying the industrial city, but have a transformative sustainable city. 



拉菲·里奇 Arch. Rafi Rich

以色列智慧城市技术与战略发展有限公司执行总裁、建筑师
CEO, SUIITS Smarter Urban iT&S Strategies LTD, Israel

城市决定着人类是否能成功应对 21 世纪的全球挑战。尽管挑战是全球性的，但由于巨大的服务和基础设施差距，南半球的挑战更为严峻。例如，全球超过 8 亿人无法获得清洁水源，13 亿人仍然无法用电，超过 50 亿人无法使用互联网。

尽管投入了大量资金，但这种包容性增长的差距和阻碍仍在加剧。我们认为，造成这种情况的主要原因是缺乏市政聚焦（基础设施只是在区域和国家层面管理和建设的，没有根据不同需求和能力与当地机构合作）和缺乏数据（以知晓需要资源和服务的群体）。当不同的部门彼此不信任，数据就无法顺畅传输，资源也就无法送达到关键部门，所以一切问题源于信任。

区块链是建立信任的工具之一，它为每个人创建了一个独有的“账本”。无需第三方启动诸如能源、移动解决方案、财务等资源的本地所有权，交易和合作将变得更加便捷。

不过，如果要回答区块链是否适合城市，这个答案是比较复杂的，虽然它可以使人们拥有一个全球身份，但是由于一些先前的情况存在（如驾驶执照、保险贷款等），区块链加快了拒绝服务的速度，从而可能会给很多人造成困境，也使当前的情况变得更糟。

因此，我们提议将数字“货币”，作为一种合作参与和管理的方式，应用在次级城市环境中，从而使已经相识的人们，或是生活在同一地区或同一群体的人们能够共同决策，共创解决方案和共享商品。

Cities are where humanity will succeed or fail to answer to global challenges of the 21st century. While the challenges are global, the global south is where these challenges are much more substantial, due to the huge service and infrastructure gap. Globally, for example, over 0.8 billion people are with no access to clean water, 1.3 billion people still have no access to electricity and over 5 billion people with no access to internet.

This gap and barrier to inclusive growth is still growing despite huge financial efforts put into it. We believe that the main reasons to this is lack of municipal focus (infrastructure is managed and created regionally and nationally without collaboration with local entities with different needs and capabilities) & lack of data (to know who needs resources and services). This all comes down to trust when different sectors do not trust each other that data doesn't stream, and resources do not reach those that matter.

Blockchain is one of the tools to create trust - but creating an unique "ledger" for each person. Transactions and collaborations may be made easier and faster without third parties enabling local ownership of resources such as energy, mobility solutions, finances, etc.

However answering to the question if blockchain is fit for the city - the answer is more complex- while it enables people to have a global identity, it may also be a toll to enable faster refusal for services due to



如果将区块链应用于城镇和次级城市，我们将看到更多的共享能源、水、互联网资产、更好和更高效的住房策略、可持续和共同创建的城市。

If blockchain will be applied to towns and sub-city levels, we will see more shared energy, water, internet assets, better and more efficient housing strategies, sustainable and co-created cities.



研究地方社区应用工具时，有很多工具可以实现这种共享，但大多数工具因为需要更多资源以及排除了部分社区而退出了区块链，因此目前可以确信我们只走了一半的路，（a）创建基于本地信任的数字工具（目前不一定是区块链）；（b）投资于社区一级的信托、治理工具和程序，以实现本地所有权和资产共享；（c）制定政策，以确保此类工具不排除城市社会中的部门或群体，或是造成不利影响。

如果将其应用于城镇和次级城市，我们将看到在能源、水、互联网资产方面更多的共享现象，以及更好与更高效的住房策略和可持续的共建城市。

prior situations (i.e. driving license, insurance loan etc.) making the current bad situation for many in our society today - worse.

Therefore we propose that digital “currencies” should be used as a tool of collaborative engagement and governance in sub-city environments to enable

people that may know each other or live in a common area or under a common group to make joint decisions, create solutions together and share commodities.

Examining local community based tools there are many tools that enable such sharing- most of them opted out of blockchain due to the fact that it needed more resources and excluded parts of the community – so currently we believe in going only half of the way - (a) create digital local trust-based tools (not necessarily blockchain at this time); (b) invest on neighborhood level trust and governance tools and processes to enable local ownership and sharing of assets; and (c) create policies to enable that such tools do not exclude or create disadvantages to sectors or groups within the urban society.

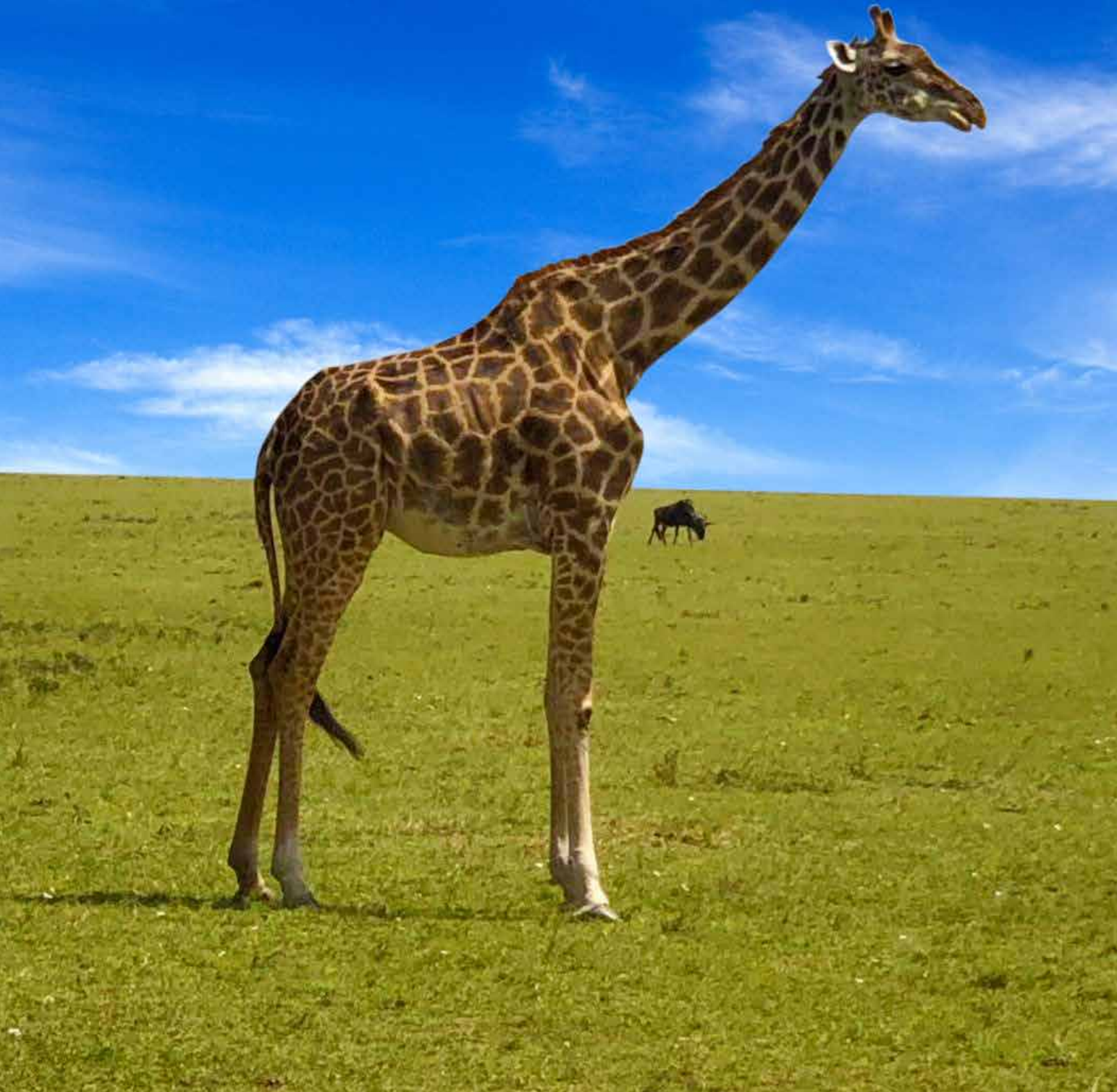
If this will be applied to towns and sub-city levels, we will see more shared energy, water, internet assets, better and more efficient housing strategies, sustainable and co-created cities. 

HERE COMES THE **BLOCKCHAIN** (?)

Decentralized Ledger



HONOR ROLL 荣誉榜





SCAHSA

Honor Roll

2019 Sustainable Cities and Human Settlements Awards

2019 “可持续城市与人居环境奖” 荣誉榜

2019 可持续城市与人居环境奖颁奖盛典（SCAHSA·飒飒奖）于9月6日晚在亚的斯亚贝巴联合国会议中心揭幕，再次成为本届年会的一大亮点。经过近一年的层层选拔、激烈角逐，当晚共有来自全球的26个单位和个人荣膺桂冠。

“可持续城市与人居环境奖”，原名“全球人居环境奖”，是由全球人居环境论坛创立和颁发的、一年一度的世界性大奖。该奖项得到联合国环境规划署等机构的大力支持和指导，已经成功举办了十四届，获奖者来自世界各地，为国际上同行业之间最佳范例知识和经验的分享传播提供了一个高规格的互动平台，产生了显著的示范效应。“飒飒奖”共设立7大类别，城市（区、镇）、景区、建筑、规划设计、交通、绿色技术、个人包括少儿均可申报。

As a highlight of GFHS 2019, the Sustainable Cities and Human Settlements Awards Ceremony (SCAHSA) 2019 saw a grand opening on the night of September 6, 2019 at UN Conference Center in Addis Ababa. After nearly a year of selection and intense competition, this year's SCAHSA has produced a total of 26 awards from all over the world.

The "Sustainable Cities and Human Settlements Awards (SCAHSA)", formerly known as the "Global Human Settlements Awards", is an annual worldwide prize awarded by Global Forum on Human Settlements (GFHS). With the support and guidance of the United Nations Environment Programme and other organizations, this Award has been successfully held for fourteen times, and the winners

come from different parts of the world. The awards have provided a high-level interactive platform to share best practices and experience, and generated a significant demonstration effect. "SCAHSA" covers seven major categories: cities (districts, towns), scenic spots, building, planning and design, transportation, green technology and individuals including children.

CITY 城市类别



全球绿色城市 Global Green City

西班牙维多利亚市 City of Vitoria-Gasteiz, Spain

全球绿色智慧城市 Global Green Smart City

马来西亚碧桂园森林城市 Country Garden Forest City, Malaysia

全球智慧城市发展范例 Global Model of Smart City Development

印度乌代浦智慧城市 Udaipur Smart City, India

土耳其埃斯基谢希尔智慧城市 Eskişehir Tepebaşı Smart City, Turkey

颁奖嘉宾 Presenter

联合国非洲经济委员会负责人奥利弗·钦甘亚先生（中）

Mr. Oliver Chinganya, Director, African Center for Statistics and Officer-in-Charge, United Nations Economic Commission for Africa (UNECA) (middle)

INDIVIDUAL 个人类别



全球人居环境杰出贡献奖
Global Human Settlements Outstanding Contribution Award

中国隆基绿能科技股份有限公司创始人兼总裁李振国
Mr. Li Zhenguo, Founder and CEO of LONGi Green Energy Technology Co., Ltd, China

国际知名建筑师、仿生学专家米克·皮尔斯
Mr. Mick Pearce, well-known architect, expert on biomimicry

阿联酋宾·扎耶德集团主席兼创始人哈列德·宾·扎耶德·阿尔·那显安亲王
Sheikh Khaled Bin Zayed Al Nahayan, Chairman and Founder of the Bin Zayed Group

泰国皇家学会美术系副院长、教授 — 玛尼拉塔纳·萨瓦迪娃·娜·阿语塔雅博士
Professor Dr. Maneeratana Sawasdiwat Na Ayutthaya, Associate Fellow, Fine Arts Department, The Royal Society of Thailand

中国清华大学客座教授、中国智慧城市建设领军人物、无锡市信息化和无线电管理局原局长张克平
Mr. Zhang Keping, Visiting Professor, Tsinghua University, former Chief of Information and Radio Bureau, Wuxi City, China

颁奖嘉宾 Presenter

肯尼亚前总理、非盟基础设施发展高级代表拉伊拉·欧丁嘉阁下 （左四）
H.E. Raila Odinga, former Prime Minister of Kenya, High Representative for Infrastructure Development at the African Union Commission (4th from left)

TOURISM 旅游类别



全球低碳生态景区
Global Low-Carbon Ecological Scenic Spot

全球人居环境规划设计奖（旅游类）
Global Human Settlements Award on Planning and Design (Scenic Area)

西班牙埃斯塔蒂特海滩生态重建
Remaking the Landscape: Life Pletera, Spain

印度尼西亚普拉塔兰西巴厘岛国家公园
Plataran L'Harmonie West Bali National Park, Indonesia

肯尼亚马赛马拉保护区
Mara Naboisho Conservancy, Masai Mara, Kenya

颁奖嘉宾 Presenter

全球人居环境论坛副主席、世界和平联盟秘书长泰吉·哈马德博士（中）
Dr. Taj Hamad, Vice Chairman of Global Forum on Human Settlements, Secretary General of Universal Peace Federation International (middle)

PLANNING AND DESIGN (I) 规划设计类别 I



全球人居环境规划设计奖

Global Human Settlements Award on Planning and Design

中国威海市南海新区市民文化中心项目设计

Nanhai New District Citizen Cultural Center, City of Weihai city, China

重庆潼南人民生态公园景观设计

The Landscape Design of People Eco-park, City of Chongqing, China

贵阳·融创城

Guiyang•Sunac City, China

美国圣路易斯市绿道规划设计－城市马赛克拼图

+StL: Growing an Urban Mosaic, United States of America

武汉长江新城起步区城市设计

Wuhan Changjiang New Town Starting Area Urban Design, China

颁奖嘉宾 Presenter

联合国区域发展中心环境部门协调员乔杜里·莫汉迪先生（左四）

Mr. Choudhury Mohanty, Coordinator of Environment Programme, UNCRD/UN DESA (4th from left)

PLANNING AND DESIGN (II) 规划设计类别 II



全球人居环境规划设计奖

Global Human Settlements Award on Planning and Design

中国镜湖宸院

The Sino Park, City of Changshu, China

常德中建·生态智慧城

Eco-Smart City by China State Construction Engineering Corporation in City of Changde, China

阿联酋马斯达尔城

Masdar City, United Arab Emirates

亚的斯亚贝巴霍马博物馆

Zoma Museum, Addis Ababa, Ethiopia

南宁江宇梦想小镇

Jiangyu Dream Town, City of Nanning, China

颁奖嘉宾 Presenter

联合国环境规划署可持续生活方式、城市和产业处前负责人阿拉布·霍巴拉先生（左四）

Mr. Arab Hoballah, Senior Sustainability Expert, former Chief, Sustainable Lifestyles, Cities and Industry Branch, UNEP (4th from left)

COMMUNITY/BUILDING 社区 / 建筑类别



全球绿色示范社区

Global Green Model Community

中建·壹号府

China State Construction Engineering Corporation • Top Mansion, China

南非约翰内斯堡社会住房项目

South Hills Mixed Income Housing Development, Johannesburg, South Africa

全球绿色商业综合体范例

Global Model of Green Commercial Complex

红星美凯龙上海爱琴海购物公园

Aegean Place of Red Star Macalline Holding Group, Shanghai, China

可持续发展国际合作范例

Global Model for Sustainable Development

柬埔寨西哈努克港经济特区

Cambodia Sihanoukville Special Economic, Kingdom of Cambodia

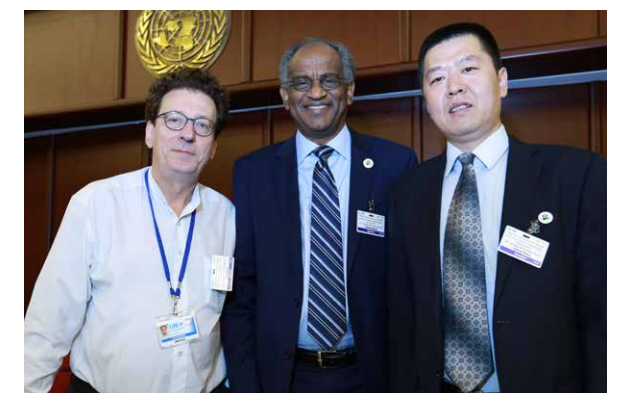
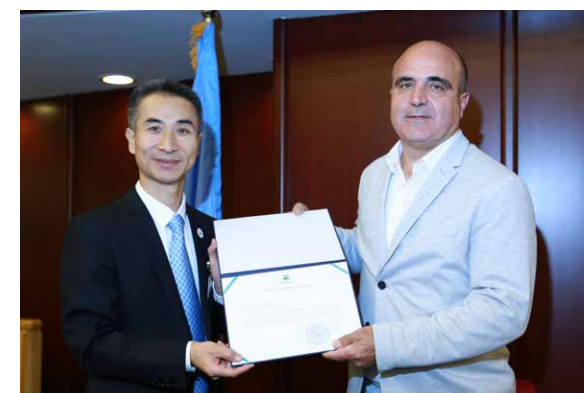
颁奖嘉宾 Presenter

美国圣塔莫妮卡市前市长、南加州都会铁路局捷运部主任帕姆·奥康纳女士（中）

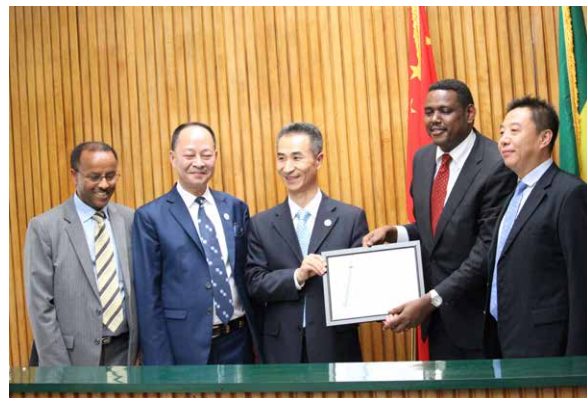
Ms. Pam O'Connor, Former Mayor of City of Santa Monica, Director, Metrolink, Southern California Regional Rail Authority, U.S.A. (middle)

PHOTO NEWS 图片报道

GFHS 2019 年会现场



参观考察 Site Visits



闭门会议 Closed-door Meeting



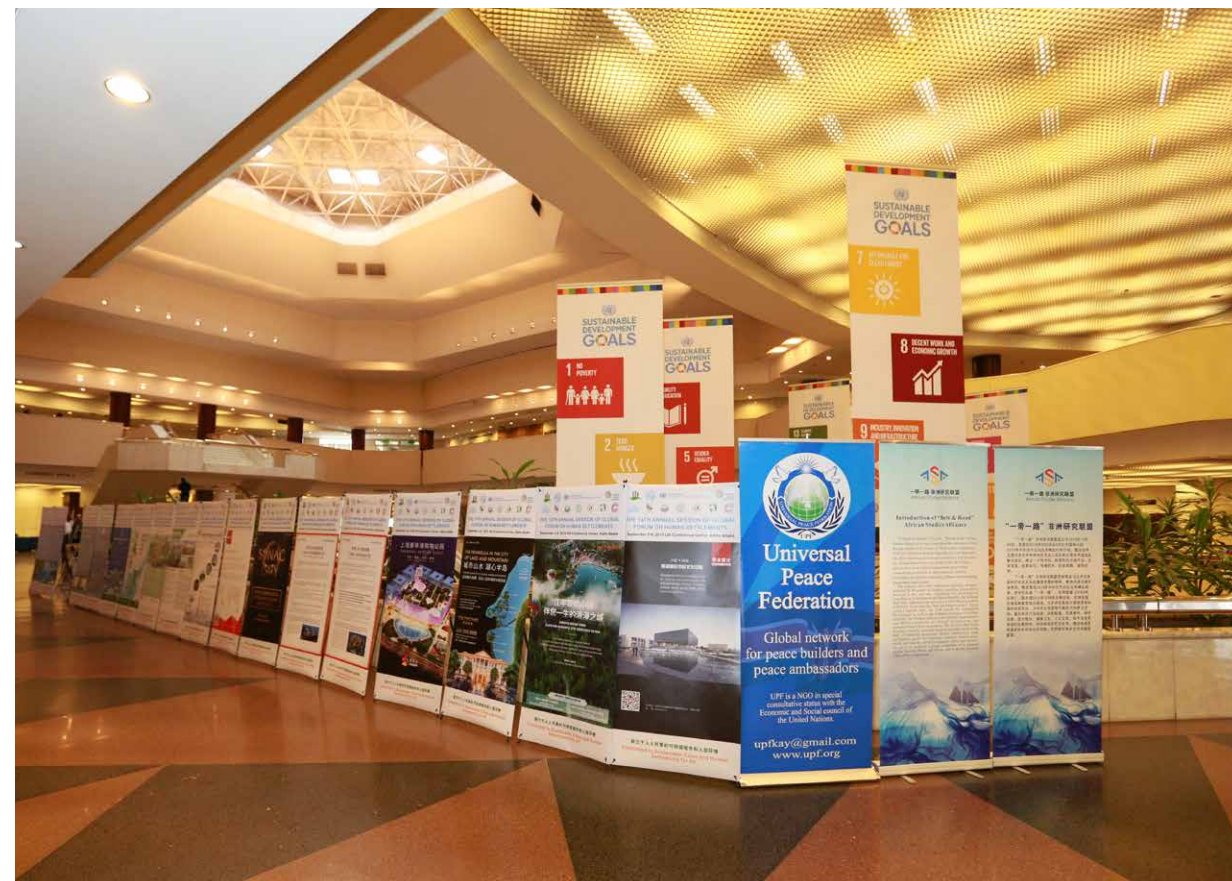
工作团队 Work Team



▲ 参观亚的斯亚贝巴 ZOMA 博物馆，这是一个艺术性与可持续性俱佳的文化旅游项目

Visit to Zoma Museum, a sustainable tourism project with good combination of arts and sustainability

展览展示 Exhibition



部分媒体报道 Mainstream Media Reports



▲ 联合国新闻报道 United Nations News report



▲ UNECA 官网报道 UNECA website report



▲ 肯尼亚媒体报道 Media report in Kenya



▲ 泛非新闻网报道 AllAfrica report



▲ 国际电信联盟 (ITU) 官网报道 ITU website report



▲ 西班牙市媒体报道 Media coverage in Spanish cities



▲ 埃塞外交部官网报道

Website coverage by the Ministry of Foreign Affairs, Ethiopia



Ceremony of Making Commitments to SDGs 2019

2019 可持续发展目标承诺仪式

第十四届全球人居环境论坛特别邀请了 10 位来自城市、企业和民间社会的代表为可持续发展目标（SDGs）在地方层面的实施作出庄严承诺。我们在这里记录了他们的承诺，和大家分享。

Ten delegates representing cities, businesses, academia and civil society announced commitments to support the implementation of the 17 Sustainable Development Goals at the GFHS 2019, which will scale up the local efforts towards achieving the SDGs. We therefore share their commitments as follows.



我是保罗·切普沃尼教授，肯尼亚凯里乔州的州长。在肯尼亚，州政府在实施联合国的可持续发展目标方面发挥着重要作用。我们支持这些目标，也意识到我们的行动对于在全球范围内成功实现这些目标至关重要，并认可这一成就将极大地改善我们的社会。

今天，在第十四届全球人居环境论坛年会上，我代表凯里乔州政府和人民自豪地承诺，我们将致力于通过《凯里乔州综合发展规划（CIDP）2018-2022》，促进 17 个可持续发展目标的实施，并将目标内容纳入 CIDP 开展的相关活动中。让我们共同努力，为我们的星球建设一个可持续的未来。

I am Prof. Paul Kiprono Chepkwony, the Governor of Kericho County, Kenya. County Governments play a critical role in the implementation of the United Nation's Sustainable Development Goals (SDGs) in Kenya. We embrace the goals, recognize that our actions are essential in advancing the success of the implementation of these goals globally, and agree that such an achievement will greatly improve our society.

Today, at the 14th Annual Session of the Global Forum on Human Settlements, on behalf of the County Government and the people of Kericho, I am proud to pledge our commitment towards promoting the implementation of the SDGs through the alignment of the Kericho County Integrated Development Plan (CIDP) 2018-2022 towards the Seventeen Goals and their incorporation into the activities undertaken by my government under the CIDP. Let us all work together towards building a sustainable future for our planet.



我是戈尔卡·犹塔然·阿吉，西班牙维多利亚-加斯泰斯市的市长。维多利亚-加斯泰斯市坚定地承诺促进和实施所有可持续发展目标。我们特别要强调关于可持续城市和社区的目标 11。城市对于实现可持续的星球起着关键作用。解决全球问题的最佳答案源于地方层面。城市聚集了世界上最多的人口，使其成为最大的温室气体来源、资源消耗者和废物源头。然而，解决方案也在于城市。因此，我们正在制定改善公共交通的政策；我们正在为人们提供量身设计的公共空间；我们正在让我们的公司参与探索一种致力于环境保护的新产业模式；我们正在与其他城市建立网络，以分享专业知识和经验，共同寻求解决未来挑战的最佳答案。

未来的城市，作为给我们提供生活所需的空间，必须要越来越高效，更负责任和更关切使所有人都能获得最佳机会，同时最大程度地实现公平并创造凝聚力。这就是维多利亚-加斯泰斯市的目标。

I am Gorka Urtaran, the Mayor of Vitoria-Gasteiz, a city that has made the firm commitment to promote and implement all the Sustainable Development Objectives. We would especially like to highlight one, objective number 11, in relation to Sustainable Cities and Communities. Cities play a key role to achieve a sustainable planet. The best answer to a global problem must come from the local level. The city concentrates the largest volume of the world's population and this has made it the greatest source of greenhouse gases, the biggest consumer of resources and the largest generator of wastes. However the solution also resides in cities. Accordingly, we are developing policies to improve public transport; we are creating public spaces with increasingly tailor-made designs for people; we are involving our companies in the search for a new model of industry committed to the environment; we are creating networks with other cities to share the know-how and experiences that will allow us to provide the best answer to the pending challenges.

The city of the future, as a space which provides the answer to our necessities, must be increasingly more efficient, more responsible and more concerned to ensure the best opportunities to all people with maximum equality and solidarity. This is our goal for Vitoria-Gasteiz.



我是梅沙克·范维克，来自南非约翰内斯堡市。我们致力于促进可持续发展目标 11 的实施，即建设包容、安全、有复原力和可持续的城市和人居环境，通过采用和实施综合议程，发展高质量的基础设施和空间规划，特别是加强城市和人居环境的复原力。我们将促进具有复原力、资源高效的基础设施的发展，以减少灾害的风险和影响，包括非正规住区和贫民窟的修复和改善。

我们承诺采用智慧城市的方法，充分利用数字化、清洁能源和技术以及创新的住房技术，使居民做出更环保的选择，促进可持续的经济增长，提升城市服务。通过我们的《内城更新战略》，我们致力于进一步增强内城核心区的密度，使人们能够沿着交通枢纽找到更近的工作机会，并最终减少我们的碳足迹。

I'm Meshack Van Wyk, from the City of Johannesburg Metropolitan Municipality. We are committed to promoting the implementation of Sustainable Development Goal 11 of making cities and human settlements inclusive, safe, resilient, and sustainable through specific focus on strengthening the resilience of cities and human settlements, through the development of quality infrastructure and spatial planning by adopting and implementing integrated agenda. We will promote the development of infrastructure that is resilient, resource efficient, and which will reduce the risks and the impact of disasters, including the rehabilitation and upgrading of informal settlements and slums.

We commit to adopt a smart city approach, which makes use of opportunities from digitalization, clean energy and technologies, as well as innovative housing technologies, thus providing options for inhabitants to make more environmentally friendly choices and boost sustainable economic growth and enabling cities to improve their service delivery. We commit towards the further densification of our inner city core through our Inner City Regeneration Strategy, which would allow people to be located along transportation nodes and closer opportunities for work and ultimately reducing our carbon footprint.



我是阿杰伊·塔瓦，来自加纳阿克拉都会区，我们致力于通过改进废物管理方法来促进可持续发展目标 11 的实施。具体而言，阿克拉希望引进新技术，通过对工作人员的培训和再培训来创建充足的人力资源储备，并促进社区清洁活动。我们也正在尝试各种方式来利用技术进行废物分类。我们在阿克拉的最终目标是提高废物管理方面的可持续技术，以推动回收利用和废物能源转化管理方案。

I'm **Nii Adjei Tawiah**, from Accra, we are committed to promoting the implementation of Sustainable Development Goal 11 through improving our approach in relation to waste management. Specifically, Accra wishes to introduce new technologies, build adequate human capacity by training and retraining of staff and to facilitate community clean-up activities. We are also looking at various ways to use technology for waste segregation. The ultimate objective for us in Accra is to upscale sustainable technologies on waste management to promote recycling and waste-to-energy management options.



我是沈涛，来自武汉长江新城管理委员会，我们致力于通过实施高水平的可持续发展规划、高标准的建设、创建可持续的人居环境、建立绿色的产业体系和营造良好的商业环境，促进所有 17 个联合国可持续发展目标的实施。

I'm **Shen Tao**, from Wuhan Changjiang New Town Administration Committee, we are committed to promoting the implementation of all 17 UN Sustainable Development Goals through implementing a high-level sustainable development plan, high-standard construction, building sustainable human settlements, establishing a green industrial system, and creating a good business environment.



我是王继赢，来自碧桂园，代表马来西亚新山的森林城市项目。我们致力于通过森林城市的建设，推动可持续发展目标之可持续城市和社区的实施。森林城市是一个具有产城融合理念、智慧城市社区范例的生态友好、环境和经济可持续发展的城市，是未来城市的典范。

I'm **Kelly Wang**, from Country Garden, representing Forest City Project in Johor Bahru, Malaysia. We are committed to promoting the implementation of Sustainable Development Goal of Sustainable Cities and Communities through the construction of Forest City, an eco-friendly, environmentally and economically sustainable city with a industry-city integration concept and complete with smart city community models, and a prime model of future cities.



我是来自美国能源联盟的克雷格·柏金斯。美国能源联盟是一个使命驱使的非营利组织，总部位于加利福尼亚州洛杉矶。我们支持所有 17 个可持续发展目标，特别致力于促进目标 7（可负担和清洁能源）的实施；目标 11，可持续的城市和社区；目标 13，气候行动；和目标 17，促进目标实现的伙伴关系。我们将通过为城市提供低碳和可持续能源解决方案的项目和倡议的计划和实施，帮助实现这些目标，并通过为弱势社区提供特殊需求服务，确保他们将我们的能源系统转型中显著获益，从而提供更大的环境公平。

I am **Craig Perkins** from The Energy Coalition, a mission-driven non-profit organization based in Los Angeles, California. We support all 17 of the Sustainable Development Goals and are specifically committed to promoting the implementation of goal number 7, Affordable and Clean Energy; goal number 11, Sustainable Cities and Communities; goal number 13, Climate Action; and goal number 17, Partnership for the Goals. We will help achieve these goals through the design and implementation of programs and initiatives that provide low-carbon and sustainable energy solutions for cities, and provide greater environmental justice by serving the special needs of disadvantaged communities and ensuring they will significantly benefit from the transformation of our energy systems.



我是冯盖·曼迪维轶，来自南非全国无线集团。我们致力于促进实现可持续发展目标 7（提供可负担和清洁能源），目标 9（工业、创新和基础设施）和目标 11（建设可持续城市和社区），通过创新和技术来弥合数字鸿沟，推动金融包容，为农村社区提供清洁能源解决方案，并使用数字平台提供信息访问，以解决社会挑战和满足人们的需求，特别是在非洲大陆。

I'm **Fungai Mandiveyi**, from the Econet Group. We are committed to promoting the implementation of Sustainable Development Goal number 7 (of providing Affordable and Clean Energy), goal number 9 (of building Industry, Innovation and Infrastructure) and Goal number 11 of (building Sustainable Cities and Communities) by innovating and leveraging technology to bridge the digital divide, drive financial inclusion, offer clean energy solutions to rural communities, and use digital platforms to provide access, and to address societal challenges and meet people's needs – particularly on the African continent.



我是阿卜杜拉·巴拉拉，来自阿联酋马斯达尔。马斯达尔（阿布扎比未来能源公司），致力于支持联合国可持续发展目标的实施。马斯达尔通过可再生能源和清洁技术的商业化和应用，促进可持续城市的发展以及通过知识和最佳范例的共享来应对全球可持续挑战，以实现这些目标。

I'm **Abdulla Balalaa**, from Masdar, UAE. Masdar, Abu Dhabi Future Energy Company, is committed to supporting the implementation of the United Nations' Sustainable Development Goals. Masdar is helping to realise these goals through the commercialization and deployment of renewable energy and clean technologies, the advancement of sustainable urban development, and its support of strategic initiatives aimed at addressing global sustainability challenges through the sharing of knowledge and best practice.



我是彭惠鑫，来自湖南中建信和智慧谷置业有限公司，我们承诺通过实施先进的建筑施工工艺、采用优质的建筑原材料、先进的设备和现代管理方式来建设包容、安全、有风险抵御能力和可持续的城市及人类住区；促进持久、包容、可持续的经济增长，实现充分和生产性就业，尽力为所有达到工作年龄的人提供就业机会及体面的工作环境。

I'm **Peng Huixin**, from Hunan Xinhe Smart Valley Real Estate Co., Ltd of CSCEC, we are committed to building inclusive, safe, resilient and sustainable cities and communities through implementing advanced building construction techniques, using high-quality building materials, advanced equipment and modern management ways; promoting long-term, inclusive and sustainable economic growth, to achieve adequate and productive employment, and strive to provide employment opportunities and a decent work environment for all working-age people.

THE 2019 ANNUAL SESSION OF
GLOBAL FORUM ON HUMAN SETTLEMENTS
OUTCOME DOCUMENT
2019 全球人居环境论坛年会
成果文件





▲ 国际电信联盟非洲区域主任安德鲁·鲁加吉在闭幕式代表主办方宣读《亚的斯亚贝巴宣言》
Mr. Andrew Rugege, ITU Regional Director for Africa presents the "Addis Ababa Declaration" at the closing session

Addis Ababa Declaration

Harnessing the Power of Digital Revolution for Urban Sustainability and Prosperity for All

《亚的斯亚贝巴宣言》

把握数字革命机遇 促进城市繁荣与可持续发展

世界各国正在向着建设更加包容的全球信息社会的目标大踏步前进。数字革命方兴未艾，在促进经济社会转型的同时，也重塑着我们的城市和社区，改变着我们的生产与生活方式。在这一进程中，积极迎接挑战和把握机遇将有助于确保“不让任何一个人掉队”。

今天我们从世界各地相聚埃塞俄比亚首都亚的斯亚贝巴的联合国会议中心，出席第十四届全球人居环境论坛年会

Countries around the world are making great strides toward building a more inclusive global information society. The digital revolution is in the ascendant. Whilst information technology and the digital economy are driving economic and social transformation worldwide, they are also triggering profound changes in urban development and human settlements. These changes are reshaping our cities and communities, and at the same time altering our

(GFHS 2019)，围绕“数字时代城市与人居环境的可持续发展”的主题，探讨如何把握数字革命的机遇，建设包容、安全、有复原力、繁荣与可持续的城市。

我们意识到：

1. 非洲对数字技术、可再生能源等新兴技术的兴趣日益浓厚，这促使非洲地区得以充分利用后发优势发展数字经济，推动可持续城市化进程。同时，投资连通性基础设施和分布式可持续能源系统，并利用信息通信技术提升服务和工业经济，将有助于创造包容、有活力的城市经济。

2. 随着数字化转型以及数字技术在社会经济中的不断运用，从根本上改变服务和/或解决方案的构思、规划、设计、部署和运营方式，对于各地区各国都至关重要。数字化转型使公民的服务更加个性化，变得无纸化，无需现金，无需到场，同时尊重公民意愿，减少摩擦。

3. 数字技术在知识与信息交流共享、资源管理、效率提升方面显示出巨大的优势，且在社会变革及空间资源配置中逐渐显现，同时使得城市规划更加智慧高效。对于城市及社区的居民来说，这些技术将大大提高他们的生活质量，不让任何一个人或是任何一个国家掉队。

4. 数字经济在促进传统经济升级转型、提升生产效率和速度方面卓有成效，所占比重持续上升，新机遇层出不穷。若是运用得当，将毫无疑问地彻底改变现有的经济结构并给全人类带来长足的发展。

5. 数字革命使人类社会面临着数百年未遇之大变局，其影响无处不在。人类的主流伦理价值观与社会经济制度正在被重塑，人工智能正在替代越来越多的人类工作，权力正在转移，人们所需要的技能亦发生转变。

6. 数字安全变得日益重要和紧迫。从国家到城市、从电网到银行、从机构到个人的商业和隐私信息都面临着越来越多的威胁，且十分脆弱，一旦遭到攻击，往往瞬间全面沦陷。

7. 高度集中的数字经济、少数机构对公众数据的把控以及不平衡的数字基础设施可能加剧贫富分化和社会不公，威胁可持续发展目标“不让一个人掉队”的承诺。

8. 日益强大的数字系统虽然可以影响到生态系统，但不能根本改变其基本运行规律，即使人工智能可以帮助人们更好的监测环境数据，减轻影响，但不可能让人类免遭环境污染和气候变化的威胁。

production mode and lifestyle. It is important to explore the opportunities and challenges that the digital revolution brings in order to ensure that no one is left behind in the process.

Therefore, the 14th Annual Session of Global Forum on Human Settlements was held on September 6 2019 at the United Nations Conference Center in Addis Ababa, Ethiopia. The participants have realized the importance of “sustainable development of cities and human settlements in the digital era” and discussed the ways in which digital technologies can be harnessed to make cities inclusive, safe, resilient, prosperous and sustainable.

We, the participants of the 14th Annual Session of Global Forum on Human Settlements, acknowledge that:

1. Africa's increased interest in emerging disruptive technologies such as digital technology and renewable energy technologies give Africa a 'late-comer' advantage to leverage urbanization for sustainable development. Investment in connectivity infrastructure and decentralized sustainable energy systems, and leveraging ICT to promote distributed service and industrial economies, would help to create an inclusive and productive urban economy. At the same time, strengthening international cooperation and technology transfer will support smart sustainable urban development in both developed and developing regions.

2. Digital transformation and the continuous process of society and economy-wide adoption of digital technologies to fundamentally change the way services and/or solutions are ideated, planned, designed, deployed and operated is essential for countries and regions. Digital transformation allows services to citizens to be personalized, paperless, cashless, presence-less, frictionless and consent-based.

3. Digital technologies offer significant potential in improving resource management, energy efficiency and knowledge and information exchange. The use of these technologies which consequences are being seen in critical societal changes and their spatial configurations can make urban planning smarter and more efficient. They have great prospects in improving the quality of life for all inhabitants of cities and other communities, leaving no one and no territory behind.

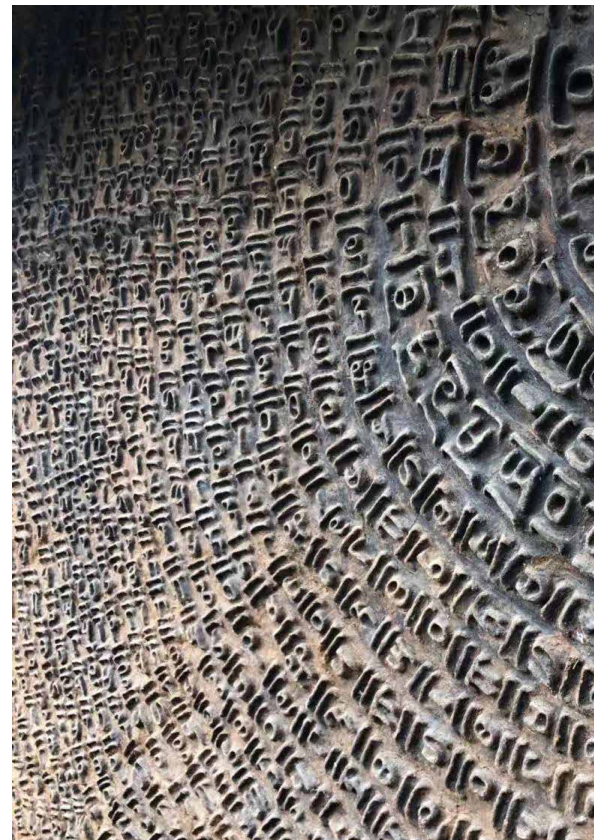
4. The digital economy has achieved fruitful results in transforming the traditional economy by dramatically improving existing production and consumption

为此，我们倡议：

1. 创新合作。非洲城市发展需要的既不是自上而下的集权控制，也不是自下而上的自由发挥，而是需要中央提供能按需调整的指导框架，以及民众自发灵活的实际行动相互配合。同时，加强国际合作和技术转让将支持发达地区与发展中地区智慧和可持续城市发展。

2. 以人为本。数字技术应用与数字经济的发展应坚持以人为本。例如，智慧可持续城市联合倡议（U4SSC）为参与全球数字革命对话提供了一个平台，通过包容磋商就关键问题达成共识。为了应对数据安全和大数据时代伦理等挑战，必须在决策过程中充分尊重每个群体和领域的想法，并通过国际平台提供最佳行动方案。

3. 规划引领。运用国际标准和最佳范例作为指导，推动数字革命和可持续城市规划。ITU-T 建议、国际绿色范例新城标准、ITU-D 报告等为包容、可持续的城市提供了具体要求、规范、最佳实践和其他方面的指引。城市总体规划应考虑绿色城市与智慧城市的融合，高起点规划，分步骤实施，持之以恒。应以紧凑型与多中心的城市形态、混合功能社区、便利宜居、环境清洁、资源循环、智慧高效、多产繁荣为主要模式，建筑和社区就地循环利用资源、生产能源与食品。



patterns. These powerful technologies offer new opportunities for many. It is expected that they will fundamentally challenge the existing economic structure and will have far-reaching consequences that if well governed will result in enhanced prosperity for all.

5. The digital revolution has had unprecedented impacts on human society. Human's ethical values as well as the social and economic systems are being confronted by the disruptions brought on by different digital technologies. In particular, a growing number of jobs are being replaced by artificial intelligence and other emerging technologies, which is causing a shifting of power and required skills.

6. Digital security has become increasingly important and urgent. Business and private information, from the state to the city, from the grid to the bank, from the organization to the individual, are increasingly vulnerable to a wide-range of cyber threats and risks. Once a digital security is compromised, it may cause the entire system to be completely collapsed.

7. A digital economy that is controlled and driven by a small number of institutions can exacerbate the polarization between the rich and the poor. Having public data and digital technologies concentrated in the hands of a few may risk widening the social and economic disparities between different population groups, which does not align with the ultimate goal of the 2030 Agenda for Sustainable Development, that is to "leave no one behind".

8. Whilst increasingly powerful digital technologies may affect the ecosystems, they cannot fundamentally alter the law of nature. That is, artificial intelligence cannot stop environmental pollution and climate change from happening, even though the technology may assist humans to better monitor them and reduce their impact.

To this end, we, the participants of the 14th Annual Session of Global Forum on Human Settlements, declare that:

1. Taking adaptive, innovative and collaborative approach. The solution to African urban challenges lies neither in the top-down command and control system nor in the bottom up self-development. What is needed is light touch top-down planning to provide guidance frameworks and structures while allowing adaptation and innovation to suit diverse needs, and bottom-up initiatives that are spontaneous, adaptive and collaborative.

4. 整合数据。智慧城市基础是建立一个安全的、跨行业、跨部门的大数据系统，包括政策法规、市民服务、能源、交通、经济、环境、社会等各方面的信息，互通共享，并深度开发利用。

5. 适用技术。采用适用的、负担得起的数字技术为城市规划、建设和管理服务，并确保其运用过程实现包容和创新，这将有助于所有人共享各种技术带来的好处，也更加有利于实现可持续发展目标和《新城市议程》设立的愿景，减少、防止环境污染和资源枯竭，改善生态系统和应对气候变化。

6. 教育先行。为了支持可持续城市发展，特别是对于后发地区的城市发展，应加强其数字基础设施，并通过教育投资扩大人们的数字能力，培养创新精神，为年轻一代提供工具和知识，使他们能够超越传统的工业化模式，推动包括数字经济在内的绿色经济发展。

7. 设计创新。公共空间和建筑物的设计和建造应充分适应数字时代的特点，加强社区的适应力和社会凝聚力。其中，扩展和重新架构数字基础设施，以确保它们稳定、高效、通用并允许快速迭代。公共空间设计应通过数字系统和应用程序实现便利进入。同时，利用可再生能源和其他数字解决方案实现建筑与可再生能源一体化。

让我们一起行动，把握数字革命的机遇，促进城市可持续发展，推动建设可持续和有复原力的社区，实现 2030 年可持续发展目标。

2. Putting people first. The development of digital technology should adopt a people-oriented approach. Initiatives such as the United for Smart Sustainable Cities offer a useful platform to engage in global dialogues on the digital revolution and to develop consensus on key issues through an inclusive process. To address challenges such as data security and big data ethics, the views of every population group and every sector must be represented in the decision-making process and international platforms offer the best way to do so.

3. Using international standards and best practices as guidance to drive the digital revolution and sustainable urban planning. International standards such as ITU-T Recommendations, International Green Model City Standards, as well as ITU-D reports and other publications, provide requirements, specifications, best practices and/or other important guidelines that would make cities more inclusive and sustainable. These standards and best practices offer guidance on making urban strategies and plans that make cities and

communities greener and smarter, promote a mixed-use and more livable community, ensure environmental efficiency by encouraging the responsible use, reuse and recycle of different resources, as well as sustainably producing energy and food that are clean and safe.

4. Integrating data. The foundation of a smart city is to establish a secure, cross-industry, cross-sectoral big data system with effective policy and regulations. Such data system provides the crucial information on how to improve social services, energy production and consumption patterns, transportation and other aspects of a city's sustainable performance.

5. Applicable technology. Using applicable and affordable digital technologies as well as inclusive and innovative processes in urban planning, construction and management is vital in ensuring that the benefits of these technologies are shared by all. This is particularly important in order to support the implementation of the New Urban Agenda and the achievement of the SDGs, reducing and preventing pollution and resource depletion, improving ecosystems sustainable management and addressing climate change.

6. Investing in talents. To support sustainable urban development, cities, especially those are located in the late-developing regions, should strengthen their digital infrastructures and invest in expanding the people's digital capacity through education. Prepare the younger generation to capture the opportunities that the digital revolution have to offer by cultivating the spirit of innovation, promoting the development of green economy, and giving them the tools and knowledge that would allow them to leapfrog the traditional industrialization paradigms.

7. Innovative design and infrastructure. The design and construction of public space and buildings should be fully adapted to the opportunities of the digital age, to strengthen communities' resilience and social cohesion. Among other, expanding and rearchitecting the digital infrastructures to ensure they are stable, efficient, versatile and allowed for rapid iteration. Public spaces should be designed to enable expanded access through digital systems and applications. Buildings should also be reconfigured to reduce energy consumption and leverage the adoption of renewable energy and other digital solutions.

We call on all concerned stakeholders to act together in harnessing the power of digital revolution, to advance sustainable urban development promoting sustainable and resilient communities and the achievement of the 17 Sustainable Development Goals. 

Twenty Recommended Statements and Viewpoints

20 条推荐观点

1. 我们重申，信息技术、创新、清洁和可再生能源、电动汽车和火车、高效建筑、可持续垃圾管理等为城市带来变革的主要驱动力将为发展中国家创造实现跨越式发展的机会，从而在城市与城郊建设新的和现代的人居环境，因为没有闭锁效应，新兴技术的进步将提供许多后发优势。

2. 我们强调，二十一世纪的社会经济和社会生态挑战以及新兴技术的破坏性影响需要新的战略领导才能。这套新的战略领导力的核心是有效管理和利用技术体制的锁定效应和跨越式效果之间的动态关系。



1. We reaffirmed that the major drivers of change in urban settings such as ICT, innovation, clean and renewable energy, electrified vehicles and trains, advancement in efficient buildings, sustainable waste management, and the like will leapfrog developing countries to create new and modern urban and peri-urban settlement, as there is no lock in and these advancements provide late comer advantage.

2. We underscored that the socio-economic and socio-ecological challenges of the 21st century coupled with the disruptive impact of emerging technologies require new set of strategic leadership. At the core of this new set of strategic leadership is the ability to effectively manage and utilize the dynamic tension between lock-in and leapfrogging effects of technological regimes.

3. We acknowledged that "carbon-based green city" and "silicon-based smart city" are the two major urban development trends. Combining the two will help upgrade and green the economy, while making cities and communities more sustainable. In view of this, the concepts of "circular economy" and "information and knowledge society" should be at the centre of smart sustainable city transitions.

4. We realized that emerging technologies and knowledge systems create more favourable conditions for combining top-down strategic planning with bottom-up operational planning that create more jobs and reduce poverty at the local level.

5. We reaffirmed that sustainable urban development must tackle various different problems simultaneously through an integrated approach that is policy-oriented, technology-driven, and community-

3. 我们承认，“碳基绿色城市”和“硅基智慧城市”是城市发展的两大趋势。将两者有力结合将有助于提升经济，实现绿色发展，同时使城市和社区更具可持续性。因此，“循环经济”和“信息与知识社会”的概念应成为向智慧的可持续城市转型的中心。

4. 我们意识到，新兴技术和知识体系为自上而下的战略规划与自下而上的、在地方层面创造就业和减贫的运营计划相结合创造了更有利的条件。

5. 我们重申，城市可持续发展必须通过以政策为导向，以技术为动力，以社区为基础的综合方法同时解决各种不同的问题，并重视气候 - 土地 - 能源 - 水 - 生物多样性之间的联系。

6. 我们强调，智慧的政策才能有助于实现智慧的城市。在重塑城市或开发新城市时，各级政府与地方社区和商业部门需要共同参与，制定共同计划，确保城市能够兑现其在就业、住房、公共服务和环境等方面许下的承诺。

7. 我们强调，地方政府需要被赋予更大的政治权力，因为他们需要应付和管理为了获得更好的水、食物、能源、工作等迁徙到城市的大规模人群。此外，对于可持续发展，每一个人都责无旁贷。

8. 我们呼吁从社团主义式城市治理向企业家式城市治理转变，从竞争性城市模式转变为植根于包容性生态经济学的合作城市模式，从脆弱的等级政府转变为与城市公民协作的政府。

9. 我们还呼吁创造社区而不是提供住房。邻里应该成为我们建设可持续人居环境的战略要点。

10. 我们强调，除非作出真正的承诺独立支持民间社会的可持续行动，特别是支持民间社会发起的创新试点项目，使其成功的经验和模式得以复制，否则政府永远无法有效地资助民间社会。

11. 我们注意到，一些发展中国家在促进社会凝聚力方面并没有完善的法律或政策框架。因此，应从宪法上确立各种社会和经济权利，例如公民应该享有健康服务、足够的食物、基本的教育、住房和社会保障等。

12. 我们建议，智慧城市发展路线图应着眼于打造高质量的应用程序，建立支持服务、工业和城市管理的统一平台，孵化自我回收和多层工业生态系统，并综合解决物联网的安全问题。

13. 我们意识到，包容性增长的差距和障碍主要是由于缺乏市政当局的重视和数据不足所致。这一切都归于信任问题。因此，我们建议创建基于信任的本地数字工具，投



based, and attaches importance to climate-land-energy-water-biodiversity nexus.

6. We emphasized that cities will not be smart when policies are not. In re-inventing our cities or developing new ones, we need to ensure all levels of governments sit with local communities and business sector to come up with a shared plan that ensure the city delivers on jobs, housing, public services and the environment.

7. We stressed that local authorities will have to become more politically powerful as they are in the position to cope with huge movements of people in search of water, food, work and energy. Also, each and every one of us takes responsibility for sustainable development.

8. We called for a shift from corporatist urban governance to entrepreneurial urban governance, from competing cities paradigm to cooperating cities rooted in inclusive eco-economics and from a vulnerable hierarchical government to collaborative governance with urban citizenry.

9. We also called for building neighbourhoods rather than providing housing. Neighbourhoods should be the strategic point of our efforts in human settlements.

10. We stressed that government can never fund civil society effectively unless genuine commitment is made to independently support civil society efforts and specifically to back up pilot innovations initiated by civil society, thereby helping create documentation of experiences and lessons for replication.

11. We noted that in some developing countries, there is no comprehensive legal or policy framework to promote social cohesion. Therefore, social and



资于社区层面的信任机制建设、治理工具和操作流程以保障本地所有权和资产共享，并制定相应政策，确保此类工具不会排斥或对城市中的某些行业和群体造成不利影响。

14. 我们呼吁通过基于自然和森林的解决方案发展新生物经济，在进行城市改造的时候运用天然的建筑材料，比如交叉复合木材、竹子等，这有助于实现绿色增长并消除贫困。

15. 我们意识到，在未来的两到三年中，太阳能将成为世界上大多数地区最经济的能源。未来，全球能源互联网可以平衡电力供应和需求，实现能源共享，并保障昼夜不停的电力供应。

16. 我们建议地方政府将积极的社会、环境和经济成果纳入项目的战略设计，以创造更强大的需求方并扩大融资渠道。同时，城市不应过度依赖外部供应驱动的资金支持，而应提高其信誉度和自给自足的能力。保险是建立财政弹性的一部分。

17. 我们重申，在数字时代，功能性的家庭是城市中健康的人居环境的基础。功能性的家庭倡导幸福、和谐共处的价值观。幸福的人类住区的秘诀在于拥抱数字化的同时培育真爱、善良、包容、同情和温暖等价值观。

18. 我们强调，非洲有九亿人住在非正式住区，60-70%的城市居民住在贫民窟。在讨论智慧城市和数字公民时，同样重要的是要记住，在速度、容量和可靠性方面，数字基础设施远非世界上最好的。预测表明非洲每年需要大约 50 亿美元的 ICT 基础设施投资。

19. 我们强调，非洲实现转型发展的可能性取决于其创造活力的创新空间的能力，这种创新空间可响应特定资源和人民的需求。非洲应通过基于自然的、适应气候变化的行动倡议摸索出一套因地制宜的城市发展模式。

20. 我们意识到，公私伙伴关系虽然开放了非洲的基础设施市场，但也导致了一些不对等的契约关系。因此，政府必须建立强有力的监管机构，制定反垄断法规，保证市场的公平和有序竞争。在基础设施市场规模较小的小型城市中，政府必须保护项目私有产权，并利用保险机构规避风险。

economic rights, such as the right to healthcare, education, food, housing and social security should be constitutionally entrenched, and citizens should be conferred legal entitlements.

12. We recommended that the roadmap for smart city development should focus on forging high-quality application, build up united platform empowering service, industry and city management, and incubate self-recycling and multi-level industrial ecosystem, and comprehensively address the security issue of IOT.

13. We realized that the gap and barrier to inclusive growth is mainly caused by lack of municipal focus and inadequate data. This all comes down to trust. Hence, it is recommended to create digital local trust-based tools, to invest on neighborhood level trust and governance tools and processes to enable local ownership and sharing of assets, and to make policies that ensure such tools do not exclude or create disadvantages to sectors and groups within the urban society.

14. We called for developing the new bioeconomy based in natural and forest solutions and reinventing cities using natural building materials such as cross-laminated timber, cross-laminated bamboo, to achieve green growth and eradicate poverty.

15. We acknowledged that in the next 2-3 years, solar will become the most economical power source in most parts of the world. In future, global energy internet could balance power supply and demands to realize energy sharing and to accomplish the persistent power supply day and night.

16. We recommended that local governments should integrate positive social, environmental and economic outcomes into the strategic design of projects to build a stronger demand side and expand financing channels. In the meanwhile, rather than depending excessively on outside supply driven funds, cities should increase their creditworthiness and self-sufficiency. Insurance is part of building financial resilience.

17. We reaffirmed that functional families are the foundation of strong healthy human settlements in cities in this digital era. Functional families have values that contribute to happy co-existence in human settlements. The recipe for happy human settlements lies in

embracing digitization with values entrenched in true love, charity, inclusivity, empathy and warmth.

18. We emphasized that in Africa, 900 million people live in informal settlements, and 60-70% of urban residents reside in slums. When discussing smart cities and digital citizenry, it is equally important to remember that the digital infrastructure is far from the world's best in terms of speed, volume and reliability. Early estimates suggested that Africa needs about \$5 billion a year for ICT infrastructure.

19. We stressed that Africa's possibility for transformative development is dependent on its ability to create a dynamic innovation space that is responsive to

the specific context of resource and needs of its people, and Africa should develop their own model of urban development through nature-based and climate-resilient initiatives.

20. We realized that Public-Private Partnership opens the African infrastructure market to non-African providers, leading to asymmetrical contracts. Governments have to put in place strong regulatory agencies and anti-monopole laws to ensure fair and managed competition in the market. In smaller cities where infrastructure market is small, governments have to democratize project ownership and use insurance institutions to mitigate risks. 



Ten Recommended Practices

10 个推荐范例

1、埃塞俄比亚政府发起了 40 亿棵树国家绿化计划，以整合人力、财力和机构资源，以最大化地扩展城市和农村绿化区域，从而扭转全国森林不断退化的局面。为此，埃塞俄比亚完成了一项雄心勃勃的计划，即在 2019 年 6 月至 8 月期间种植了 40 亿棵树，并因每天种植 3.53 亿棵树打破了世界纪录。在这 40 亿棵树中，有 5.33 亿棵树苗种在城市和城市周边地区。该项目将极大地帮助干旱多发国家应对森林砍伐和气候变化带来的挑战，同时影响更多国家和城市效仿。

2、作为一项创新的绿色城市发展行动计划，国际绿色范例新城倡议（IGMC）倡议旨在使用 IGMC 标准 3.0 作为有效的规划工具，通过提供创新理念、综合策略和方法、评价标准、监测框架和以需求为导向的解决方案，评估和指导可持续城市发展并实施试点项目。导入 IGMC 标准有利于提高资产价值和城市竞争力，促进实现人人共享的可持续城市和人居环境。今年，IGMC 倡议全球网络又添新伙伴，新近加盟的城市和企业包括南非约翰内斯堡市、加纳阿克拉市、碧桂园马来西亚森林城市、武汉长江新城管委会、西班牙托罗埃利亚 - 德蒙特格里、红星美凯龙控股集团有限公司、贵阳经开区贵阳·融创城等。

3、作为一个在水资源利用方面智慧且弹性的城市，埃塞俄比亚巴赫达尔市充分利用生态水文学可持续地管理洪水的总量、质量和风险。在城市中，湿地和自然排水景观有助于调节高峰期的供水。与此同时，湿地旨在存储和回收雨水并应对防洪安全挑战。湿地还用于过滤废水，从而减少了对废水的处理要求。这种由城市内湖组成的湿地综合系统，除了保护生物多样性外，还可以与生态旅游相结合，并通过城市农业为当地社区发展提供生计选择。

4、美国加州圣塔莫尼卡市的可持续水基础设施计划（SWIP）包括三个要素：模块化反渗透装置，新的浅咸水和盐渍地下水抽取井，以及用于抵消能耗的新太阳能电池板。一个日处理能力为一百万加仑的地下雨水和污水处理设施，以及两个容量为 450 万加仑的新雨水收集箱。该项目将收集多达 450 万加仑的雨水，每天循环利用 100 万加

1. 4 Billion Trees National Greening Program has been initiated by Ethiopian Government to synergize human, financial, and institutional resources to maximize green urban and rural areas thereby reversing national level of deforestation. In this endeavour, Ethiopia delivered on ambitious project of planting 4 billion trees in a season from June to August, and break the world record by planting over 353 million trees a day. Out of the 4 billion, 533 million seedlings were planted in the urban and peri-urban areas. The project will significantly help tackle the effects of deforestation and climate change in the drought-prone country, while influencing more countries and cities to follow suit.

2. As an innovative greener urban development action plan, IGMC Initiative aims to use IGMC Standards 3.0 as an effective planning tool for assessing and guiding sustainable urban development and conducting pilots through providing innovative concepts, integrated strategies and methodologies, benchmarks and monitoring framework as well as demand-oriented solutions. Applying the IGMC Standards is expected to help enhance assets value and urban competitiveness and facilitates sustainable cities and human settlements for all. This year, IGMC Initiative global network has continually expanded by welcoming the new partners including Wuhan Changjiang New Town Administration Committee, China; City of Quezon, the Philippines; City of Johannesburg, South Africa; City of Accra, Ghana; Forest City, Malaysia; Red Star Macalline Holding Group, China, among others.

3. As a water-wise resilient city, Bahar Dar has put eco-hydrology in place to sustainably manage the quantity, quality and risks of flooding. In the city, wetlands and natural drainage landscapes help absorb peaks in water supply, and at the same time wetlands are designed to store and recycle rainwater and address the challenge of flood safety. Wetlands are also used to filter wastewater effluent, thus reducing wastewater treatment requirements. This integrated system of wetlands that composes a lake within the city could,

Diagram of the Structure of the International Green Model City Standards 3.0
国际绿色范例新城标准3.0结构示意图



仑的城市废水，包括将来通过含水层补给间接的饮用水回用，处理多达 50 万加仑的雨水和微咸地下水，以及每年可节约超过 1,680 英亩的地下水或进口水。该计划将确保环境的可持续性，改善海滩和海湾的水质，并保证其地下水资源储量。

5、南非约翰内斯堡通过创新的交通技术等一系列积极行动来应对气候变化带来的挑战。Rea Vaya 快速公交系统

in addition to conserving biodiversity, be integrated with ecotourism and the developing of livelihood option for local communities through urban agriculture.

4. The Sustainable Water Infrastructure Program (SWIP) in Santa Monica consists of three elements including: a modular reverse osmosis unit, a new shallow brackish and saline groundwater extraction well, and new solar panels for energy offset; a below

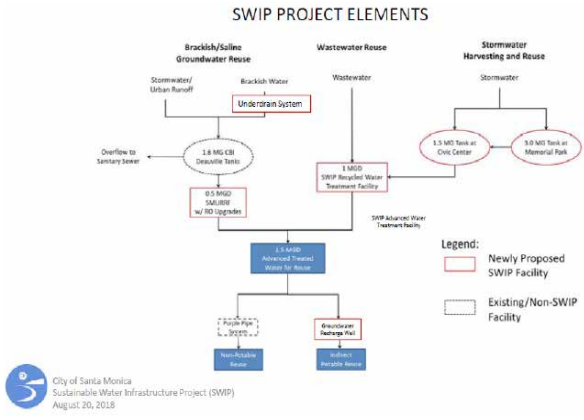


▲ 巴赫达尔市的蓝色和绿色基础设施
Blue and green infrastructures in Bahar Dar

是非洲首创，自 2009 年以来开始运营，每天的载客量高达 53000 人，并且减少了约 46000 吨二氧化碳的温室气体排放。旨在使其公共交通系统更具可持续性的另一项创新举措包括通过购买 150 辆公交车，全部使用压缩天然气。同时，正在规划中的电动汽车车队一旦投入运营，将使该市的内燃机汽车使用量在 2040 年减少 50%。

6、在西班牙维多利亚 - 加斯泰兹市已采取了一系列变革性行动，以通过基于自然的解决方案减缓和适应气候变化。维多利亚 - 加斯泰兹绿化带是一个具有高生态和景观价值的城郊公园系统，通过生态娱乐走廊实现战略性连接。在过去的 30 多年中，该市已投资建设了 833 公顷的绿化带，将很快达到 950 公顷，成功打造了一个综合的生态系统，该系统促使市民向低碳出行模式转变，建设了广泛的公园和城市步道网络以及实现可持续的水管理。自 1990 年代初以来，半天然绿化带行动一直在进行中，比如在开垦退化地区（如砾石坑和排水湿地）方面投入巨大的努力和资金。绿化带连接了城市和乡村，其中两个经过修复的郊区湿地因其具有重要的自然价值和国际保护地位而备受称道。它们既是公园和游客中心，又能有效地蓄水、净水，最大程度地减少了城市污水处理网络的河水流量。

7、加利福尼亚州巴塞特 - 阿瓦卡多实施了先进能源社区（AEC）计划，目的是为弱势社区提供最先进的能源解决方案，减少和优化弱势社区的社区能源需求，并在弱势社区中生成和存储本地可再生能源。主要设计元素包括生产者网络 - 50 个配备太阳能和存储设备的单户家庭；智能社区太阳能 + 储能 - 1.2 兆瓦系统设计，可为 235 位居民提供服务；区块链社区网络 - 监控社区资产并验证碳排放信用和电力生产；社区行动 - 有针对性的社区参与、互动和人力发展；移动电网 - 具有电动汽车拼车和微交通服务的公共电动汽车充电站；微电网弹性中心 - 专用的太阳能和存储系统，可在社区中心提供至少 4 个小时的用电弹性。



▲ 可持续水基础设施计划
The Sustainable Water Infrastructure Program

grade stormwater and sewer treatment facility with 1 million gallons per day capacity; and two new stormwater harvesting tanks with 4.5 million gallon capacity. This project will harvest up to 4.5 million gallons of stormwater, recycle 1.0 million gallons per day of municipal wastewater, including future indirect potable reuse via aquifer recharge, treat up to 0.5 million gallons of stormwater and/or brackish-saline-impaired groundwater, and conserve over 1,680 acre-feet per year of groundwater or imported water. This program will ensure environmental sustainability, improve beach and bay water quality, and guarantee the long-term yield of its groundwater resources.

5. Johannesburg has been taking bold action to combat climate change through innovative transport technology. The Rea Rea Vaya bus rapid system - the first in Africa and operated since 2009 achieves a ridership of up to 53000 passengers per day and has achieved a Green House Gas emissions reduction of approximately 46000 tons in Carbon Dioxide. Another innovation aimed at making its public transport system more sustainable includes the use of Compressed Natural Gas through the acquisition of 150 buses which are used by its own bus company, Metrobus. In the pipeline an electric vehicle fleet is being planned, which will be able to reduce the city's use of internal combustion vehicles by 50% by the year 2040.

6. A series of transformative actions have been implemented in Vitoria-Gasteiz, Spain to mitigate and adapt climate change through nature-based solutions. The Vitoria-Gasteiz Green Belt is a system of periurban parks of high ecological and landscape value, strategically linked by means of eco-recreational corridors. For over 30 years now, the city has invested in its 833-hectare green belt that will soon cover 950 hectares, in a successful mobility shift, an extensive



▲ 维多利亚 - 加斯泰兹绿化带 Vitoria-Gasteiz Green Belt

8、李振国先生是西安隆基绿色能源技术有限公司的创始人兼总裁。作为全球领先的太阳能技术公司和全球最大的单晶硅片制造商，隆基一直在有效地减少温室气体排放，促进世界能源结构的转变，并以有效的生产能力和产量发挥巨大的社会和环境效益。李先生决定了隆基集团的“用清洁能源生产清洁能源”的绿色制造发展模式。自 2015 年以来，隆基已在中国云南和马来西亚古晋建立了主要生产设施，而水力发电是马来西亚的主要能源。李先生认为，光伏产业在决定地球的未来中扮演着重要角色，“100%可再生能源发电”是实现控温目标最有效的途径。他提出了“Solar for Solar”模式，通过这种模式光伏可以在生态恢复和应对气候变化中发挥积极作用，实现“负碳地球”。

9、仿生建筑引领可持续设计之路。津巴布韦哈拉雷的东门购物中心由著名建筑师米克·皮尔斯先生设计，一直被视为仿生科学领域的一个经典案例。该建筑物没有空调或暖气，通过受非洲白蚁自冷却土堆启发设计了被动冷却系统调节温度。它的独特之处在于它不仅完全通过自然方式进行通风、冷却和加热，而且运营正常。它的通风成本是相似的空调建筑的十分之一，比哈拉雷的六座传统建筑能耗低 35%。仅在最初的五年中，该建筑为其租户节省了 350 万美元的能源成本。通过仿照自然界的形态并复制自然的过程，仿生建筑可以在自然、社会和经济环境之间取得平衡。

10、Zoma 博物馆位于埃塞俄比亚首都亚的斯亚贝巴市，是一个艺术与可持续性俱佳的社区范例。该项目原址是一个废弃的垃圾场，在建成之前开展了土地修复工作。整个博物馆包括展览馆、图书馆、儿童中心、可食用的有机花园、幼儿园、艺术和乡土建筑学校、圆形剧场、餐厅、有沼气设施的谷仓和博物馆商店等等。具体而言，通过可持续的建筑材料，如抹灰篱笆墙、玉米穗轴和干石墙，共同营造出独特而

network of parks and city walks and sustainable water-management systems. The semi-natural green belt has been working in progress since the early 1990s, with a lot of work and investment in reclaiming degraded areas such as gravel pits and drained wetlands. It links the city and the countryside - two of its suburban, restored wetland areas have been recognised for their significant natural value with international protection status. They are also efficient water retention and purification areas, parks and visitor centres, minimizing the flow of river water into the city's sewage treatment network.

7. Advanced Energy Communities Program has been carried on in Bassett-Avocado in California to provide disadvantaged communities with access to state of the art energy solutions, reduce and optimize community energy demand in disadvantaged communities, and generate & store local renewable energy in disadvantaged communities. Key design elements include prosumer network – 50 single family households equipped with solar and storage; smart community solar + storage – 1.2MW system designed to serve 235 residential participants; blockchain community network – monitors community assets and verifies carbon emission credits and electricity production; community action – targeted community engagement, outreach and workforce development; mobile grid – public EV charging stations with EV vanpooling and microtransit services; and microgrid resilience hub – dedicated solar and storage system to allow for at least 4 hours of electricity resiliency at a community center.

8. Mr. Li Zhenguo is the founder and president of Xi'an-based LONGi Green Energy Technology Co., Ltd. As the world's leading solar energy technology company and the world's largest manufacturer of monocrystalline silicon wafers, LONGi has been effectively reducing greenhouse gas emissions, promoting the transformation of the world's energy structure, and exerting enormous social and environmental benefits with efficient production capacity and output. Mr. Li decided to adopt the green manufacturing development mode of "producing clean energy with clean energy" for LONGi Group. Since 2015, LONGi has laid out its main production facilities in Yunnan, China and Kuching, Malaysia, where hydropower is the main energy source. Mr. Li believes that the PV industry plays an important role in determining the future of the earth, and that "100% renewable energy power generation" is the most effective way to achieve the goal of temperature control. He put forward the development model of "Solar for Solar", through which PV can play a positive role

又充满未来感的景观，并辅之以郁郁葱葱的有机种植菜园，让到访的游客流连忘返。其他行动还包括利用自然灌溉系统培育有机城市农业，提供有价值的绿色公共开放空间，积极鼓励社区和附近居民参与，并为其创造长期的就业等。这是一种促进本地创新，提升当地经济活力，加强社会包容性，维护生态环境以及保护传统艺术和文化的优秀实践。

in ecological restoration and the fight against climate change and realize "negative carbon earth".

9. Biomimicry architecture leads the path to sustainable design. The Eastgate in Harare, Zimbabwe designed by the well-known architect Mr. Mick Pearce remains as a great example of the science of biomimicry. The building has no air-conditioning or heating but regulates its temperature with a passive cooling system inspired by the self-cooling mounds of African termites. What makes it unique is that it is not only ventilated, cooled and heated entirely through natural means, but it works. Its ventilation costs one-tenth that of a comparable air-conditioned building and it uses 35percent less energy than six conventional

buildings in Harare. In the first five years alone the building saved its tenants \$3.5million in energy costs. Through using models from nature and copying natural processes, biomimicry architecture can make a balance between the natural, social and economic environments.

10. Zoma Museum located in Addis Ababa, Ethiopia is seen as a regenerative effort characterized by a wonderful combination between art and sustainability. Built on reclaimed land that was previously the site of an informal dumping ground, the compound includes an exhibition gallery, a library, a children center, an edible organic garden, a kindergarten, an art and vernacular architecture school, an amphitheater, a restaurant, a barn with a biogas facility and a museum shop. Sustainable construction methods like wattle and daub, cob and drystone walls come together to create a unique and futuristic landscape, complemented by a beautifully lush and organically cultivated vegetable garden. In line with a participatory approach, the inhabitants of the neighborhood are employed in the facility. In short, it represents an excellent practice that fosters local innovation, promotes economic growth, strengthens social inclusion, safeguards ecological environment, and protects traditional arts and culture. 

BEST PRACTICES

最佳范例

Stick to Ecology Priority and Green Development to Forge a High-Quality Development Model City along the Yangtze River Economic Belt

坚持生态优先绿色发展
打造长江经济带高质量发展典范新城

FOREST CITY
An Emerging Futuristic Urban Development
A Prime Model of Future Cities

碧桂园森林城市
产能合作新城 未来城市榜样



Green facade

在哈拉雷的玻璃和混凝土塔楼前，从东南方向看米克·皮尔斯先生设计的东门中心

Eastgate seen from the south-east,
in front of Harare's glass and concrete towers.
Designed by Mr. Mick Pearce



Stick to Ecology Priority and Green Development to Forge a High-Quality Development Model City along the Yangtze River Economic Belt

坚持生态优先绿色发展 打造长江经济带高质量发展典范新城

武汉，因江得名，依江而兴，是一座有着深厚历史积淀的城市、一座站在时代潮头的超大城市。以超前理念，世界眼光，谋划出城市格局的伟大蝶变。在开拓中不忘初心，托举起复兴大武汉的伟大梦想。2017年年初，武汉市第十三次党代会提出“规划建设长江新城”，2017年9月30日，武汉长江新城党工委、管委会挂牌成立。从此，武汉长江新城正式拉开“打造长江经济带高质量发展示范区、未来城市建设样板”的序幕。

Wuhan is named after and built along the Yangtze River, which is a megacity with a long history and stands ahead of the time. A great qualitative change of urban pattern is emerging from advanced concepts and world visions, and a great dream of revitalizing Wuhan has been held up by staying true to the mission in pioneering. Early in 2017, the concept of "Planning and Building the Changjiang New Town" was proposed at the 13th Congress of Party Representatives of Wuhan,

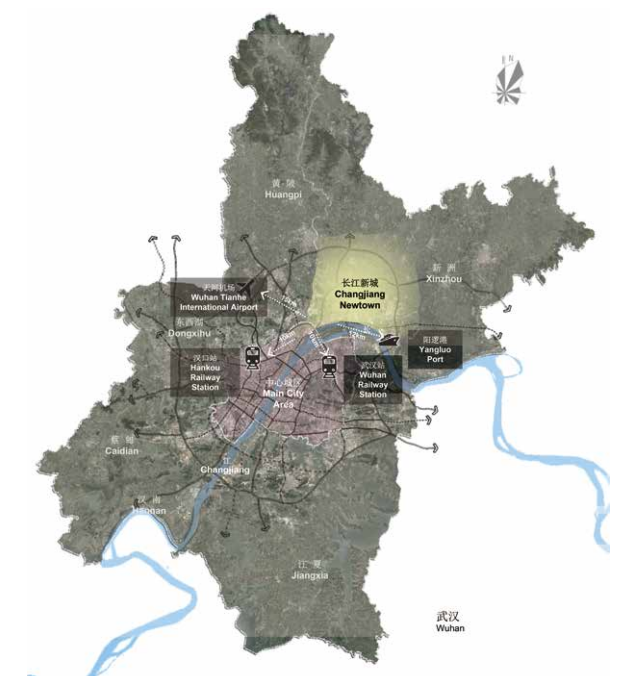
立意深远，响应国家战略

规划建设武汉长江新城是湖北武汉贯彻推动长江经济带、中部地区崛起战略的重大举措，是打造国家中心城市和世界亮点城市、全面复兴大武汉的战略举措，是百年大计、湖北大事、武汉大业。贯彻落实国家战略，体现湖北武汉在国家重大战略中的责任担当和重要作用，进一步增强区域引领带动能力，打造长江经济带新的增长极、“一带一路”重要节点和中部地区崛起战略重要支点。探索新时代城市发展新模式，创新新城（新区）规划建设体制机制，有效化解各种“城市病”，实现城市规划建设与生态修复、环境保护、绿色发展的融合共赢，为长江经济带绿色发展探索可复制可推广经验。构建有区域特色的现代产业体系，促进武汉地区的科技创新、人力资源、现代金融等核心要素与实体经济深度融合，加快新旧动能转换，为湖北武汉高质量发展提供强有力的支撑。优化城市发展空间布局，为武汉未来30-50年发展预留空间，并通过新区建设带动老城区发展，加快国家中心城市建设，促进城市均衡协调可持续发展。

and Party Working Committee and Administration Committee of Wuhan Wuhan Changjiang New Town were established on September 30, 2017. The prelude of "forging high-quality development demonstration district along the Yangtze River Economic Belt and city construction template in the future" has been officially opened in Wuhan Changjiang New Town since then.

Far-reaching Concept Responding to the National Strategy

Planning and construction of Wuhan Changjiang New Town constitute a major measure to carry forward the strategies of promoting rise of the Yangtze River Economic Belt and Middle China taken by Wuhan Municipal Government, a strategic measure to forge a national central city and global highlight city and comprehensively revitalize Wuhan, and also a project of vital and lasting importance, a major event in Hubei Province and a great cause of Wuhan City. We will implement national strategies, reflect the responsibilities and significant functions of Hubei Wuhan in major national strategies, further reinforce regional driving ability, and forge new growth poles of the Yangtze River Economic Belt, key nodes of the "Belt and Road Initiative" and important pivots for the strategy of Middle China rising. We will explore for new urban development model in the new era, create the system and mechanism of demonstration district (new district) planning and construction, effectively solve various



▲ 长江新城在武汉区位图
Location Map of Changjiang New Town in Wuhan

科学选址，优势凸显

经过 10 余次专题调研座谈会讨论，在国内知名院士、勘察设计师和在城市规划设计、经济、历史、文化等相关领域有关外国专家 300 余人的建言献策下，同时以问卷调查、征文等形式广泛收集社会各方面意见建议后，长江新城的选址于 2017 年 7 月落子确定。长江新城选址于武汉东北部的长江之滨，范围东至倒水河，南至长江，西至淝水河、府河、张公堤路，北至 318 国道，总面积约 500 平方公里。长江新城规划建设区域具有良好条件。长江新城与武昌地区、汉阳地区、汉口地区呈四足鼎立之势，促进武汉南北均衡发展。长江新城东承接黄冈等市和皖江经济带、长三角城市群；西联汉口主城、孝感等市和成渝城市群；南靠光谷、长株潭城市群和泛珠三角城市群，北接大别山革命老区和中原城市群，是带动中部地区崛起的重要极核。处于航运、空运、铁路三位一体的立体交通网络中心位置，半小时可达机场、高铁站，管委会办公驻地 15 分钟可达武汉市委市政府。毗邻长江、府河、淝水河、倒水河和武湖、后湖等众多河流湖泊，水资源丰富，生态环境好，环境承载力强。无地质灾害和不良地质作用发育，地基承载力较高，适宜建设开发。辖区人口少，建筑体量小，开发建设成本相对较低，可规划建设土地充裕且可塑性强，具备高起点高标准规划建设的基础条件。

高点定位，聚焦规划

长江新城功能定位是“五城”，即打造高效高新产业集聚的创新名城、大江大湖魅力凸显的生态绿城、新一代信息技术领先应用的现代智城、对外开放合作水平一流的国际友城、百姓富裕安居乐业的创富民城，最终建设成为践行新发展理念的典范新城。

长江新城对标雄安新区，坚持“世界眼光、国际标准、中国特色、高点定位”，以总体规划为基础，同步编制土地利用规划、总规环评报告，配套开展产业发展、水系统、综合交通、综合能源、地下空间、智慧城市、生态环境保护等多个专项规划，有序组织开展起步区城市设计和起步区控制性详规的编制工作。由中国工程院院士、同济大学副校长吴志强领衔编制的总体规划，由法国阿海普公司编制的长江新城起步区城市设计方案，均已通过全国专家评审和市规委会审查。起步区控制性详规市政府已批复。由工信部赛迪研究院编制的产业规划、由钮新强院士牵头编制的水系统专项规划、综合能源规划等通过全国专家评审，其他各专项规划已陆续结题。目前，“一总八专”规划体系基本建立。

"urban diseases", realize fusion and win-win outcome of urban planning and construction, ecology repair, environmental protection and green development, and explore for duplicable and promotable reference experience for green development along the Yangtze River Economic Belt. We will build a modern industrial system with regional characteristics, promote in-depth integration of scientific and technological innovation, human resource, modern finance and other core elements with the real economy in Wuhan, and accelerate new-traditional kinetic energy conversion, and thereby providing powerful supports to high-quality development of Wuhan, Hubei. We will optimize urban development space layout, reserve the space for development in the following 30-50 years in Wuhan, accelerate the construction of the national central city by driving development in old urban area with construction of new district, and promote balanced, coordinated and sustainable development of the city.

Scientific Site Selection
Advantages Highlighted

After over 10 thematic research forums, with contribution of over 300 domestic famous academicians, surveying and design masters and foreign experts in fields relating to urban planning and design, economy, history and culture, and supported by numerous opinions and suggestions collected from all walks of life in the forms of questionnaires, soliciting articles and others, the site of the Wuhan Changjiang New Town was finally confirmed in July 2017. The site of the Wuhan Changjiang New Town is located along the Yangtze River in northeast Wuhan, east to Daoshui River, south to the Yangtze River, west to Sheshui River, Fuhe River and Zhanggongdi Road and north to State Road 318, covering about 500 square kilometers in total. The planning and construction area for the Wuhan Changjiang New Town enjoys favorable conditions. The Wuhan Changjiang New Town, Wuchang District, Hanyang District and Hankou District forge a situation of quadra-party confrontation, promoting south-north balanced development in Wuhan. The Yangtze River Economic Belt follows Huanggang and other cities, Wanjiang River Economic Belt and the Yangtze River Delta Urban Agglomeration, which is linked to Hankou downtown, Xiaogan and other cities and Chengdu-Chongqing Urban Agglomeration in the west, bordered to Optics Valley, Changsha-Zhuzhou-Xiangtan City Group and Pan-Pearl River Delta Urban Agglomeration in the south, and Dabie Mountain Old Revolutionary Base Area and Central Henan Urban Agglomeration in

生态优先，三生融合

塑造“国际范、荆楚风、水乡韵”的形象，突出长江文明风貌特质。构建“木兰山 - 武湖 - 长江”的中轴景观，构建网络化、高品质的景观体系。强化历史文化资源的保护与活化。构建“梯次化”总体结构。秉承传统营城智慧，形成“一湖八湾、一轴三带、一心十片”的空间结构。培育“特色化”生态空间，突出“理水”，依托武湖、草湖构建城市水库，联通长江、淝水、倒水，构建纵横景观水网，将被动防洪变为主动调蓄。生态“成网”，形成“十字生态轴、环城森林带、纵横蓝绿网、两级通风廊道”特色生态空间体系。营造“品质化”生活空间，坚持以人民为中心，构建步行 15 分钟可达，“宜居、宜业、宜游”的城镇社区生活圈。构建“复合化”地下空间，以分层利用为导向，促进地上、地面、地下立体协调，总体形成依托轨道交通，串联各大功能组团片区的地下空间总体结构，重点发展地下交通设施、物流与仓储设施、公共服务设施、市政基础设施、防空防灾设施等。

the north, being an important polar nucleus driving the rise of Middle China. It is located in the central position of the three-dimensional traffic network integrated with navigation, airway and railway. It takes only half an hour to reach the airport and high-speed rail station, and 15 minutes from the compound of the management committee to Wuhan Municipal Party Committee and Government. It is adjacent to the Yangtze River, Fuhe River, Sheshui River, Daoshui River, Wuhu Lake, Houhu Lake and many other rivers and lakes, which gains it abundant water resources, excellent ecological environment and strong environmental carrying capacity. There is no geological disaster and unfavorable geology actions developed, and the superior bearing capacity of foundation soil is suitable for construction and development. As the jurisdiction has a small population and small building volume, the development and construction costs are relatively lower, available land for planning and construction is abundant and has high plasticity, gaining it the basic conditions for high-starting-point and high-standard planning and construction.

小尺度街区模式
Small block model



▲ 小街区密路网示意图 Schematic Diagram of Dense Road Network and Small Blocks



▲ 武汉长江新城起步区中轴线效果图 Central Axis Rendering of Startup Area of Wuhan Changjiang New Town

基础先行，完善城市脉络

搭建百年基础设施框架，建设“高效能、高品质、高韧度”的市政设施体系。强化“陆港、空港、水港”多式联运体系，构建高效智慧的综合交通网。构建“地铁+慢行”绿色出行体系，构建舒适、便捷、安全的步行系统、自行车出行系统及水上游览系统，实现绿色出行比大于85%。坚持“窄马路、密路网”，规划形成“四横四纵两环”的快速路系统。构建层级覆盖、均衡共享的公共服务网络，形成“城市级+组团级+社区级”三级城市公共服务体系。建设新型智慧城市。坚持数字城市与物理城市同步规划，同步建设。推进全5G覆盖、千兆光纤入户、水陆空天地一体化数据系统、车路协同的智慧交通系统等基础设施建设。建立绿色、低碳的智能环保和智能能源体系，构建智能公共服务体系和便捷智慧生活。构建“城市大脑”，搭建“BIM+CIM+GIS”相结合的智能城市运营系统，探索智慧城市建设、监控、评估、管理新模式。

创新引领，构建现代产业体系

突出创新驱动，集聚高端高新资源，推动新旧动能转换，强化区域、市域协同发展，率先建立以绿色、智能、生命为主导的现代产业体系。重点布局人工智能、生命健康、金融科技等高新产业，积极导入金融总部、商务服务、文化

High-spot Positioning Focus on Planning

The functional orientation of the Wuhan Changjiang New Town is "Five-City", that is, to create an innovative city gathering efficient high-tech industries, an ecological green city with charm of rivers and lakes highlighted, a modern intelligent city applying the new generation of information technologies in advance, an international friendly city with top-notch opening and a cooperation and prosperous city where the common people live happy and rich, which will finally be built into a typical new district practicing new development concepts.

The Yangtze River Demonstration District follows Xiong'an New Area, sticks to the principles of "world vision, international standard, Chinese characteristics, and high-spot positioning", synchronously formulates land use planning and overall environmental assessment report based on overall planning, carries out multiple special plans for industrial development, water system, comprehensive transportation, comprehensive energy, underground space, intelligent space and ecological environment protection as supports, and orderly organize and carry out formulation of urban design in starting area and controlling regulations for starting area. The overall planning compiled under leadership of

娱乐等高端功能。构建“热带雨林式”创新生态系统，全面提升武汉的全球科技要素集聚能力。

久久为功，分期建成典范新城

分三步推进长江新城建设。到2025年，基本形成典范城市的建设框架。强化沿江发展轴、西部发展轴的建设，形成以起步区、长江科学城以及阳逻地区为重点空间，建成区域及骨架交通设施，形成现代威尼斯示范片区。到2035年，基本建成创新引领的现代化典范城市。进一步拓展建设其他功能组团，强化各发展体系的完整性构建，完成新城各项支撑系统。预测至2035年，长江新城常住人口将达到200万左右，按照300万预留公共服务设施和基础设施的保障能力；规划控制城镇建设用地200平方公里。通过建设长江新城，引导武汉市域空间结构由“1+6”向“1331”结构转变，形成以主城为核心，光谷、车都、临空副城为重点，东部、南部、西部新城组群为支撑，长江新城为战略发展方向的空间结构。

展望2050年，全面建成具有国际影响力和中国特色的现代化城市。长江新城周边区域联动发展格局逐步完善，区域辐射带动作用明显。总体形成“2025年沿江发展、2035年环湖北拓、2050年全面建成”的发展时序。

(武汉长江新城管理委员会供稿)

Academician of the Chinese Academy of Engineering and Vice President of Tongji University, Wu Zhiqiang, and the urban design scheme for the starting area of the Yangtze River Demonstration District compiled by AREP in France have passed national expert review and review of the municipal specification committee. The controlling regulations for the starting area have been approved by the municipal government. The industrial planning formulated by CCID Research Institute of the Ministry of Industry and Information Technology, the special planning for water system compiled under leadership of Academician Niu Xinqiang, comprehensive energy planning and others have passed the national expert review, and other special plans have been successfully ended. Currently, the planning system characterized by one master plan and eight special plans has been basically established.

Ecology Priority in the Integration of Production, Living and Ecology

We will form an "internationalized, Jingchu style and water town" image, and highlight the civilized style and characteristics of the Yangtze River; build a central-axis landscape of "Mulan Mountain-Wuhu Lake-the Yangtze River", and establish a network-based and



高线公园效果图 High Line Park Rendering

high-quality landscape system; reinforce the protection and revitalization of historical and cultural resources; and build an overall "cascade" structure. We will take over the traditional city operating intelligence to form a space structure of "one lake and eight bays, one axis and three belts, and one core and ten pieces"; cultivate "characterized" ecological space, highlight "water-modulation", and build an urban reservoir which is linked to the Yangtze River, Sheshui River and Daoshui River relying on Wuhu Lake and Caohu Lake in order to build a landscape water network in length and breadth and convert passive flood control to active regulation and storage; form an ecological "network" to build a characteristic ecological space system featured in "cross ecological axis, forest belt encircling the city, vertical and horizontal blue green network and two-grade ventilation corridor"; create a "high-quality" living space, sticking to the people-oriented principle to build a 15 minutes' walk township community suitable for "living, business and tourism"; and build a "compound" underground space, promoting aboveground-ground-underground coordination under guidance of layered utilization to generally form an overall underground space structure linking various major functional organization areas based on rail traffic, and focus on developing underground traffic facilities, logistics and storage facilities, public service facilities, municipal infrastructure, air defense and disaster prevention facilities.

Infrastructure Going Ahead in Urban Context Perfection

We will set up the one-hundred infrastructure framework, and establish a municipal facility system featured in "high efficiency, high quality and high tenacity"; reinforce the multi-mode transport system of "land port, airport and water port", and construct an efficient and intelligent comprehensive traffic network; build a green travelling system of "subway + slow walking", establish a comfortable, convenient and safe walking system, bicycle travelling system and water sightseeing system, and realize a proportion of green travelling larger than 85%; plan to form an expressway system of "four-cross, four-lengthwise and two-ring" by sticking to "narrow road and dense road network"; build a public service network featured in covered layers and balanced sharing to form a "city + cluster + community" urban public service system; build a new intelligent city; stick to synchronous planning and construction of digital city and physical city; promote full 5G coverage, entrance of gigabit fiber, data system integrated with water, land and air, intelligent traffic system with vehicles

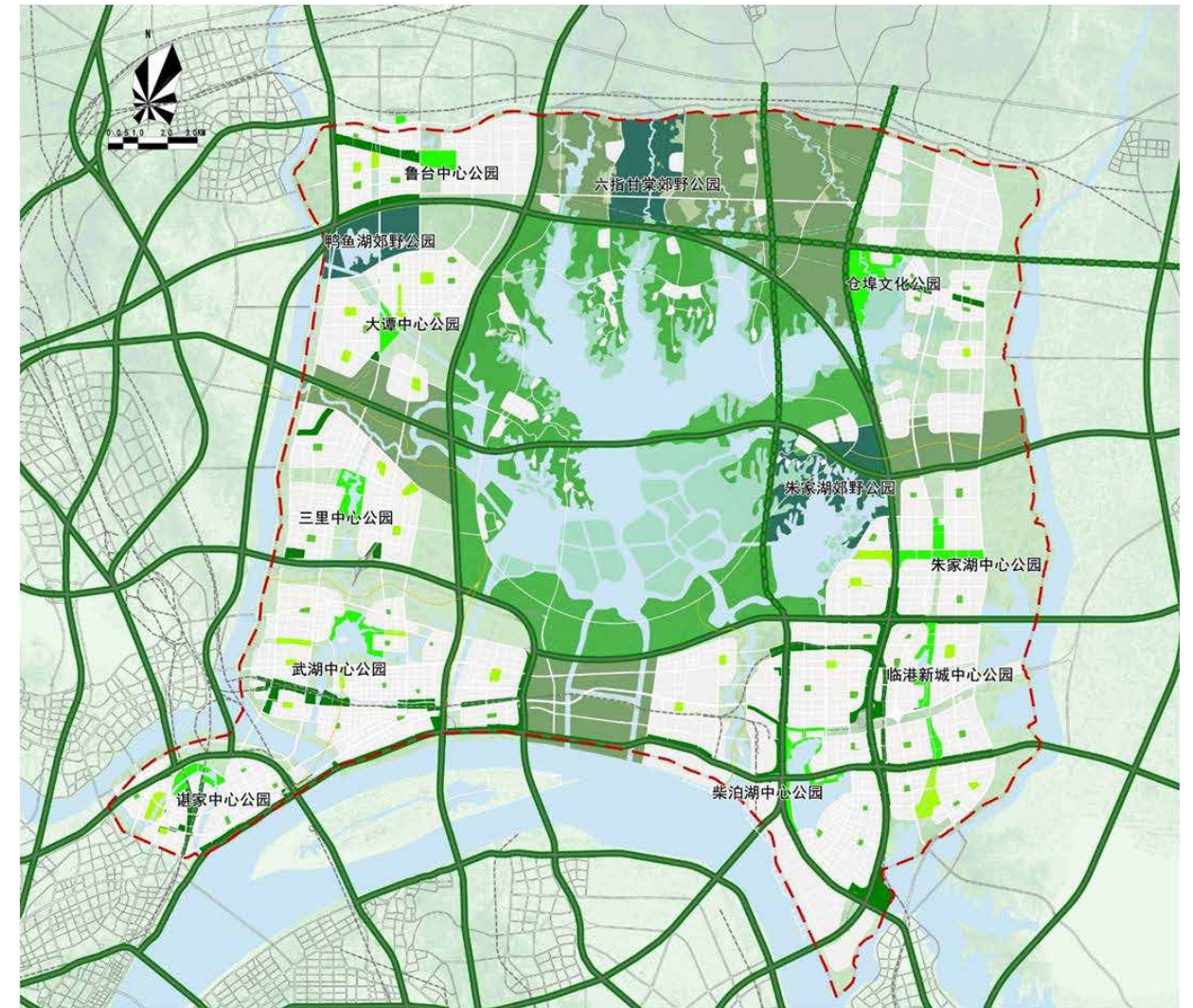
and roads coordinated and construction of other infrastructure items; establish a green and low-carbon intelligent environmental protection and intelligent energy system to construct an intelligent public service system and convenient intelligent life; and build a "city brain" to set up an intelligent city operating system combined with "BIM + CIM + GIS", and explore for a new mode for construction, monitoring, evaluation and management of intelligent city.

Innovation oriented, building a modern industrial system

We will highlight driving power of innovation, gather high-end and high-tech resources, promote new-traditional kinetic energy conversion, reinforce region-city coordinated development, and lead to establish a modern industrial system led by green, intelligence and life; focus on laying out artificial intelligence, life and health, financial science and technology and other high-tech industries, and actively introduce in high-end functions, including finance headquarter, business service and cultural entertainment; and build an innovative ecological system of "tropical rainforest style", and comprehensively improve the capability of Wuhan of gathering global science and technology elements.

Building a Model Demonstration District in Phases and in a Long Run

We will promote the construction of the Changjiang New Town in three steps. The basic construction framework of the model city will be established by 2025. We will reinforce construction along river development axis and western development axis, form a space with starting area, Yangtze River Science City and Yangluo District as key point, establish regional and framework traffic facilities, and build a modern Venice demonstration area. An innovative and leading modern model city will be basically established by 2035. We will further expand to build other functional clusters, reinforce complete construction of all development systems, and complete all supporting systems of the demonstration district. It is anticipated that by 2035, the permanent resident population of the Yangtze River Demonstration City will reach about 2 million, where the guarantee capability of public service facilities and infrastructure for a population of 3 million will be reserved, and 200km² of urban construction land will be planed and controlled. We will lead to convert the urban space structure of Wuhan to "1331" from "1 + 6" through



▲ 武汉长江新城绿地系统图 Map of Green Space System of Wuhan Changjiang New Town

construction of the Changjiang New Town, and form a space structure where the main city is the core, Optics Valley, Car Capital and Linkong Vice City are the key points, eastern, southern and western new city clusters provide supports, and the Changjiang New Town is taken as the strategic development direction.

Looking to the future, a modern city with international influence and Chinese characteristics will be comprehensively built by 2050, where the

linkage development pattern in surroundings of the Changjiang New Town will be gradually completed, and the regional radiation function will become remarkable. The development sequence of "development along the Yangtze River by 2025, expansion towards the north around the lake by 2035 and comprehensive completion by 2050" will be basically formed. 

(Article by Wuhan Changjiang New Town Administration Committee)

武汉长江新城

WUHAN CHANGJIANG NEW TOWN

绿色经济·智能经济·生命经济
GREEN ECONOMY·SMART ECONOMY·LIFE ECONOMY

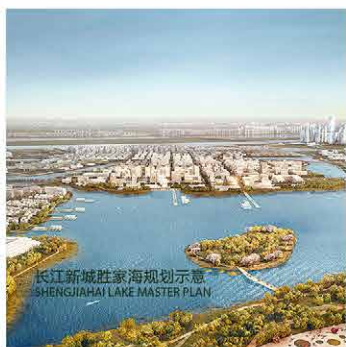
长江经济带绿色发展示范区

GREEN DEVELOPMENT DEMONSTRATION ZONE OF YANGTZE RIVER ECONOMIC BELT

长江新城起步区鸟瞰
BIRD'S EYE VIEW OF THE START-UP AREA
OF CHANGJIANG NEW TOWN



长江新城高线公园规划示意
CHANGJIANG NEW TOWN HIGH LINE PARK
MASTER PLAN



武汉长江新城

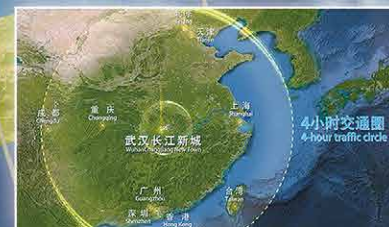
WUHAN CHANGJIANG NEW TOWN

WUHAN CHANGJIANG NEW TOWN

长江新城总平面示意图
GENERAL LAYOUT OF CHANGJIANG NEW TOWN



武汉市域空间结构规划示意
CONSTRUCTION PLAN OF URBAN SPACES
IN WUHAN



长江新城全国区位优势
CHANGJIANG NEW TOWN'S LOCATION
IN CHINA

Five Advantages

Superior location

Connecting Wuhan's main city areas and the main axis of Yangtze River in Wuhan, it promotes Wuhan's north-south balance development. Linking Chengdu-Chongqing City Cluster, Changsha-Zhuzhou-Xiangtan City Cluster, Pan-Pearl-River Delta, the old revolutionary area of the Dabie Mountains and the Central Plain City Cluster, it takes the core role to drive the rise of the central region.

Convenient transportation

Being in the center of the three-dimensional transportation network of water, aviation and high-speed railway, it takes only half an hour from the New Town to the airport or to the high-speed rail station, and 15 minutes to downtown Hankou.

Green ecology

Bordering the Yangtze River, the Fu River, the Sheshui River, the Daoshui River, the Wu Lake, the Hou Lake and many other rivers and lakes, it boasts rich water resources, beautiful ecological environment, abundant land with excellent conditions, and good environmental capacity. The ratio of water to green land is 65%.

Profound cultures

Rooted deeply in the Yangtze River culture of water transport and ports, as well as the traditional culture represented by the ancient city site of Panlong and Cangbu Ancient Town, the New Town will vigorously promote red culture and Jingchu culture, bringing the Yangtze River civilization to a new high level.

Favorable policies

Sustaining Wuhan's high-quality development, a great cause that lasts beyond one hundred years will take effect. The New Town will be a focal point of the gathering efforts of Wuhan.

五大优势

区位优势

有机联接武汉主城、联贯武汉长江主轴，促进武汉南北均衡发展；联接成渝城市群、长株潭城市群、泛珠三角城市群、大别山革命老区和中原城市群，是带动中部地区崛起的重要极核。

交通便捷

处于水运、航空、高速铁路三位一体的立体交通网络中心位置。半小时可达机场、高铁站，15分钟可达汉口主城。

生态良好

毗邻长江、府河、滠水河、倒水河和武湖、后湖等众多河流湖泊，滨江拥湖，水资源丰富，生态环境优美，土地充裕且可塑性强，环境承载力强。蓝绿比例达到65%。

文化厚重

具有以水运、港口为特色的长江文化，以盘龙城遗址、仓埠古镇为代表的传统文化，大力发扬红色文化、荆楚文化，打造长江文明新高地。

政策集聚

长江新城是百年大计、武汉大业，是武汉市高质量发展的后劲所在，举全市之力打造的重点、亮点区域。

基本情况

BASIC INFORMATION

500km²：长江新城选址于中国湖北武汉东北部的长江之滨，总面积约500平方公里。规划建设武汉长江新城是打造国家中心城市和世界亮点城市、全面复兴大武汉的战略举措，是湖北省、武汉市高质量发展重点区域。

58.8km²：长江新城起步区约58.8平方公里，如上图所示。

500km²：Changjiang New Town is located in northeastern Wuhan by the Yangtze River, with an estimated area of 500 square kilometers. The planning and construction of Wuhan Changjiang New Town is a strategic initiative to build a national central city and a global spotlight city, as well as to comprehensively rejuvenate the grand city of Wuhan. It will be a key area for high-quality development in Hubei Province and Wuhan.

58.8km²：The newly launched urban design of the start-up area of Changjiang New Town Project covers an area of about 58.8 square kilometers. As shown above.

五大定位

FIVE OBJECTIVES

创新名城：打造高端高新产业集聚的创新名城。
生态绿城：大江大湖魅力凸显的生态绿城。
现代智城：新一代信息技术领先应用的现代智城。
国际友城：对外开放合作水平一流的国际友城。
创富民城：百姓富裕安居乐业的创富民城。
最终建设成为践行新发展理念的典范新城。

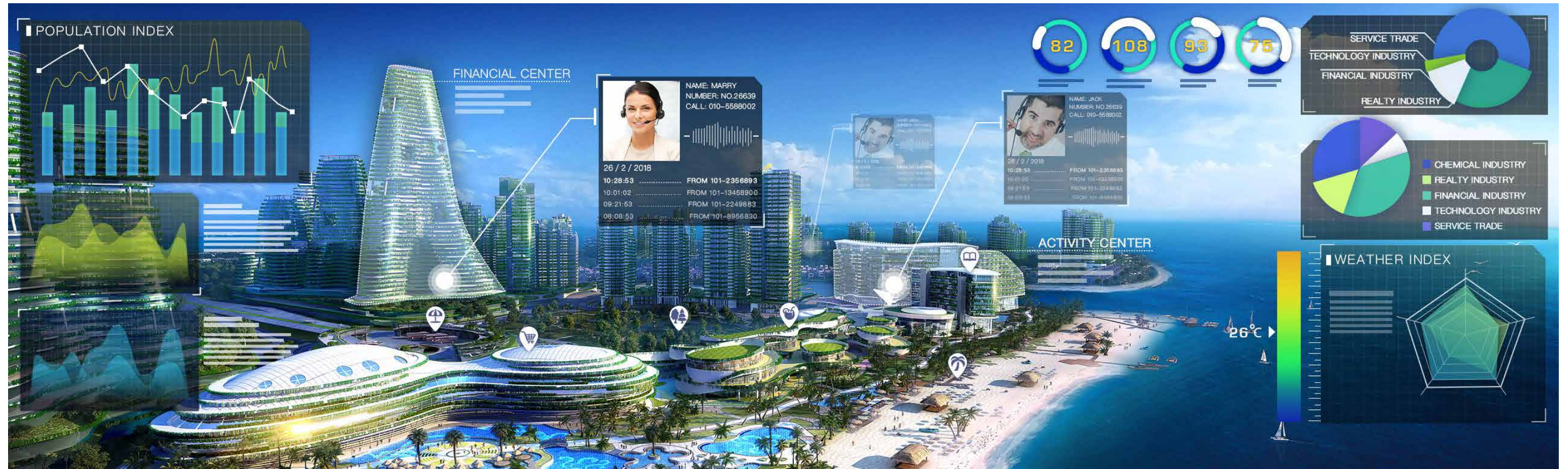
A famous innovative town: cultivating clusters for high-end, high-tech industries.
An ecological green town: displaying charms of great rivers and lakes.
A modern smart town: boasting leading-edge application of information technology.
An international friendly town: Being open and receptive for global cooperation.
A thriving, people-oriented town: focusing on high quality lifestyle and well-being of residents.
Finally, it'll be built as a model town that practices new development concepts.



cjxcgwh@qq.com

+86-27-82799515

中国湖北武汉市江岸区谪家矶大道88号
Wuhan Changjiang New Town Administration Committee
Address: No.88,Chenjiaji Avenue,Jiang'an District,Wuhan,China



FOREST CITY 碧桂园森林城市

An Emerging Futuristic Urban Development A Prime Model of Future Cities 产能合作新城 未来城市榜样

碧桂园森林城市是碧桂园集团携手柔佛人民集团合力打造，选址位于经济快速增长的马来西亚依斯干达经济特区，地处东盟战略区位，紧邻新马第二通道。森林城市规划近 30 平方公里，包含四座岛屿、高尔夫生态度假区及建筑工业化产业园。森林城市以绿色智慧产业新城为定位，结合环境、科技和产城融合的顶尖设计理念，呈现一个优雅、先进的理想工作与生活环境，打造未来城市榜样。

Forest City is co-developed by Country Garden and Johor government-backed Esplanade Danga 88 Sdn Bhd (EDSB). It is strategically located in the fast-growing Iskandar Development Region, Malaysia, injecting another source of growth in ASEAN. It stands adjacent to Tuas second link, spanning approximately 30 km², including four man-made islands, golf resort and IBS industrial park. Forest City will be a smart and

黄金区位优势

森林城市位于马来西亚经济要冲—柔佛州依斯干达经济特区，临近新加坡，辐射东盟及亚太经济圈。独立海关已正式获准政府批文，规划包括水、陆两个海关。自建跨海高速路桥全线通车，未来森林城市可与新加坡无缝连接，随着两地关系进一步打通、加强，森林城市整体价值将愈发可观。

先进城市规划理念

森林城市采用先进的立体分层城市及垂直绿化规划理念，全城搭建垂直绿墙、空中花园和屋顶花园，形成多维度立体绿化系统，目之所及都是森林。并联手思科、埃森哲、Celcom，共同发展项目的“智慧城市愿景”。提供多样化智慧社区服务，打造最先进的智慧城市。

智慧安全城

森林城市智慧发展将聚焦居民生活、城市管理、产业发展、智慧建造四个方面，并规划打造“一脑四云两平台”的智慧发展架构，开创“四城一体”基础搭建，注重城市网

green futuristic city that combines environment design, industry integration and cutting-edge technology to create an ideal, idyllic and technology-driven living and working space ecosystem.

Strategic Location

Forest City is located in the Malaysian economy hub - Iskandar Special Economic Zone, adjacent to Singapore, covering ASEAN and APEC economic circle. The independent CIQs via land and sea have been officially approved by the government, and the newly constructed highway is operational. In the near future, Forest City will be seamlessly connected to Singapore. With closely connected diplomatic ties and strengthening relations between the two nations, Forest City has possessed great investment prospects.

Advanced Urban Planning Concept

Forest City adopts advanced three-dimensional city and vertical greening planning concept. The whole city is surrounded by green facades, sky gardens and rooftop gardens, forming a multi-dimensional greening



络和信息安全，为居民和企业提供全方位的智慧体验，力图未来五年建设成为全球领先的绿色智慧产业新城，实现家居生活更智能、城市管理更精细、网络体验更畅快、科技体验更生动、社区服务更便捷、产业配套更全面、建筑工业更高效。

四城一体

森林城市将“光网城市、无线城市、感知城市、云上城市”建设融为一体，搭建完善的信息基础设施。

1. 光网城市：

建设超大容量公共光纤宽带网络，打造马来西亚唯一的城市级全岛光纤入户社区。

2. 无线城市：

森林城市免费无线网络实现公共区域全覆盖。



▲ 森林城市凤凰酒店 Forest City Phoenix Hotel

system. Moreover, Forest City partners with Cisco, Accenture and Celcom to develop the “smart eco-city” vision. Together with the diversified smart community services, Forest City aims to build the most advanced smart city.

Smart & Safe City

Forest City Smart City Development focuses on 4 aspects which include residential living, city management, industrial development and smart construction. It plans to put forward a smart development framework with the name of “One Brain, Flour Clouds and Two Platforms”, forging ahead a “four cities in one” urban infrastructure construction, with the focus of urban network and information security, providing residents and enterprises with a comprehensive smart experience. Forest City strives to become a leading green and smart industrial new city in the next five years, creating smarter residential living, greater urban management, speedy online experience, vivid technology experience, convenient community service, comprehensive industry facilities and higher efficiency construction industry.

Four Cities in One

Forest City integrates the construction of "Optical Network City, Wireless City, Sensing City and Cloud City" into a whole for a perfect information infrastructure.

1. Optical Network City:

To build a public optical fiber broadband network with mega capacity, making the first city-level and all-island optical fiber ever for household usage in Malaysia.

2. Wireless City:

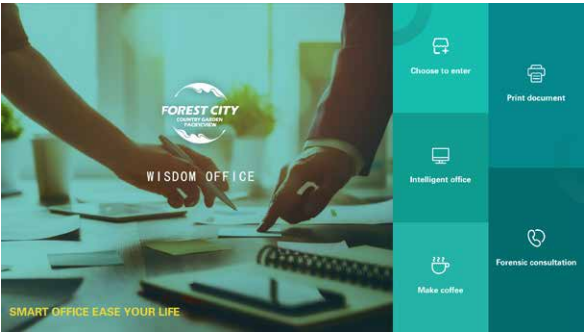
To make free wireless network cover the entire public area of Forest City

3. 感知城市：

通过部署城市海量传感终端，实时采集城市部件的运行状态。

4. 云上城市：

搭建森林公有云平台，提高数据储存以及计算能力，助力企业发展。



智慧云服务

1. 智慧生活云

1.1 智慧家园——智能感知、舒适宜居的智慧家

搭载森林城市智慧家 2.0 引擎，引入国际领先的 AI 交互技术，以家为起点，聚焦智慧生活体验，打造森林城市智慧家园服务。

1.2 智慧社区服务——打造“最后一公里”社区服务圈

依托 Forest Life APP，提供线上物业、智慧安防、数字图书馆、社区社交、生鲜配送、房屋托管等全方面的智慧社区服务，为居民创造一个平安、高效、便捷的社区环境。

1.3 智慧城市配套

智慧城市配套覆盖智慧交通、智能建筑、城市应急、健康医疗、能耗管理等诸多领域，融合构建森林城市的人文、生活、经济环境，最大限度地提升城市公共服务的效能。

2. 智慧管理云

2.1 城市管理之事件全掌控——事前预警、事中管控、事后追溯

森林城市构建全生命周期管理精细化服务，让城市管理更高效、城市服务更精准、公共资源更集约，部门协同更智能。

2.2 城市管理之物件全感知

森林城市精细化管理能读懂每一个城市细胞——将感知的触角深入城市每一个物件，路灯管理、能源管理、环

3. Sensing City:

To collect in real time the operation status of city components by deploying a large number of sensing terminals in the city.

4. Cloud City:

To build a public cloud computing data platform to improve data storage and computing capacity, and help enterprise develop.

Smart Home

1.Smart Life Cloud

1.1 Smart Home

–Intelligent and Comfortable Smart Home

Forest city applies the 2.0 engine of Smart Home which takes advantage of the international leading AI interactive technology, to a smart life experience.

1.2 Smart Community Service——Building the "last kilometer" community service circle

Relying on Forest Life APP, we provide online property service, smart security, digital library, community social space, fresh food delivery, housing trusteeship and other intelligent community services, so as to create a safe, efficient and convenient community environment for residents.

1.3 Smart City Supporting Facilities

Smart city supporting facilities covers many fields, such as intelligent transportation, smart building, city emergency management, health care, energy consumption management, etc. It supports the humanistic, living and economic environment of Forest City, and maximizes the efficiency of public service.

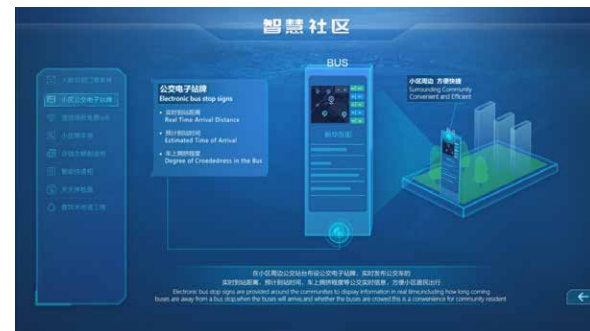
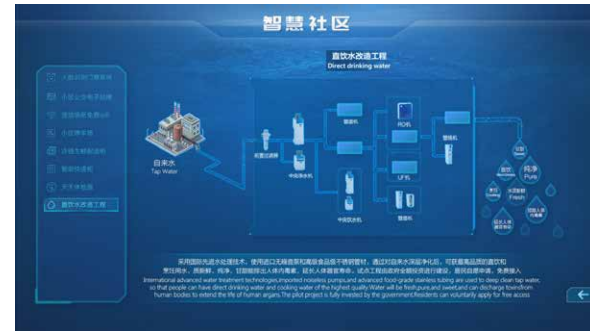
2. Smart Management Cloud

2.1 City Management: Full Control of City Events–Alert, control, backtrack.

Forest City builds up exquisite service of city life cycle management, which makes the city management more efficient, the city service more precise, the public resources more intensive, and the department collaboration smarter.

2.2 City Management: Overall Perception of City Components

Forest City’s exquisite management approach can have real time feedback on every city component, including street lamp, energy consumption, including street lamp, energy consumption,



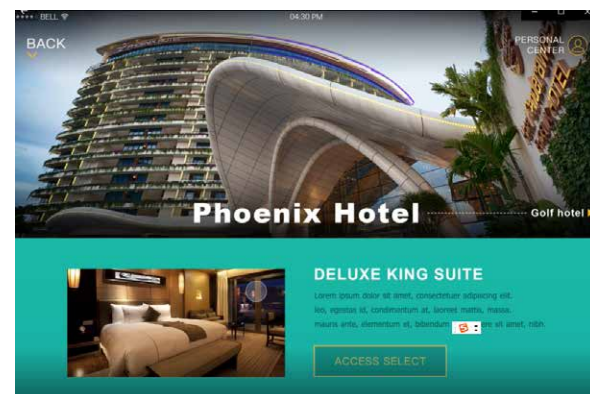
境管理、管网监控，了解城市设备运行的状态，监测城市生活的脉搏，让城市运行更安全、更清洁、更高效。

3. 智慧产业云

为入驻企业搭建共享办公环境，提供“一站式”入驻服务，包括企业桌面云、技术共享、咨询服务、中介代办等，打造便捷、智能、安全的办公空间。

4. 智慧建造云

森林城市采用建筑信息模型的智慧建造工作理念，以数字化的工程实施方式贯穿建筑生命周期，使得整个建造过程绿色、高效、过程可追溯、管理精细化。令房屋使用加倍省心，从而给业主提供更加安全可靠的建造品质以及非凡优质的人居体验，为城市管理提供可视化数字资产，促进建造产业生态汇聚。



environmental protection, pipe network monitoring, to make sure the city operation is safer, cleaner and more efficient.

3. Smart Industry Service Cloud

To build a co-working space for enterprises and provide "One-stop Quick Start" services, including desktop cloud, technology sharing, consulting services, agent services, etc., for a convenient, intelligent and secure working space.

4. Smart Building Clouds

Forest City adopts the smart construction work idea based on Building Information Model, which runs through the construction life cycle with digital engineering implementation, making the whole construction process environment-friendly, highly efficient, the whole process easy to be traced and delicately managed. This approach provides our property owners with more reliable construction quality and extraordinary living experience. In terms of city management, it provides visible digital assets, accelerating the converging of industrial ecology in the industry.



An Integrated City

Forest City aims to attract the world's leading corporations and international capital investment by introducing 8 key industries to fulfill sustainable development, namely Tourism & MICE, Healthcare, Education & Training, Regional Headquarters, Nearshore Finance, E-commerce, Emerging Technology and Green & Smart industry. Forest City ranked among the "5 New Cities That Are Set To Shake Up the Future" by Forbes Bi-weekly Website. The 5 new cities are Xiongan New Area (China), Nurkent (Kazakhstan), Colombo Port

产城一体化

森林城市通过规划旅游会、医疗保健、教育培训、外企驻地、近岸金融、电商基地、新兴科技、绿色与智慧产业等8大可持续活力产业，吸引全球优秀企业进驻和国际资本投资。森林城市上榜美国福布斯双周刊网站盘点的《影响未来的五座新城》，与雄安新区（中国）、努尔肯特（哈萨克斯坦）、科伦坡港口城、杜库姆（阿曼）一起被认为是对整个国家进行重新定义及其未来在全球经济中的角色的一种尝试。

作为国际合作的平台，森林城市将聚焦发展旅游会展、新兴科技、电商基地以及医疗保健，为相关企业提供投资及合作机会，吸引国际资本进驻。同时，引入教育培训设施及服务，孵化培养本地人才。

2016年12月，森林城市首届国际产能产业合作签约大会召开，与36家国际知名企业签约。2017年8月，第二次国际产能产业合作签约大会召开，森林城市再次与来自中国、马来西亚、新加坡和英国的21家机构签署战略合作协议，推进产业新城及经济贸易合作区建设。

City (Sri Lanka), Dumq (Oman), which is considered an attempt to redefine its country as a whole and its future role in the global economy.

As an international cooperation platform, Forest City aims to create opportunities for cooperation in a multitude of industries across the globe, with focus on the business in Tourism & MICE, Emerging Technology, E-commerce and Healthcare, attracting international capital investment. Meanwhile, it will equip with educational facilities and services to cultivate local talents and to support the development of those industries.

In December 2016, Forest City signed MoU with 36 international leading enterprises at the 1st International Capacity Industry Cooperation Signing Ceremony. In August 2017, the 2nd International Capacity Industry Cooperation Signing Ceremony was held. Forest City signed strategic cooperation agreements with 21 institutions from China, Malaysia, Singapore and UK to promote the construction of new industrial cities and economic and trade cooperation zones.



▲ 嘉德圣玛丽森林城市国际学校 Shattuck-St. Mary's Forest City International School



Advanced Urban Planning Received International Recognition 先进城市规划 广受国际赞誉

2019

- IDC 亚太区智慧城市智慧建筑大奖（智慧 B.I.A. 体系）
IDC Smart City Asia Pacific Awards-Smart Building (Smart B.I.A system)
- 《大马纪录大全》“全马最大全自动化建筑工业化基地”（建筑工业化产业园一期工厂）
The Malaysia Book Of Records-“Largest Fully Automated IBS Plant” (IBS Industrial Park Phase 1 factory)
- 东盟地产奖之最佳可持续绿色发展项目
ASEAN Property Award on Best Sustainable Green Development
- 企业社会责任贡献表彰证书（马来西亚首相马哈迪亲自颁发）
Certificate of CSR Contribution (Awarded by Malaysian Prime Minister Dr.Mahathir)

2018

- 星报地产奖之（由国际发展商开发）全马最大最先进的建筑工业化系统
Star Property Awards on The Biggest & Most Advanced IBS Development in Malaysia by an International Developer
- 星报地产奖之最具代表性的城市规划和可持续性智慧城市开发商
Star Property Awards on Most Iconic International City Planner & Sustainable Smart City Developer
- 飒飒奖之全球产城融合范例
SCAHS on Global Model of City-Industry Integration Award
- “GreenRE 可持续设计奖项 2018”金级认证（森林城市岛一、嘉德圣玛丽森林城市国际学校文体中心）
GreenRE Sustainable Design Award 2018” Gold Certification (Won respectively by Forest City Island 1, Shattuck-St. Mary's Forest City International School Multi Use Centre)

2017

- 飒飒奖之全球绿色建筑产业化示范园区奖
SCAHS on Global Model of Green Building Industrial Park
- 星报地产奖之最佳可持续性发展项目奖（南马区）
Star Property Awards on 2017 Best Sustainable Development (South Malaysia)

2016

- 飒飒奖之全球人居环境规划设计奖
SCAHS on Global Human Settlements Award on Planning and Design
- 亚太房地产大奖之马来西亚优秀综合发展项目
Asia Pacific Property Awards on Mixed-use Development Malaysia
- 亚太房地产大奖之马来西亚最佳集合住宅建筑奖
Asia Pacific Property Awards on Best Architecture Multiple Residence Malaysia - 5 star
- MIPIM Asia 峰会之第十届“最佳未来超级城市”金奖
MIPIM Asia Awards on The Best Futura Mega Project Gold Award 2016 by MIPIM Asia
- 弗若斯特沙利文公司 2016 年亚太地区产品创新研发领袖奖
Frost & Sullivan Asia Pacific Property Development New Product Innovation Award 2016
- 波士顿建筑学会颁发波士顿景观设计优秀奖
Boston Society of Landscape Architects - Merit Award for Landscape Analysis and Planning
- 柔佛苏丹荣誉嘉奖 – 梁国坤大师园林设计
His Royal Highness Sultan Ibrahim Ibni Almarhum Sultan Iskandar awarded Mastery in Landscape Design for Mr. Liang Guokun
- 美国绿色建筑委员会颁发海之贝单体建筑绿色建筑 LEED-CS 金级预认证
The US Green Building Council awarded The Gold Level Pre-certification under LEED-CS for Forest City Sales Gallery



AN EMERGING FUTURISTIC URBAN DEVELOPMENT A PRIME MODEL OF FUTURE CITIES

产能合作新城 未来城市榜样

Forest City is co-developed by Country Garden and Johor government-backed Esplanade Danga 88 Sdn Bhd (EDSB). It is strategically located in the fast-growing Iskandar Malaysia, injecting another source of growth in ASEAN. It stands adjacent to Tuas second link, spanning approximately 30 km², including four man-made islands, golf resort and IBS industrial park. Forest City combines top design concepts of environment, technology and industrial city integration, focuses on residential living, city management, industrial development, smart construction and strives to become a leading green and smart new industrial city in the next five years.

森林城市是碧桂园集团携手柔佛人民集团合力打造，选址位于经济快速增长的马来西亚伊斯干达经济特区，地处东盟战略区位，紧邻新马第二通道。森林城市规划近30平方公里，包含四座岛屿、高尔夫生态度假区及建筑工业化产业园。森林城市结合环境、科技和产城融合的顶尖设计理念，聚焦居民生活、城市管理、产业发展、智慧建造四个方面，力图未来五年建设成为全球领先的绿色智慧产业新城。



Actual Photo 实景图



INTEGRATED CITY DEVELOPMENT

产城一体化发展

Forest City adopts advanced urban planning concept, and it has received approval on independent customs, duty-free area policy and other preferential policies, aiming to attract the world's leading corporations and international capital investment, realizing a peaceful co-existence of lifestyle and business development by introducing 8 key industries to fulfill sustainable development, which include Tourism & MICE, Healthcare, Education & Training, Regional Headquarters, Nearshore Finance, E-commerce, Emerging Technologies and Green & Smart industry. Forest City is also ranked among the "5 New Cities That Are Set To Shake Up the Future" by Forbes Biweekly Website, which are believed to redefine the whole country and serve as the pilot of its new role in the global economy in the future respectively.

森林城市采用先进的城市规划理念，现已获批独立海关、免税区政策等其他专属优惠政策，通过规划旅游会展、医疗保健、教育培训、外企驻地、近岸金融、电商基地、新兴科技、绿色与智慧产业等8大可持续活力产业，吸引全球优秀企业进驻和国际资本投资，实现“生活方式”与“事业发展”和谐共融，并上榜美媒盘点的《影响未来的五座新城》，被认为是对整个国家进行重新定义及其未来在全球经济中的角色的一种尝试。

Actual Photo 实景图

INTERNATIONALLY RECOGNISED ADVANCED URBAN PLANNING CONCEPT

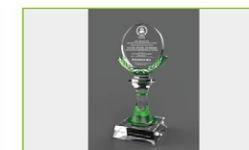
先进城市规划理念广受国际认可



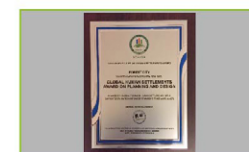
IDC Smart City Asia Pacific Awards-Smart Building ("Smart B.I.A." system)
IDC亚太区智慧城市智慧建筑大奖 (智慧B.I.A.体系)



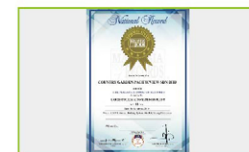
Global Model of City-Industry Integration Award
全球产城融合范例



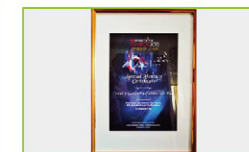
Global Model of Green Building Industrial Park
全球绿色建筑产业化示范园区



Global Human Settlements Award on Planning and Design
全球人居环境规划设计奖



The Malaysia Book Of Records-Largest Fully Automated IBS Plant
大马纪录大全-最大全自动建筑工业化基地



Most Iconic International City Planner & Sustainable Smart City Developer
最具代表性的城市规划和可持续性智慧城市开发商



In December 2016, Forest City signed MoU with 36 international leading enterprises at the 1st International Capacity Industry Cooperation Signing Ceremony.

2016年12月，第一届国际产能产业合作签约大会，与总市值约6万亿美元的36家国际知名企业签约。



The 2nd International Capacity Industry Cooperation Signing Ceremony was held. Forest City signed strategic cooperation agreements with 21 institutions from China, Malaysia, Singapore and UK to promote the construction of new industrial cities and economic and trade cooperation zones.

第二次国际产能产业合作签约大会召开。与来自中国、马来西亚、新加坡和英国的21家机构签署战略合作协议，推进产业新城及经济贸易合作区建设。



Country Garden Pacificview Sdn Bhd (1044344-D)
+607 505 8888 (INT'L / MY)

Forest City Sales Gallery CGPV Galeri Jualan Mahkota Selatan, Jalan Forest City 1, Pulau Satu Forest City, 81550 Gelang Patah, Johor, Malaysia.
Forest City Golf Resort Forest City Golf Hotel, Jalan Persiaran Golf 5, Forest City Golf Resort, 81550 Gelang Patah, Johor.
Forest City 森林城市 forestcity.countrygarden ForestCity2018
Forest City - Country Garden Pacificview



Forest City Website



Country Garden Pacificview Sdn Bhd (1044344-D)
+607 505 8888 (INT'L / MY)

Forest City Sales Gallery CGPV Galeri Jualan Mahkota Selatan, Jalan Forest City 1, Pulau Satu Forest City, 81550 Gelang Patah, Johor, Malaysia.
Forest City Golf Resort Forest City Golf Hotel, Jalan Persiaran Golf 5, Forest City Golf Resort, 81550 Gelang Patah, Johor.
Forest City 森林城市 forestcity.countrygarden ForestCity2018
Forest City - Country Garden Pacificview



Forest City Website

The World's Most Valuable Solar Technology Company



LONGi

en.longigroup.com

Reliable and Efficient Solar Technology

Founded in 2000, LONGi Green Energy Technology Co., Ltd. is the world's most valuable solar technology company. LONGi is shifting its focus from product innovation to technological innovation and is committed to changing the way we approach energy. From PV materials and power generation equipment, to power solutions, we provide a full range of services for PV power generation.

SUSTAINABILITY EXPERIENCES

飒飒风采

CSCEC•Eco-Smart City CSCEC•Top Mansion
Respectively Won the Global Human Settlements Awards on Planning and Design
& Global Green Model Community

中建•生态智慧城、中建•壹号府分别荣膺
全球人居环境规划设计奖及全球绿色示范社区奖

The Landscape Design of People's Eco-Park
潼南人民生态公园景观设计

Weihai Nanhai New District City Cultural Center Design Plan
南海新区市民文化中心设计方案说明

Jiangyu Dream Town: A Destination for All
江宇梦想小镇：一个旅行、度假和居住目的地

Leading the New Trend of Shopping Aegean Palace Brings You
One-stop Shopping Experience
爱琴海购物公园一站式的购物体验，引领购物新潮流

LONGi: Photovoltaic Technology Unlocks Better Settlements for Human Being
隆基股份：光伏科技让人居环境更美好

THE SINO PARK—Ushers into a Chinese Cover of Global Human Settlements
镜湖宸院—肇启全球人居环境的中国封面



CSCEC•Eco-Smart City CSCEC•Top Mansion Respectively Won the Global Human Settlements Awards on Planning and Design & Global Green Model Community

中建·生态智慧城、中建·壹号府分别荣膺 全球人居环境规划设计奖及全球绿色示范社区奖

中建·生态智慧城作为常德市政府近年来最大的招商引资项目，由中建五局投资 160 亿元开发建设，总占地约 3500 亩，总建筑面积约 300 万方，致力于打造成为棚户区改造标杆、央企与地方政府合作发展标杆及产城融合的片区综合开发示范区。

中建·生态智慧城项目整体定位为“3500 亩生态智慧城·中国新城样板”，位于常德西门户、桃花源大桥北端片区，联合澳大利亚伍兹贝格、杭州园林设计院、凯达全球、中国文联、北师大等全球顶尖资源，以“生态 + 宜居、文化 + 科技、教育 + 综合服务”为核心，打造集“生态、生活、生产”于一体的时尚魅力国际新城。建成后将形成拥有约 1000 亩常德最大城市公园、国际五星级酒店、中高档住宅、名校教育、特色商业、智慧社区于一体的常德城市新名片。

As the largest investment attraction project of Changde Municipal Government in recent years, CSCEC•Eco-Smart City is invested and constructed by the China Construction Fifth Bureau with an investment of 16 billion yuan. It covers an area of about 3,500 mu and has a total construction area of about 3 million square meters, to create a comprehensive development demonstration zone that will become the benchmarks for district reform, the cooperation between state-owned enterprises and local governments, and integration of benchmarks and production centers.

The overall construction of the CSCEC•Eco-Smart City project is “3,500 mu of ecological smart city•Chinese new city model”, located in the north gate of Changde, the northern end of Taohuayuan Bridge, combined with Australia Woodsberg, Hangzhou Garden



中建·壹号府是中建·生态智慧城内目前唯一建造别墅的高端住宅项目，处于常德“西进北拓”与一江两岸经济带交汇地带，约 1000 亩芙蓉公园里，被 30 亿新河风光带环抱，其别墅区也是常德市唯一的半岛别墅区。

中建·生态智慧城、中建·壹号府均由中建信和地产有限公司开发建设。中建信和地产有限公司是世界 500 强第 24 位企业、中国最具国际竞争力的建筑地产集团——中国建筑工程总公司的全资成员企业，是中建五局旗下房地产业务的唯一运营平台，具备房地产开发及物业管理双一级资质，业务遍及长沙、株洲、湘潭、岳阳、衡阳、济南、烟台、南昌、重庆等城市，项目总投资额超过三百亿元。中建信和也是国内少数荣获“全国五一劳动奖”、“广厦奖”等百余项殊荣的地产企业。

2017 年，依托中建集团“投资、建设、开发、运营”全产业链优势，以规划联盟、产业联盟为支撑的“一商两翼”格局，中建信和联合全球顶级设计规划机构，与科教文卫等产业领域广泛合作，以产业导入为城市赋能。

为了一座城市的安居乐业，给一座活力之城的产城融合助力，中建信和响应常德市政府推进的“西进北拓”战略，将文化产业，智慧科技产业导入城市发展的新征程，推动常德城市提质发展，建筑繁荣片区，助力城市向上生长。

自项目入市以来，已揽获多项奖项：

- 中建·生态智慧城荣获 2018 年度常德值得期待楼盘；
- 中建·生态智慧城荣获湖南省 2018 年度优秀品质楼盘；
- 中建·生态智慧城的芙蓉公园荣获园冶杯 2018 年度市政园林金奖；
- 中建·生态智慧城荣获 2019 中国新型城镇化标杆项目；
- 中建·壹号府荣获湖南省一星级绿色建筑标识。

Design Institute, Kaida Global, China Federation of Literary and Art Circles, The world's top resources such as Beijing Normal University, with the core of “ecology + livability, culture + technology, education + comprehensive services”, create a fashion charm international new city integrating “ecology, life and production”. Upon completion, it will form a new business card for Changde City, which has about 1,000 mu of Changde's largest urban park, international five-star hotel, medium and high-end residential, famous school education, characteristic business and smart community.

CSCEC•Top Mansion is the only high-end residential project in CSCEC•Eco-Smart City. It is located in the intersection of Changde “Westward and North Extension” and the economic belt on both sides of the river. Situating in Furong Park with an area of 1000 mu and surrounded by river scenery, the villa area is also the only peninsula villa area in Changde City.

CSCEC•Eco-Smart City and CSCEC•Top Mansion are all developed and constructed by Xinhe Real Estate Co., Ltd. of CSCEC (hereinafter called as “Xinhe”) is the 24th largest company in the world, and the wholly-owned member of China Construction Engineering Corporation, China's most internationally competitive construction real estate group. It is the only operation of the real estate business of China Construction Fifth Bureau. The platform has dual qualifications for real estate development and property management. Its business covers Changsha, Zhuzhou, Xiangtan, Yueyang, Hengyang, Jinan, Yantai, Nanchang and Chongqing. The total investment of the project exceeds 30 billion yuan. CSC is also one of the few real estate companies in China that has won more than 100 awards including the National May 1st Labor Award and the Guangsha Award.

In 2017, relying on the advantages of the whole industrial chain of “investment, construction,



中建信和 城市运营商

深耕湖湘 16 年，中建信和地产布局全国，业务遍布湖南、山东、江西、重庆、广西等城市，中建信和在地产开发上通过不断的探索和尝试，逐渐形成了自己的“产品观”，并充分考虑产品特性，结合生活、居住、娱乐、出行、健康等需求，打造壹号系、和城系、印象系和府台系四大产品系列，住宅销售业绩持续领跑长沙、常德、岳阳、张家界等市场。

依托央企的责任与实力，中建信和从住宅开发商战略转型城市运营商，以城市运营商的视角，更多地参与城市发展进程，逐步实现品牌战略与城市的理想同步。2017 年，中建信和版图继续扩张，先后在重庆、常德、宁乡、益阳拿下地块，以城市运营商身份深耕片区。

中建信和将带着全新的城市运营商的身份，积极参与城市发展进程，在 PPP 合作开发模式下，中建信和将与政府协同作战，以产业规划在前，公共配套先行，通过载入教育、医疗、文化等公共资源，对片区运营规划，致力实现生产、生态、生活的三生融合，为城市描摹更美的图景。

中建信和 拓展幸福空间

中建信和致力于倡导城市建筑美学，创享城市人居价值，与城市共同升级，助力拓展幸福空间。

中建信和地产以“拓展幸福空间”为企业理念，秉承精工筑家的科班底蕴，提出“四优体系”，并以此为蓝本，打造“优 + 你的生活”的服务理念，致力于构筑城市人居理想生活。

development and operation" of CSCEC group and the pattern of "one business, two wings" supported by planning alliance and industrial alliance, Xinhe united the world's top design and planning institutions, cooperated extensively with science, education, culture, health and other industrial fields, to empower the city with industrial development.

In order to live and work in a city, and to contribute to the integration and vitality of a city, Xinhe responded positively to the strategy of "Westward and Northward Extension" promoted by the Changde Municipal Government, and will introduce the cultural industry and the smart technology industry into a new journey of urban development, to improve the quality development of Changde City and build a prosperous area to help the city grow up.

Since the project entered the market, it has won several awards:

CSCEC•Eco-Smart City won the 2018 Changde expected property;

CSCEC•Eco-Smart City won the 2018 excellent quality project in Hunan Province;

Furong Park of CSCEC•Eco-Smart City won the 2018 Municipal Garden Gold Award of Yuanye Cup;

CSCEC•Eco-Smart City won the 2019 China New Urbanization Benchmarking Project;

CSCEC•Top Mansion won the one star project of Green Building Label of Hunan Province.

“四优体系”涵盖优品质，优服务，优生态，优空间四大板块，倡导建筑美学，创享人居价值。在优品质上，依托“中国建筑”的科班底蕴，世界 500 强责任央企，用 63 座鲁班奖“小金人”之手精工筑家，打造高品质社区，为百姓创造理想的品质，让生活还原本真；在优服务上，全国百强一级资质物业，秉承“优 + 你的生活”服务理念，营造有温度的和谐社区，为百姓创造理想的空间，让生活倍感从容；在优生态上，凭借“广厦奖”的实力 + “住宅产业化”的生产优势 + 中建信和园林的专业能力，打造畅享绿色、人文、低碳的公园式生活，让百姓常伴理想的生态，让生活与自然相伴；而最优空间则秉承以客户、创意的人居生活，让有限空间带来无限幸福空间，用理想的服务，让生活变得有温度。

基于“四优体系”，中建信和提出“优 + 你的生活”服务理念，从运动、社交、亲子、文化等多个角度出发，打造邻里文化节、创建优读小站、推广邻里公约等，为社区注入无限活力，打造全新的优 + 生活范本。

打造城市智慧空间，缔造人居范本

中建信和将城市居住理想和美好未来融为一体，从客户角度出发，以立足于城市之上的高度、深度和气度去构筑城市未来的发展，以城市运营商的高度责任感不断地推动城市化进程，让企业、城市、人三者之间，和谐共生。而考量一个城市是否具有竞争力，要看通过城市运营是否提升了城市价值，是否以全局视野，进行城市资源优化配置、整合，平衡商业价值和社会价值的同时让市民拥有获得感。

Xinhe, A City Operator

In the past 16 years, Xinhe has been deployed nationwide, with operations in Hunan, Shandong, Jiangxi, Chongqing, Guangxi and other cities. Xinhe, through its constant explorations and tests in real estate development, has formed its own "product concept" gradually, and fully consider the product characteristics, combined with the needs of life, residence, entertainment, travel, health, etc., to create four series of products: Height series, Harmonious City series, Mansion and Pavilion series and Impression series, continue to lead Changsha, Changde, Yueyang, Zhangjiajie and other markets.

Relying on the responsibility and strength of the state-owned enterprises, Xinhe strategically transforms from a residential developer to a city operator, more participates in the urban development process, and gradually realizes the ideal synchronization between brand strategy and the city. In 2017, the layout of Xinhe continued to expand and successively distributed its businesses in cities including Chongqing, Changde, Ningxiang and Yiyang as a city operator.

Xinhe will actively participate in the urban development process with the status of a new city operator. Under the PPP cooperative development model, Xinhe will cooperate with the government to take industry planning ahead. Public support first, through the education, medical, cultural and other public resources, the district operation planning, and strive to achieve the integration of production, ecology, life, and create a more beautiful picture for the city.

Xinhe, Expanding the Space of Happiness

Xinhe is committed to advocating urban architectural aesthetics, creating urban dwelling values, and upgrading the city to improve people's well-being.

With the corporate philosophy of "expanding the space of happiness", Xinhe adheres to the foundation of professional team to build a "four excellent system", and use this as a blueprint to create a service concept of "excellent + your life", and build an ideal life for human settlements.

The "Four Excellent System" covers four major sectors: excellent quality, excellent service, excellent ecology and excellent space. It advocates architectural aesthetics and creates human settlement value. In terms of excellent quality, relying on the foundation of "Chinese Architecture", the world's top 500 responsible state-owned enterprises, using 63 hands of the Luban



产城融合，构筑智慧生活平台

常德中建生态城就是一座融合了智慧教育、智慧医疗、智慧生活、智慧旅游等高科技体验的未来智慧生活中心。作为中建·生态智慧城内的高端住宅项目，中建·壹号府备受瞩目。



城市文化引导下的创新商业体验

常德中建生态城将引进生活超市、影院等主力店，规划了一线城市才有的开放式街区，利用首层，创建商业活力街区，将街区式建筑形态与都市休闲体验式消费相融合。中建·壹号府则可享受其所有配套，住宅区居民的购物、娱乐休闲需求均能满足，居民可在舒适美好的环境里，享受阳光下悠闲购物的生活。

值得一提的是湖南首个工业风格的文化创意小镇，融合文创商业、创客基地、影院休闲、特色民宿于一体的文化创意中心也将落成。

城市面貌升级 让生活更幸福

这里，曾经也是管网不配套、污水横流，没有休闲的地方。随着中建信和参与桃花源棚改项目的建设，在3500多亩的规划总面积中，生态环境建设达到三分之二，改造了城市管网、解决黑臭水体、优化了水系，建成了公园，市民可以在这里休闲娱乐。

目前，中建·生态智慧城的40多亩公园已经对外开放，市民可以在里面散步、骑行、休闲，享受健康生活。芙蓉公园桥东剩余部分预计于今年年底对市民开放，中建·壹号府首批高层也将于年底交房。

常德中建·生态智慧城，融合了“智慧美学”，将自然之美、建筑之美、空间之美、服务之美融入生活体验，致力于为城市缔造人居范本。中建·生态智慧城则匠心造价，用优良的品质、极佳的环境、优质的配套等为常德百姓带来住宅示范区。

Award “Xiaojinren” to build a home, create a high-quality community, create ideal quality for the people, let life restore the authenticity; in the excellent service, the national top 100 qualified property, adhering to the “excellent + your life” service concept, create a harmonious community with temperature, create an ideal space for the people, make life feel calm; Ecologically, relying on the strength of the “Guangsha Award” + the production advantage of “residential industrialization” + the professional ability of China Construction and the garden, the project is dedicated to creating a park-like life that enjoys green, humanities and low-carbon, so that the people often enjoys excellent ecological environment. Ecologically, make life and nature go hand in hand. An excellent space is to put customer first, to enable creative living, to be a source of happiness in the limited space, and in the meanwhile to make a loving community by providing attentive service.

Based on the “Four Excellent System”, Xinhe proposes the “Excellent + Your Life” service concept, from the perspectives of sports, social, parent-child, culture and others, to create a neighborhood cultural festival, create a good reading station, and promote the neighborhood convention, inject vitality into the community and create a new model of excellent + life.

Create A Urban Smart Space & A Model of Human Settlements

Xinhe combines the ideal of urban living with a bright future. From the customer's point of view, based on the height, depth and temperament of the city the

project is to build future city, and with the city operator's high sense of responsibility to continuously promote the process of urbanization and let enterprises, cities and people live in harmony. Considering whether a city is competitive or not depends on whether the city's operation enhances the city's value, whether it is to optimize the allocation and integration of urban resources with a global perspective, and balance the commercial value and social value while giving the public a sense of gain.

Fusion of Production Towns to Build a Smart Life Platform

Changde CSCEC•Eco-Smart City is a future smart life center that combines high-tech experiences such as smart education, smart medical care, smart life and smart tourism. As a high-end residential project in the CSCEC•Eco-Smart City, the CSCEC•Top Mansion has attracted much attention.

Innovative Business Experience Guided by Urban Culture

Changde CSCEC•Eco-Smart City will introduce living supermarkets, cinemas and other main stores, and plan open blocks that are only available in first-tier cities. The first floor will be used to create a commercial and dynamic neighborhood, which will integrate the block-style architectural form with urban leisure experience consumption. CSCEC•Top Mansion can enjoy all its supporting facilities. The residents in the residential area can enjoy the shopping, entertainment and leisure facilities. The residents can enjoy the leisurely shopping life in the sunshine in a comfortable and beautiful environment.

It is worth mentioning that Hunan's first industrial-style cultural and creative town, a cultural and creative center that integrates Wenchuang Commercial, Chuangke Base, Cinema Leisure and Characteristic B&B, will also be developed.

Urban Physical Upgrading Makes Life Happier

Here, it used to be a place where the pipe network was not matched, the sewage was flowing, and there was no leisure. With the participation of Xinhe in the construction of Peach Blossoms shed reform project, in the total planned area of 3,500 mu, the ecological environment construction reached two-thirds, the urban pipe network was rebuilt, the black and odorous water body was solved, and the water system was optimized. In the park, citizens can have fun here.

At present, the 40 mu park of CSCEC • Eco-Smart City has been opened to the public, and citizens can walk, ride, relax and enjoy a healthy life. The remaining part of the Furong Park Bridge East is expected to be open to the public at the end of this year. The first batch of senior officials of the China Construction and Construction Bureau will also hand over the house at the end of the year.

Changde CSCEC•Eco-Smart City combines “Smart Aesthetics” to integrate the beauty of nature, the beauty of architecture, the beauty of space and the beauty of service into the experience of life, and is committed to creating a model of human settlements. CSCEC • Eco-Smart City is an ingenuity to create a residential demonstration zone for Changde people with excellent quality, excellent environment and high-quality facilities. 



中建·生态智慧城荣膺 “全球人居环境规划设计奖”

CSCEC Eco-Wisdom city win the SCAHSA

中建·生态智慧城,作为常德市政府近年来最大的招商引资项目,由中建五局投资160亿元开发建设,总占地约3500亩,总建筑面积约300万方,致力于打造成为棚户区改造标杆、央企与地方政府合作发展标杆及产城融合的片区综合开发示范区。

CSCEC ECO-Wisdom City, is the largest investment attraction project of Chang De municipal government in recent years. It was built with an investment of 16 billion yuan by CSCEC 5th Bureau. It covers a total area of about 3,500 mu, with a total construction area of about 3 million square meters. CSCEC ECO-Wisdom City will become the benchmark for shanty town reconstruction, the benchmark for cooperative development between central enterprises and local governments, and the comprehensive development demonstration zone integrating industries and cities.

项目整体定位为“3500亩生态智慧城·中国新城样板”,位于常德西门户、桃花源大桥北端片区,联合澳大利亚伍兹贝格、杭州园林设计院等全球顶尖设计资源,以“生态+宜居、文化+科技、教育+综合服务”为核心,打造集“生态、生活、生产”于一体的时尚魅力国际新城。

CSCEC ECO-Wisdom City will be the new model of Chinese city. It is Western Gateway of Changde City, located in the north of TaoHuayuan bridge.

CSCEC ECO-Wisdom City was designed by Woods Bagot, Hangzhou Landscaping Incorporated and other global design resources involved in the engineering design.

The core of CSCEC ECO-Wisdom City is "Ecology + livability, culture + science and technology, education + comprehensive services". It will become an international new city with "ecology, life and production".

建成后将形成拥有约1000亩常德最大城市公园、国际五星级酒店、中高档住宅、名校教育、特色商业、智慧社区于一体的常德城市新名片。

After the completion of the CSCEC ECO-Wisdom City, this place will be a new name card of ChangDe City with the largest city park, international five-star hotel, medium and high-grade residence, famous university education, characteristic business, and intelligent community.

全球人居环境规划设计奖,是由全球人居环境论坛于2005年创立的年度世界性大奖——全球人居环境奖的专业奖项,获得联合国环境规划署官方指导和支持,是目前全世界城市建筑和设计领域的最高奖项之一,被誉为“人居环境奥斯卡”。荣膺“全球人居环境规划设计奖”,代表了中建·生态智慧城在可持续性生态造城与环境规划方面的杰出贡献,获得国际肯定。

SCAHS is a professional award of global habitat environment award—the annual world award established by GFHS in 2005. SCAHS is the official guidance and support of the United Nations environment programme. It is currently one of the world's.



中建·生态智慧城鸟瞰效果图

中建·壹号府荣膺 “全球绿色示范社区奖”

CSCEC No. 1 Mansion win the SCAHSA

由中建信和地产开发的中建·壹号府,位于常德西门户、桃花源大桥北端片区,常德“西进北拓”与一江两岸经济带交汇地带,约1000亩芙蓉公园里,30亿新河风光带环抱,打造常德唯一半岛生态墅区。

CSCEC No. 1 Mansion, developed by XinHe Real Estate co., LTD of CSCEC, is located in the north end of the TaoTuayuan bridge. It is in ChangDe "westward to the north" and the River Rconomic Belt Intersection Zone. It owns a Lotus Park. It is surrounded by scenic belt which costed a 3 billion yuan. It is the only peninsula ecological villa area in ChangDe.

中建信和地产以“拓展幸福空间”为企业理念,秉承精工筑家的科班底蕴,提出“四优”体系,并以此为蓝本,打造“优+你的生活”的服务理念,致力于构筑城市人居理想生活。

XinHe Real Estate co., LTD of CSCEC takes "expanding the space of happiness" as its enterprise concept, inherits the professional knowledge of fine construction, puts forward the "four excellent" system, and takes this as the blueprint to create the service concept of "excellent + your life", and devotes itself to building the ideal life of urban residence.

优品质:依托“中国建筑”科班底蕴,世界500强责任央企,用81座鲁班奖小金人之手精工筑家,打造高品质社区。

优服务:全国百强一级资质物业,秉承“优+你的生活”服务理念,营造有温度的和谐社区。

优生态:“广厦奖”的实力+“住宅产业化”生产优势+中建信和园林的专业能力,打造畅享绿色、人文、低碳的公园式生活。

优空间:秉承以客户为中心,研发舒适、多元、创意的人居生活,让有限空间带来无限幸福。

Superior quality. Relying on the knowledge of CSCEC, it is one of the world's top 500 responsible central enterprises. It uses 81 LuBan award statuettes to proving the ability to build homes. CSCEC builds quality communities for residents.

Superior service. It has one of the country's top 100 first-class property qualifications. It adheres to the service concept of "excellent + your life" and creates a warm and harmonious community for residents.

Superior ecological. It won the "GuangSha award". At the same time, it also has the advantage of "housing industrialization" production + the professional ability of zhongjianxin garden, which has created a garden-style life with green, humanistic and low carbon for residents.

Superior space. We are committed to customer focus. We develop comfortable, diverse and creative living life, so that the limited space brings infinite happiness.

全球绿色示范社区奖,是由全球人居环境论坛于2005年创立的年度世界性大奖——全球人居环境奖的专业奖项,获得联合国环境规划署官方指导和支持,是目前全世界城市建筑和设计领域的最高奖项之一,被誉为“人居环境奥斯卡”。荣膺“全球绿色示范社区奖”,代表中建·壹号府在居住和生活环境方面的杰出贡献,获得国际肯定。

SCAHS is a professional award of global habitat environment award—the annual world award established by GFHS in 2005. SCAHS is the official guidance and support of the United Nations environment programme. It is currently one of the world's highest award in urban architecture and design, known as "habitat Oscar". CSCEC No. 1 Mansion has won international recognition. It is an outstanding contribution to sustainable ecological city building and environmental planning. It deserves SCAHSA.



中建·生态智慧城壹号府鸟瞰效果图



The Landscape Design of People's Eco-Park

潼南人民生态公园景观设计

为不断改善、提升城市宜居环境，潼南区围绕“生态优先、品质宜居”的总体思路，通过高水平设计不断优化城市山水文化布局，落实城区黑臭水体治理和滨水景观建设，多点发力不断提升城乡宜居环境品质，凸显江岸山水文化魅力，助推潼南产、城、景融合发展。

景观红线总面积 69446.69m²

景观硬质铺装面积 17876.69m²

绿化景观面积 39179.7m²

水域景观面积 10572.3m²

建筑占地面积 1080m²

水景面积 257m²

临停车位数量约 37 个，约 481m²

绿地率约 72.3%

In order to continuously improve and enhance the livable environment of the city, Tongnan District, focusing on the idea of "ecological priority and livable quality", continuously optimizes the layout of urban landscape culture through high-level design, implements the treatment of urban black and odorous water body and the construction of waterfront landscape, and continuously promotes the livable environment quality of urban and rural areas, to highlight the riverside landscape. Only in this way can we promote the integration and development of Tongnan production, city and landscape.

Landscape Red Line Total Area 69446.69m²

Scenery Hard Pavement Area 17876.69m²

Greening landscape area 39179.7m²

Waterscape area 10572.3m²

潼南概况

潼南区幅员面积 1583 平方公里，历史悠久。太安鱼、狮舞、车车灯被纳入市级非物质文化遗产，是中国民间文化艺术之乡。潼南区一级景区有大佛寺、双江古镇、东升茶山；二级景区有人工运河、太安一琼江、青云湖；三级景区有马龙山卧佛、马鞍山、龙多山。渝遂铁路、渝遂高速、国道 S319、国道 S205、长江支流流域等区域大型交通基础设施交错连接，有着十分优越的对外交通条件。

长江支流涪江贯穿城市组团，使得潼南城区后有靠山，面向江河，让人觉得安心舒畅，无论是工作还是生活都会舒适而富有信心。智者爱山，仁者爱水，山水乃人生存之基本。潼南充分体现了传统背山面水的好上居住和招财聚气的格局。

新城公园位于潼南区江北区域，该地块处于城市的中心区，周边用地性质多为居住区和商业，且承接城市主要轴线结构，延续城市的礼仪感。该公园规划定义为区级公园，公园服务半径为 1500~2000 米。

基地原貌

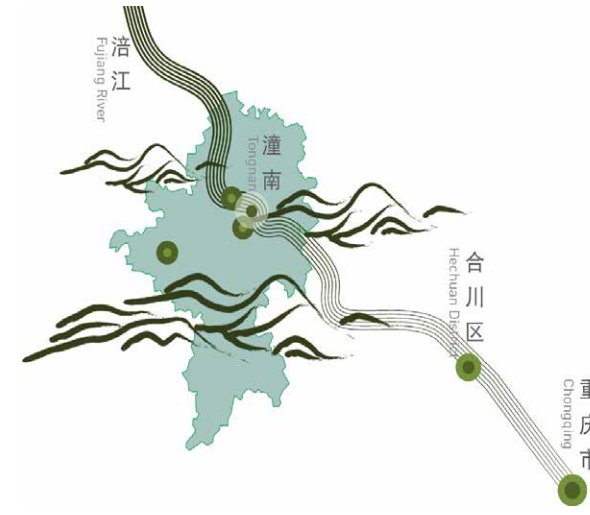
场地与城市之间的衔接点较多，东西两侧及南端原设有 4 处，但北侧城市轴线入口处，原有居住区的销售中心建筑阻碍了城市与基地之间的联系。

金佛大桥、莲花大桥、涪江大桥、奋进大道等，市级主要交通干道环绕基地，且公园东侧链接城市街心广场，西侧链接城市市民运动场地。

场地内植被茂密丰盛，有较好的垂直绿化景观效果。有较多的桉树林，及其他丰富的植被。



▲ 现状图片 Site Photos



▲ 区位分析 Location Analysis

Building area 1080m²

Waterscape area 257m²

The number of temporary parking spaces is about 37, about 481m².

Green space rate 72.3%

BASIC FACTS OF TONGNAN

Tongnan District covers an area of 1583 square kilometers with a long history. Tongnan is the home of Chinese folk culture and art. Tai'an Fish, Lion Dance and Car Lights are included in the intangible cultural heritage at the municipal level. The first-class scenic spots in Tongnan District are Big Buddha Temple, Shuangjiang Ancient Town and Dongsheng Tea mountain; the second-class scenic spots are Artificial Canal, Tai'an-Qiongjiang River and Qingyun Lake; and the third-class scenic spots are Malong Mountain Sleeping Buddha, Ma'anshan and Longduoshan. In additional, Yusui Railway, Yusui Expressway, National Highway S319, National Highway S205, Yangtze River tributary basin and other regional large-scale transport infrastructure are interlaced here, which have very superior external traffic conditions.

Fujiang, a tributary of the Yangtze River, runs through the urban agglomeration. Tongnan district is backed by hills and facing the river, which make people feel comfortable and at ease in both work and life. The wise love mountains, and the benevolent love waters. Mountains and waters are the basis of human survival in Chinese traditional concept. Tongnan fully shows the traditional pattern of good living and gathering wealth behind mountains and rivers.

项目基地地形呈洼状，四周高，中间低。由于中间部分地形较为低、深、陡。四周分别为已建好的居民建筑，更增加了场地的陡峭态势。

公园周边建筑用地多为居住建筑、商业用地、公共服务建筑，人群密集、汇聚。

奋进大道、东风大道、金佛大道城市主干道与片区支路环绕场地，城市的交通可达性强。

设计策略

策略一 延续 [自然山水格局，生态先行]

由山体、河流、湖泊所形成的自然山水格局，作为城市绿地的组成部分，在城市绿地网络体系中是不可或缺的。

策略二 颂赞 [潼南优秀文化]

增强广大基层群众的文化自觉和文化自信，激发民族文化创造活力，丰富广大人民群众精神文化生活。

策略三 点睛 [生态文明典范]

从情感互动的角度出发，探讨景观序列与人情感之间的动态关系，对景观序列的组织及其丰富性设计提出相应的策略与建议。

策略四 创造 [人性化活动场所]

建立一个能满足需求的户外活动场所是现代城市建设中非常重要的。

策略五 创建 [精明营造典范]

以营造创意生活氛围为宗旨，通过挖掘创意要素，整合创意资源，生产创意产品，传播创意观念，营造创意生态，激活创意消费，构建富于创意的社会环境、经济环境和自然环境。



New Town Park is located in the north of the Yangtze River in Tongnan District, which is in the central area of the city. The use of the surrounding land is mostly residential and commercial. And to continue the city's main axis structure as well as the city's sense of etiquette, the park is defined as a district park with a service radius of 1500-2000 meters.

STATUS OF BASE

There are many connecting points between the site and the city. There are four places on the East and west sides and the South end. But at the entrance of the north axis of the city, the sales building of the original residential area hinders the connection between the city and the base.

Gold Buddha Bridge, Lotus flower Bridge, Fujiang Bridge, Endeavour Avenue, etc. The main traffic arteries at the municipal level surround the base, and the east side of the park links the city street center square, and the west side links the city citizen sports venues.

The vegetation in the site is dense and abundant, which has better vertical greening landscape effect. Especially, there are many eucalyptus forests.

The terrain of the project base is low-lying, which is high around and low in the middle. Because the middle part of the terrain is relatively low, deep and steep. They are surrounded by built residential buildings. It also increases the steep situation of the site.

The construction land around the park is mostly residential buildings, commercial lands, public service buildings, and crowds gathering. Endeavour Avenue, Dongfeng Avenue, Gold Buddha Avenue City Main Road and District Branches surround the site, thus the site has good accessibility.

DESIGN STRATEGIES

STRATEGY 1: CONTINUE THE CONCEPT OF "NATURAL LANDSCAPE PATTERN, ECOLOGICAL FIRST"

As an integral part of urban green space, the natural landscape pattern formed by mountains, rivers and lakes is indispensable in the urban green space network system.

STRATEGY 2: PROMOTING TONGNAN'S EXCELLENT CULTURE

We should enhance people's cultural consciousness and self-confidence, stimulate the creativity of national culture and enrich the spiritual and cultural life for people.

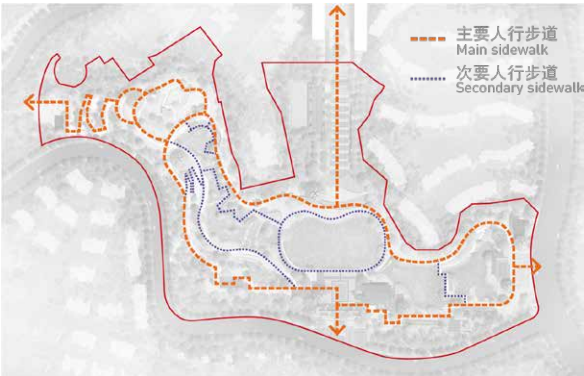


项目愿景

潼南文化庭园 新城生态典范

游线及设施

公园游线主要为两种类型。环湖的滨水带为次要人行步道，长度为 800 米；其外围为主要人行步道，主要步道联系并贯通四个出入口，长度约为 1490 米。



▲ 交通分析 Traffic Analysis

公园消防车道设置 4m 宽，满足消防车进入公园园区针对公园内部建筑进行火情扑救。并且设置 4 个半径为 50 米的防火取水点，便于防火扑救。

本次景观设计中，人民生态公园共规划厕所 3 座，40 个蹲位，满足规范要求。根据公园停车规划要求，人民生态公园停车位一共拥有 37 个。

总建筑面积 3811m²（占总面积 2.5%）其中：

水岸茶舍：建筑面积 1170m²

服务建筑：建筑面积 200m²

地下车库建筑：建筑面积约 2000m²

河流流向为自西向东。根据其流向，设计了三个大的景观阶梯，一级一级顺流而下，第一阶梯水面标高为 263 米，第二阶梯水面标高为 261.5 米，第三阶梯标高为 260.5

STRATEGY 3: HIGHLIGHT THE MODEL OF ECOLOGICAL CIVILIZATION

From the perspective of emotional interaction, this project explores the dynamic relationship between landscape sequence and human emotion, and puts forward corresponding strategies and suggestions for the organization and variety design of landscape sequence.

STRATEGY 4: CREATING HUMANIZED PLACES OF ACTIVITY

It is very important to build an outdoor venue to meet the needs of modern urban construction.

STRATEGY 5: CREATE A MODEL OF SMART CREATION

In order to form a creative life atmosphere, we should dig creative elements, integrate creative resources, produce creative products, disseminate creative ideas, model creative ecology, activate creative consumption, to build a holistic creative environment.

PROJECT VISION

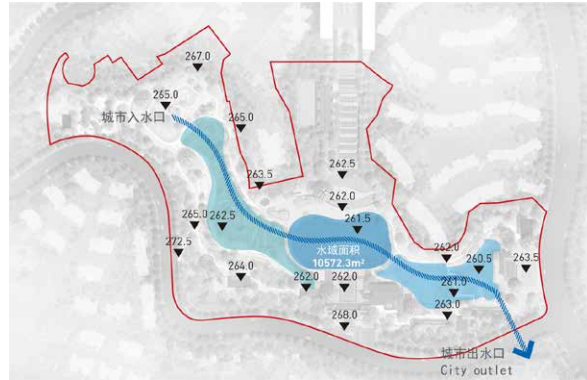
TONGNAN CULTURAL GARDEN
ECOLOGICAL VALLEY

TRAVEL ROUTES AND FACILITIES

There are two main types of Park tours. One is the waterfront around the lake, it is a secondary pedestrian walkway with a length of 800 meters, and another is a periphery main pedestrian walkway with four entrances and exits connected by the main walkway with a length of about 1490 meters.

The fire lane of the park is 4 meters wide, which meets the need for fire trucks to enter the park for fire





▲ 水流分析 Vertical Analysis

米；中心湖区水域面积约为 1 万平方米。阶梯式的水体处理手法不仅巧妙地解决了地形的高差，也为游人带来了更多的视听体验。

生态水岸设计

通过防护斜坡、人工湿地及人工岛等手段，对水岸进行修复。极少量的木栈道提供人行空间，最大程度限制人为活动对湿地环境的干扰，使水岸呈现原生态的面貌。自然缓坡结合各类观赏性强的乔灌木及水生植物进行设计，形成的自然型水岸充满野趣。木质栈道与小型平台架于水面，使人与自然更加亲近。

雨水收集模块是雨水收集利用系统中的一部分，若干个雨水收集模块单元组合起来，形成一个地下贮水池。在水池周围根据工程需要包裹防渗土工布或透水土工布，组成贮水池、渗透池、调洪池等不同类型。用雨水收集模块组装水池，安装方便，承载力大，不滋生蚊蝇及藻类，且在临建地区域使用后，可以拆除迁移到其它区域继续使用。雨水收集模块贮水池能有效的将收集来的雨水进行存储，这些存储的雨水资源，经过处理后可用于冲洗厕所、清洗路面、浇灌草坪、水景补水，甚至用于循环冷却水和消防水。



▲ 生态景观带 Ecological Landscape Belt

fighting against the internal buildings of the park. And four fire intake points with a radius of 50 meters are set.

In this landscape design, the People's Eco-Park has planned 3 toilets and 40 squats to meet the requirements of the norms. According to the park parking planning requirements, there are 37 parking spaces in the park.

The total building area is 3811m² (2.5% of the total area):

Waterfront Teahouse: the building area is 1170m²

Service Building: the building area is 200m²

Underground garage building: the building area is about 2000m²

The river flows from west to east. According to its flow direction, three large landscape ladders were designed. The first one was 263 meters, the second one was 261.5 meters, and the third one was 260.5 meters. The water area of the central lake area was about 10,000 square meters. The stepped water treatment not only solves the elevation difference of the terrain skillfully, but also brings more audio-visual experience for visitors.

WATERFRONT ECOLOGICAL PLANT

By means of protecting slopes, constructed wetlands and artificial islands, the coast is restored. A small number of wooden trestle roads provide pedestrian space, which restrict the disturbance of human activities to wetland environment to the greatest extent, and makes the waterfront present an original appearance. The natural gentle slope is designed with various ornamental trees, shrubs and aquatic plants, thus the natural waterfront is full of wild interest. Wooden walkways and small platforms are situated on the water surface, making people more close to nature.

Rainwater collection module is a part of rainwater collection and utilization system. Several modules are combined to form an underground storage tank. Surrounding the pool, the anti-seepage geotextiles or pervious geotextiles are wrapped according to the needs of the project, and different types of reservoirs, infiltration pools and flood diversion pools are formed. The rainwater collection module is used to assemble the pond, which has all kinds of good characteristics. It can be removed and transferred to other areas after being used in the adjacent areas. The rainwater collection module reservoir can effectively store the collected rainwater, which can be used to flush toilets, clean roads, irrigate lawns, make up water for scenery, and even to circulate cooling water or fire water.



▲ 污染源 Pollution Sources

城市公园满足人群户外设施需求，园区内部设置有：公共卫生间、医疗服务点、公共广播、直饮水、残疾人坡道、餐饮点、WIFI全覆盖、公共座椅、垃圾桶等一系列人性化的设施。

黑臭水治理

人民生态公园黑臭水体整治按照“源头减排、过程控制、系统治理”的海绵城市建设思路，采取“控源截污、内源治理、清淤清漂、生态修复、水体循环”的措施。对直排水体的污水进行截流改造，进入污水处理厂处理。水系主要进行河道恢复、清淤、水生态修复；水系绿带结合水位建设不同的低影响开发设施；滨水建筑区合理的组织雨水，合理利用水系绿带净化坡面雨水，补充河道水体；其他区域通过建设低影响开发设施，滞留和净化水质，并通过雨水管网补充水体水量。

变废为利 造园为民

全面贯彻落实“截污一治水一生态恢复”的生态指导思想和原则，创造性地将新城区内遗留多年的原鹿鼎湖黑臭水体整治与人民生态公园规划建设紧密结合，通过高水平的景观设计和建设实施，构建了一座集生态、低碳、文化、艺术、休闲等可持续要素于一体的潼南首个城市精品公园。



To meet the needs of outdoor facilities for people. The park has a series of humanized facilities, such as public toilets, medical service centers, public broadcasting, direct drinking water, ramps for the disabled, catering spots, WIFI, public seats, trash cans and so on.

TREATMENT OF BLACK ODOR WATER

In accordance with the idea of sponge city construction, measures of "source control and pollution interception, endogenous control, silt clearance and drift removal, ecological restoration and water circulation" are adopted in the treatment of black odor water body in People's Ecological Park. The sewage from the direct drainage body is intercepted and revamped to be treated in a sewage treatment plant. Water system mainly carries out river restoration, silt clearance and water ecological restoration. The green belt constructs different low-impact development facilities combined with water level. The waterfront construction area organizes rainwater reasonably, utilizes water system green belt to purify slope rainwater and supplement water body; other areas retain and purify water quality by constructing low-impact development facilities, and supplement water volume through rainwater pipe network.



TURN WASTE INTO PROFIT AND CREATE GARDEN FOR PEOPLE

We will fully implement the ecological guiding ideology and principles of "pollution interception, water control and ecological restoration", creatively integrate the remediation of the black and odorous water body of Luding Lake, which has left over for many years in the new urban area, with the planning and construction of people's ecological park. In this way, we have built the first urban boutique park in Tongnan, which integrates ecological, low-carbon, cultural, artistic, leisure and other sustainable elements. 



重庆市潼南区城市建设投资（集团）有限公司
CHONGQING TONGNAN URBAN CONSTRUCTION INVESTMENT(GROUP) CO., LTD

开拓创新 精筑善建 锐意进取 承载梦想

INNOVATE IN PIONEERING SPIRIT TO BUILD EXCELLENT PROJECT.
FORGE AHEAD WITH DREAMS OF THE PUBLIC.

重庆市潼南区城市建设投资（集团）有限公司成立于1998年，由区国有资产监督管理委员会全资持有。公司注册资本11.69亿元，总资产273.87亿元，净资产128.52亿元，主体信用评级2A。集团公司内设党委、董事会、监事会等治理机构，下设8个部门，现有员工105人，硕士学历以上人员20人，具有中高级技术职称15人。集团拥有重庆市潼南区涪源商业管理有限公司、重庆金浩房地产开发有限公司、广茂融资租赁（重庆）有限公司、重庆市潼南区富潼林业开发有限公司、重庆市潼南区涪韵实业有限公司5家全资子公司，业务涵盖基础设施项目建设、投资与运营、土地整理、开发与运营，国有资产经营管理及投资、房地产开发建设，棚户区改造，物业管理，林业开发等领域。经过多年的发展，现已形成“投、融、建、管、还”一体化的投融资新体制和城市建设经营实体。

风雨砥砺鼓征帆，策马扬鞭自奋蹄。潼南城投着力发挥投融资主体、重大项目建设主体和城市运营主体作用，聚焦城市、经济、民生三大业务板块，以打造城市综合运营为特色的国有资本投资运营公司为目标，以战略转型和管理提升为主线，以开放包容、互利共赢、合作创新的理念，融资汇智、众志成城，共同建设产业聚集、宜居宜业的美好潼南。

重庆市潼南区桂林街道办事处金佛大道46号
No.46, Jinfo Avenue, Guilin Street,
Tongnan District, Chongqing

Tel_023 44576388
Fax_023 44591239

www.cqtn.gov.cn/www/tncjt/

Chongqing Tongnan Urban Construction Investment (Group) Co., Ltd. was established in 1998 and is wholly owned by the District State-owned Assets Supervision and Administration Commission. The company has registered capital of 1.169 billion yuan, total assets of 27.387 billion yuan, net assets of 12.252 billion yuan and main credit rating of 2A. The group company has a party committee, board of directors, board of supervisors and other governing bodies. It has eight departments, 105 employees in which 20 people have master's degree or above, and 15 senior technical titles. The Group owns five wholly-owned subsidiaries of Chongqing Tongnan Fuyuan Commercial Management Co., Ltd., Chongqing Jinfu Real Estate Development Co., Ltd., Guangmao Finance Lease Co., Ltd., Chongqing Tongnan Futong Forestry Development Co., Ltd., Chongqing Tongnan Fuyun Industrial Co., Ltd. Their business covers infrastructure project construction, investment and operation, land consolidation, development and operation, state-owned assets management and investment, real estate development and construction, shantytown transformation, property management, forestry development and other fields. After years of development, a new system of investment and financing, as well as an entity of urban construction and operation have been formed, which integrates investment, finance, construction, management and exit.

Wind and rain beat the drum and sail, and spurred the horse and whip up to fight. Tongnan City Investment focuses on the main role of investment and financing, major project construction and urban development and operation, focusing on the city, economy and people's livelihood, aiming at creating state-owned capital investment operation company with the characteristic of urban comprehensive operation, taking strategic transformation and management promotion as the main line, with the idea of openness, inclusion, mutual benefit and win-win, cooperation and innovation, to build beautiful Tongnan of industrial agglomeration and livability.



实景图

上海爱琴海购物公园是国内首个文化体验商业综合体，也是上海地区的商业新地标。总建筑面积55万㎡，包含24万㎡商业主MALL，10万㎡家具MALL，9.5万㎡的国际街区、5万㎡的城市生态公园。

Shanghai Aegean Place is the first commercial complex providing cultural experience in China, and also a new commercial landmark in Shanghai. The total construction area is 550,000 ㎡, including 240,000 ㎡ of business owners MALL, 100,000 ㎡ of furniture MALL, 95,000 ㎡ of international blocks and 50,000 ㎡ of urban ecological park.

项目地处上海市闵行区吴中路1588号，地铁十号线龙柏新村站上盖。其中由国际建筑大师安藤忠雄亲自打造4800㎡的艺术空间及新华书店，将艺术人文与商业融为一体，上海之眼风情街以先锋建筑形态致敬城市，世界之杯酒吧街创造城市活力新领地。其中还引进冰雪世界、国际马术俱乐部等新型休闲娱乐体验模式。空中有机农场回归最自然的生活状态。是一个集萃文化、情感、生态、摩登的高端商业中心。

The project is located at No. 1588 Wuzhong Road, Minhang District, Shanghai, near the Longbaixincun Station on Metro Line 10. Among a variety of creations in this project, a combination of art space and Xinhua Bookstore designed by the internationally acclaimed architect, Tadao Ando, stands out with its vast space of 4800㎡ and its ingenious integration of arts, humanities and commerce. Beyond, the complex also introduced a series of trendy experience mode of leisure and entertainment. Among them are the Shanghai Eye Shopping Street paying tribute to the city in the form of pioneer architecture, the World Cup Bar Street offering a modern area for the releasing of urban vitality, the Aerial Organic Farm revitalizing natural state of life, the Ice and Snow World, the International Equestrian Club and etc. Overall, Aegean Place is an upscale commercial center, combining cultures, modernity, emotions, ecology and style.



上海爱琴海购物公园 AEGEAN PLACE

上海市闵行区吴中路1588号（10号线龙柏新村站3号口）/ NO.1588Wuzhong Road, Minhang District, Shanghai.



Weihai Nanhai New District City Cultural Center Design Plan

南海新区市民文化中心设计方案说明

市民文化中心作为传播城市文化的空间载体对城市发展有着重要的意义。南海新区市民文化中心项目包括文化场馆、文化广场、文化内街和中心公园，各类场馆总建筑面积约5万平方米。文化场馆包括科学技术馆、图书馆、档案馆、博物馆、青少年宫、妇女儿童、老人活动中心和大剧院。

文化广场是文化场馆的室外活动区域，是城市与建筑的过度空间，美化城市形象也具备集散功能；文化公园由公共绿地、景观、水面构成，是市民散步、健身、休闲的开放式公园。

建筑布局

分析项目周边的城市现状，把建筑分成组群更适合现场的城市空间关系，设计用建筑来隔离或围合出广场空间，最终将建筑分为三组，以大剧院为核心，其他场馆及活动中心分为两个组群，一组占据用地的西北角成L形

As a space for disseminating urban culture, the city cultural center is important for urban development. The Nanhai New District City Cultural Center Project includes various cultural venues, a cultural square, cultural alleys, and a central park. The total construction area of these is about 50,000 square meters. Cultural venues include the Science and Technology Museum, a library, archives, a museum, the Children's Palace, Women & Children's Center, Elderly Center, and the Grand Theatre.



状，与用地西侧的建筑群呼应，形成线性的街道空间。另一组占据南侧现代路。在路边的界面，水平舒展的成一字形布置。

大剧院则以独立完整的体量布置在东北处，与城市街道退出开阔的水面及广场空间。从蓝创大厦及市政公园角度看过来形象鲜明突出。这样就将原本过于开阔的场地分解为东北、中部、东南和西南四个尺度较为合宜的区域。

同时，它使开放空间以层层交叠递进的方式铺展开来，完成了从文化广场、文化内街到文化公园的渐次过渡，这也避免了中心对称或轴线对称等过于仪式感的空间出现。

建筑造型：认真梳理各场馆的功能需求以确定规模和体量，西北侧的全龄段活动中心更接近于我们日常感知的相对合宜的城市建筑尺度。为了地面景观不被大量的停车破坏美感，设计结合架空停设置了坡地景观，西侧几个活动中心建筑以相对均质的状态排在坡地之上，形成有韵律的沿街界面。

南侧的四个场馆则两两合一，形成两座对称的场馆，两座场馆间之间则用大型的景观构筑物形成灰空间，作为休闲停留的室外活动空间。使两个建筑若即若离的呼应着，沿街形成完整而统一的整体，又不乏丰富和活跃元素。两个建筑相互对话而又保持适当的距离。大剧院则以相对独立完整的体量矗立在东侧的大面积水景旁，成为整个园区的视觉中心。

空间组织

文化长廊在各馆之间建立起视觉和行为的关联，同时也形成了真正的空间共享。作为日常展示、活动发布和观众休憩的场所，各个场馆的空间界限无形中被扩展到整个长廊的范围，形成生动有趣的交集。丰富的空间层次使得人们的活动空间变得立体多元。

文化长廊在南北区各自场馆之间建立连接和共享，连续的长廊使原本毫无联系的建筑聚拢成相对整体的空间，带来稳定和连续的空间认知。也形成了亲切近人尺度的内街，在建筑群内部创造出丰富的空间层次。

外观设计

西北侧的建筑群外观，为避免出现过于平常的办公建筑表情，采用了简洁的大的虚实对比。为打破过长的延续界面，北侧的青少年活动中心和多功能厅则采用了跳脱的白色，与沉稳的灰色形成了鲜明的对比，形成相对轻松愉悦的建筑表情。南侧建筑群外观则采用有倾斜感灰色体

Cultural Square is an open space for outdoor activities outside of the cultural venues. It can build up city image and serve as a venue for gathering and evacuation. The cultural park consists of open space, some attractions, and a lake. It is an open park where people can walk, do sports and relax.

Building Layout

by analyzing the current city layout around the project, we realize that it would be better for us to divide buildings into different groups to better suit the city. So we divide these buildings into three groups with the Grand Theatre as its core independently. Other venues and centers are grouped. One was in the northwest of this area in the shape of L, forming a linear street linking buildings on the west. The other group is located at the Modern Road on the south side. At the roadside, it stretched horizontally in a line.

The Grand Theatre is situated in the northeast independently. If looked from the Lanchuang Building and the municipal park, it stands out. By doing so, the once over-spacious place can be appropriately separated into four areas in the northeast, central, southeast and southwest.



At the same time, it allows the open space to be spread out in layers, forming a gradual transition from the cultural square, the cultural alley to the cultural park, which also avoids a central symmetry or axis symmetry.

Architectural Modeling: we have to carefully comb through the functional requirements of each venue to determine the size and volume. The center for all ages on the northwestern side is closer to the urban architectural scale. To prevent the ground landscape from being damaged by parking, we set up the overhead parking lot to create a slope, and several centers will be built on the slope.

量与序列的柱廊对比，既有厚重的力量感又有优雅的仪式感。大剧院的外观则强调其主角的地位，强调完整的体积感，细节的开孔及肌理又产生出不同方向的表情变化，使其成为空间的统领者。

人文关怀与可持续发展

以人为本，满足全龄段人群的文化活动需求，充分发挥文化启迪心智、陶冶情操、涵养人生的作用，用文化的力量推进城市公共文明发展。也为一个新兴的城市带来活力。

充分利用自然资源，太阳能发电、自然水系的利用，绿色建筑标准设计，旨在让项目融于周边的自然环境，保护现有的生态环境，做到可持续发展。

南海新区市民文化中心作为文化体验的综合性场所，在功能上满足城市文化生活，整体空间组织上衔接城市公共空间体系，建筑细节上注重场所精神的营造。对完善城市功能，加快文化事业发展，提升城市文化软实力，丰富人民群众文化生活，带动文化核心区开发建设具有重要意义。



The four venues on the south side are divided into two groups, forming a symmetrical view. Between the two venues, there will be a building to form a gray space, which serves as a space for outdoor activities and relaxation. These two buildings form a complete and unified whole along the street with rich and active elements. The two buildings maintain an appropriate distance yet it seems that they are pretty close to each other. The Grand Theatre stands on the east side of the large-scale waterscape independently and serves as the visual center of the entire park.

Spatial Organization

The Cultural Corridor establishes a visual and behavioral connection between the various venues and also forms a space for sharing. As a place for daily display, event release and relax, the spatial boundaries

of each venue are invisibly extended to the entire corridor, creating a lively and interesting intersection. The rich spatial levels make space more diversified.

The Cultural Corridor establishes connections between the respective venues in the north and south. The corridor brings together unconnected buildings and forms a relatively holistic space, where people feel that they are in the same place. It also forms an inner alley in the right size and creates a rich spatial level within the building complex.

Exterior Design

The exterior design of the building group on the north side is simple but contrasts with normal office buildings. The youth center and multi-function hall on the north side adopt a white color to show a sense of delight, forming a sharp contrast with the calm gray. The arcades of the south side of the building are gray, showing a sense of power and elegance. The appearance of the Grand Theatre emphasizes its outstanding position, by showing its immensity and elegant details.

Humanistic Care and Sustainable Development

We design this place in a people-oriented approach, to meet the needs of cultural activities of the entire age group, give full play to the role of culture to enlighten the mind and spirit, and make good use of culture to promote the development of urban public civilization. It also brings vitality to an emerging city.

We should make full use of natural resources, develop solar power, natural water system, and green building standard design, to integrate the design into the surrounding natural environment and protect the existing ecological environment to achieve sustainable development.

As a comprehensive place for the cultural experience, the Nanhai New District City Cultural Center meets the needs of urban cultural life. The overall space organization is integrated into the urban public space system, and its architectural details are highlighting the creation of the place spirit. It is of great significance to improve the city's functions, accelerate the development of cultural undertakings, enhance the soft power of urban culture, enrich the cultural life of the people, and promote the development and construction of cultural core areas. 

中国 • 威海

南海新区市民文化中心

威海南海新区市民文化中心项目包括文化场馆、文化广场、文化内街和中心公园，各类场馆总建筑面积约5万平方米。文化场馆包括影剧院、科技馆、图书馆、档案馆、博物馆、老年妇女儿童活动中心。



设计单位：北京东方华太建筑设计工程有限责任公司 齐颖工作室
邮箱：dfht2@126.com



Jiangyu Dream Town A Destination for All

江宇梦想小镇 一个旅行、度假和居住目的地

人类社会的发展史同时是一部人类居住环境变迁史。人类居所源于自然，发展至都市繁华喧嚣，再回归院落田园、贴近自然。人与自然和谐相处，是人类不变的课题；回归自然田园，是人类不变的本心。

人类居住环境的变迁历史

大约 25,000 年前，人类的居所是山洞、石洞、树洞等简单栖息环境；约 16,000 年前，人类逐渐学会用兽皮、树枝、树叶等搭建帐篷，实现简单的遮阳避雨功能，可以择地而居；约 6,000 年前，人们会建茅草屋、木制屋，建筑雏形初现；公元前 1,600 年，埃及古文明始现石制建筑，随着人类文明的发展，砖瓦、石制材料的房屋逐渐普及，城市出现。

The history of development of human society is also a history of change of human settlements. Human residence originates from nature, develops to the bustling and meandering city, and finally returns to the compound and nature closely. Keeping harmony between human and nature is an invariant subject for mankind; returning to nature and countryside is the unchanging belief of mankind.

The Historical Changes of Human Settlements

About 25,000 years ago, human residence was some simple living environment such as caves, tree holes; 16,000 years or so ago, human beings gradually

随着城市化的发展，人们争相涌进城市，城市的面积比任何时候都更恢弘壮阔。进入现代，高楼大厦直冲云天，人们从横向寻求居住空间发展到纵向找寻安身之所，城市的居住环境日渐拥挤，越来越脱离自然，公共绿地、公园、湖泊愈发珍贵。富人阶层选择在城市与郊区切换生活，享受那份自然与惬意。伴随随绿色环保理念传播的深度与广度，越来越多的人渴望在兼顾城市快节奏生活的同时返璞归真，亲近自然。于是带有产城融合综合功能的新型特色小镇方兴未艾，满足更多普通人群的需求。

中国新型特色小镇概况

在中国，国家发改委会出台《2019 年新型城镇化建设重点任务》文件，提出“特色兴镇、产业建镇”的理念。

2019 年，中国共有 22 个省份提出特色小镇创建计划，总计划数量超过 1500 个，其中文旅特色小镇计划数量超过四分之三。预计到 2020 年，中国将出现逾 1200 个文旅特色小镇，兼顾人们“眼前的苟且”以及“诗与远方”。

江宇地产的开发理念

广西江宇房地产有限责任公司成立于 1996 年，是一家以房地产投资为主，集住宅开发、商业开发、写字楼开发、物业管理、商业经营与租赁等为一体的大型企业。

江宇地产始终走在最前沿的设计开发路上，2001 年以来保持地产创新标杆。从开发高楼林立城市生活的江宇东方明珠花园，江宇世纪城、江宇世纪公馆、江宇都会明珠等项目，到追求有公园有近湖的大平层雅院、别墅的枫林蓝岸、塞纳维拉花园项目，江宇地产始终秉持先进的人居生活理念。2015 年，本着尊重自然、尊重历史人文、返璞归真的理念，江宇从城市单一地产开发，转向新型特色小镇开发与运营，倾力打造江宇梦想小镇项目。

江宇梦想小镇规划建设介绍

江宇梦想小镇位于中国南宁北，其遵从与探索产城融合发展规律，依照先生态、再生活、后生产的原则，致力于打造成宜居、宜业、宜人、宜游多重功能于一体的特色文旅小镇。

在尊重当地风俗人情、文化历史、壮乡骆越文化特质等内在人文需求，尊重项目所在地的喀斯特地貌原生山林、生态系统、湖畔水系等外在客观物质的基础上，将项目定位为——以浓郁壮族风情、良好生态资源和乡村农业为主要特色，以骆越文化体验、婚庆一站式服务、山水体

mastered the skill of building tents with skins, branches and leaves, achieving simple functions of shading and sheltering from rain, making it possible to change accommodation; About 6,000 years ago, people were able to build thatched huts and wooden houses, and the original shape of buildings emerged; Before 1,600 AD, ancient Egyptian civilization began to have stone buildings. With the development of mankind civilization, the houses made of brick and stone gradually came into popularization, and cities appeared.

Along with the development of urbanization, large population rushes into the city, making the city area larger than any other period. In the modern era, tall buildings soar into clouds and sky. People turn from horizontal search to vertical search for shelter. Becoming increasingly crowded, the living environment of the city is more and more divorced from nature, making public green space, parks and lakes more and more precious. The rich class chooses to switch their life between cities and suburbs, enjoying the nature and coziness. With the depth and breadth of the spread of green environmental protection concept, a growing number of people are eager to return to nature while balancing the fast-paced life in cities. Therefore, new characteristic towns with integrated functions of industry and city are still making progress, so as to meet the needs of more ordinary people.

An Overview of New Characteristic Towns in China

In China, the national development and reform commission (NDRC) issued the document of “Key Tasks for New Urbanization Construction in 2019”, putting forward the concept of “Promoting Towns with Distinctive Characteristics and Building Towns by Industries”.





验旅游、度假养生旅游、都市田园休闲旅游为主要功能，同时兼顾全生活配套人文居住板块的文化旅游休闲宜居综合体。

项目规划总用地面积 2673329m²，总建筑面积 3539651m²。划分为四个区域，分别是骆越文化民族产业园区、飞跃营地、创意文化多功能区以及休闲养生旅游配套区。

骆越文化民族产业园区建筑面积 218167m²，主要有美梦田园与骆越文化展示区两部分，建有伊岭农家民宿、特色康养主题农庄、民族特色农作市集（壮寨、瑶寨、侗寨、苗寨）及主体酒店，包括特色美食、壮族民俗文化体验馆在内的壮家风情商业街等配套，力争把项目打造成为广西民族文化走向国际的产业平台。

创意文化多功能区建筑面积 36271m²，建设有文化旅游活动配套设施、游客综合信息服务中心、休闲度假主题酒店、主题水上乐园、花田摄影基地、彩虹廊桥、草坪婚礼、浪漫小居等建筑，主打摄影、宴会、度假功能，衍生青年、家庭消费，打造一站式文化休闲服务综合功能基地。

飞跃营地功能区建筑面积 6000m²，建有主题公园、亲子游乐、运动游乐和专项度假营地，依托基地内丰富的自然资源，打造集体育休闲、户外露营等为一体的综合性营地，开启新兴户外活动、户外体育新时代。

休闲养生旅游配套区建筑面积 3279213m²，配套建设幼儿园、小学、中学、老年大学，提供全年龄段精英教育配套。建设医院、禅文化公园、养生公园、休闲养生区以

In 2019, there are 22 provinces in China putting forward plans to build characteristic towns, with the total number of more than 1500. Among them, more than three-quarters of the small towns with cultural and tourism characteristics are planned. It is expected that by 2020, China would have more than 1200 cultural tourism characteristic towns, which will take into account the people's "temporary meticulousness" as well as "poetry and distance".

The Development Concept of Jiangyu Real Estate

Founded in 1996, Guangxi Jiangyu Real Estate Co., Ltd. is a large-scale enterprise focuses on real estate, and integrates residential development, business development, office building development, property management, business operation and leasing.

Jiangyu Real Estate has always been on the forward position of the design and development road, and has maintained benchmark in the real estate innovation since 2001. From the development of Jiangyu Oriental Pearl Garden, Jiangyu Century City, Jiangyu Century Mansion and Jiangyu Metropolis, to the pursuit of the grand floor elegant courtyard with parks and near lakes, the maple forest blue shore of villa, and the Cenavilla Garden project, Jiangyu Real Estate has always adhered to the advanced living concept. In 2015, in conformity with the concept of respecting nature, respecting history and

及高级酒店，主打休闲养生文化及养老旅游主题，打造休闲养生综合服务产业，成为广西休闲养生旅游的示范，满足旅游综合服务需求，并与小镇产业形成互补，延伸产业类型，创造新的经济增长。



humanity, and returning to the original nature, Jiangyu turned from the single development real estate of the city to the foundation and operation of a new pattern characteristic town, striving to building the project of Jiangyu Dream Town.

Introduction of the Planning and Construction of Jiangyu Dream Town

Located in Nanning, China, Jiangyu Dream Town complies with and explores the rules of development of integration of industry and city. Following the principles of ecology first, living later and production last, it devotes itself to creating a characteristic town of cultural and tourism which integrates multiple functions like livability, industry, pleasure and tourism in one.

On the basis of respecting local customs, cultural history, Luoyue cultural characteristics of Zhuang Town and other internal cultural needs, and respecting the external objective materials such as the Karst Landform Primary Forest, the ecological system and the lakeside water system of the project site, it defines the project as - the cultural tourism leisure livable complex with strong Zhuang customs, good ecological resources and rural agriculture as the main characteristics, taking the Luoyue cultural experience, wedding one-stop service, landscape experience tourism, vacation and health tourism, urban rural leisure tourism as the main functions, and giving attention to the whole life supporting humanistic living plate.

The total planned land area is 2673,329 square meters, and the total construction area is 3539,651 square meters, which is divided into four regions, namely Luoyue Cultural National Industrial Park, Feiyue Campsite, Creative Culture Multi-functional Area and Leisure Health Tourism Supporting Area.

Luoyue Cultural National Industrial Park The covered area is 218167 square meters, mainly consisting of Dream Countryside and Luoyue Culture Exhibition Area. There are Yiling farmers' homestay, characteristic health care theme farm village, ethnic characteristic agricultural market (Zhuang village, Yao village, Dong village, Miao village) and main hotel. It also has supporting facilities such as Zhuang nationality style commercial street, including special cuisine and Zhuang nationality folk culture experience hall.

Creative Culture Multi-functional Area The covered area is 36271 square meters, with the construction of cultural tourism activities supporting facilities, comprehensive information service center for tourists, leisure resort theme hotel, theme water park, flower field photography base, rainbow corridor bridge, lawn wedding, romantic small residence and other buildings. It has the main functions of photography, banquet and vacation, deriving youth and family consumption, creating one-stop cultural and leisure service comprehensive function base.

Function Area of Feiyue Campsite The covered area is 6000 square meters, with the construction of theme parks, parent-child recreation, sports recreation and special holiday campsites. Relying on the abundant natural resources in the base, it builds a comprehensive camp integrating sports recreation, outdoor camping and others, opening a new era of emerging outdoor activities and outdoor sports.

Leisure Health Tourism Supporting Area The covered area is 3279213 square meters, with the construction of kindergartens, primary schools, middle schools and universities for the aged to provide supporting facilities for elite education of all ages. Hospitals, zen culture parks, health parks, leisure and health zones and senior hotels are built, to focus on the theme of leisure and health culture and elderly tourism, and create a comprehensive leisure and health service industry. It becomes a model of leisure and health tourism in Guangxi to meet the demand for comprehensive tourism services, and forms complementary with small town industry, extending industry type, and creating new economic growth. 

小镇未来的憧憬 A Vision of the Future

未来,将有6万常驻人口在江宇梦想小镇这个幸福城邦安居乐业。人们在这里享受健康富足的生活,衣食住行、娱乐、购物、游玩、优质教育、专业医疗皆不误。世界各地的游客会慕名来到江宇梦想小镇,一睹268万m²的文旅规划。

小镇体验,多姿多彩!大人带着孩子漫步于欧式浪漫的维罗纳婚庆小镇,感受一对对新人幸福美好的灿烂笑容,埋下人生美好憧憬的种子;闲逛在充满少数民族风情的骆越文化产业园区,小桥流水,碧波潺潺,轻快的燕子飞舞在垂柳间;不远处,四季绚烂的花海传来阵阵花香,彩蝶轻舞;奔赴到壮乡民族三月三歌圩舞台,服装各异的壮、苗、瑶、侗等12个少数民族的青年男女们,正用嘹亮的歌声,抒发对美好爱情与未来生活的向往。

在飞跃营地,欢乐的人儿乘着形态各异、色彩斑斓的热气球缓缓升腾:不远处的楼宇露台上,三五只剪影悠然品茶闲适如仙人;一年级方程式,小小赛车手们正在追逐着各自的梦想;美梦田园,孩子们学着妈妈栽种蔬果,手舞足蹈地与小伙伴们追逐打闹;湖泊中尽情畅游的“蛙人”们逐渐消失在眼前;天然攀岩绝壁上挥洒汗水的“蜘蛛侠”们由近变远;与山间空中飞索缆绳上的“飞人”们擦肩而过。眺望近在咫尺的千年喀斯特原生山林,人们身心得以无限放松……

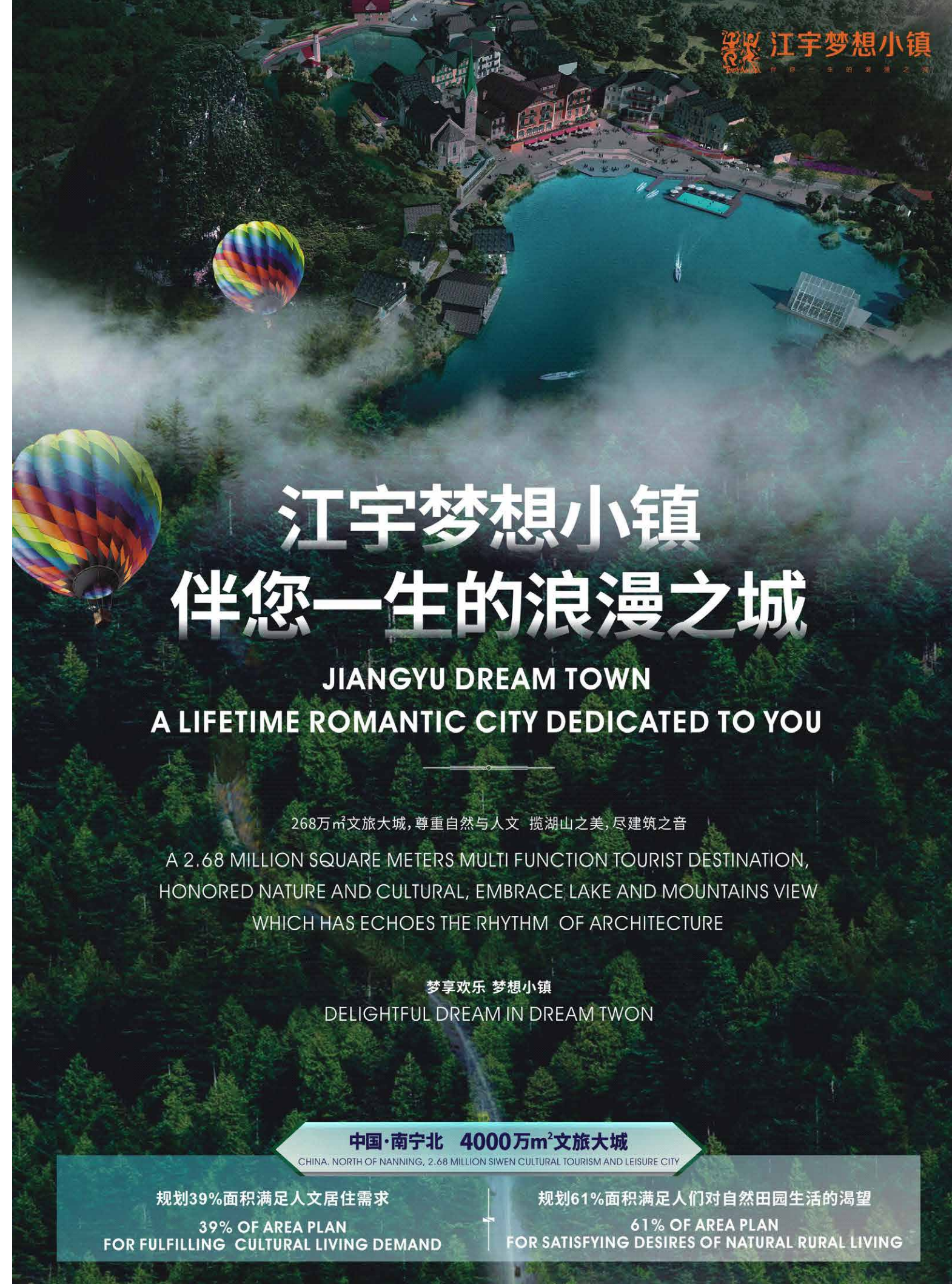
“采菊东篱下,悠然见南山”,1500年前,中国诗人陶渊明这样歌颂山水田园生活;“梦享欢乐 梦想小镇”,1500年后的今天,我们这样追溯自然与人文的本心。我们诚邀游客们到小镇赏山观景,拾得最惬意的享受和全身心的放松。我们的居民,将沉浸在山川的氧气和花海的香氛中,生活充满动力。我们力求满足游客和居民的所有需求,从而形成可持续的度假和居住生活方式。江宇梦想小镇,适合您与爱人共度一生的快乐时光,满足您所有愿望,是一个人旅行、度假、居住的最佳目的地。

In the future, there will be 60,000 permanent residents living and working in Jiangyu Dream Town, a happy city-state. People can enjoy a healthy and rich life here, including food, clothing, shelter and means of traveling - the four basic needs of everybody, entertainment, shopping, play, quality education and professional medical treatment. Visitors from all over the world will come to Jiangyu Dream Town for a total of 2.68 million m² of travel planning.

Experience in the small town is colorful! Adults and children stroll through the romantic European wedding town of Verona, feeling the happy and beautiful bright smiles of pairs of new couples, and planting the seeds of the vision of better life; Wander in Luyue Cultural Industrial Park full of ethnic customs, with small bridges, flowing water, gurgling blue waves, and brisk swallows flying among the weeping willows; Not far away, the four-season gorgeous sea of flowers spreads fragrance of flowers, with butterflies dancing lightly; Run to the stage of the folk song stage in Zhuang Town on March 3, the young men and women of 12 ethnic minorities, including Zhuang, Miao, Yao and Dong, with different costumes, are singing loud and clear to express their yearning for a better love and future life.

At the Feiyue campsite, happy people soar slowly in colorful hot air balloons of various shapes; On the terrace of the building not far away, three or five silhouettes are leisurely tasting tea as immortals; First-year formula, the small racing drivers are chasing their dreams; In the dream garden, the children learn to grow vegetables and fruits from their mothers, dancing and chasing with their little friends; In the lake, “frogmen” who are swimming freely are gradually disappearing; In the natural climbing cliff, sweat “spider-man” go from near to far; They passed the “flying men” on the aerial cables in the mountains. Looking at the Millennium Karst Primary Forest, people can relax infinitely physically and mentally.

“When pick chrysanthemum beneath the eastern fence, see the Nanshan leisurely”, 1500 years ago, the Chinese poet Tao Yuanming praise the pastoral life of landscapes like this; Enjoy the Happiness, The Dream Town”, today, 1500 years later, we trace the nature and humanities in this way. Our plan invite our tourist to stay and relax within nature view of mountains and various tourist attractions. Meanwhile, our residents will be rejuvenated by fresh air through hillside and flower sea. This one plan unifies demands of tourists and residents that lead to a sustainable vacation and residence living style. Jiangyu Dream Town meets what you wish for a peaceful and joyful time well spent with your love ones, a destination for all.



江宇梦想小镇 伴您一生的浪漫之城

JIANGYU DREAM TOWN
A LIFETIME ROMANTIC CITY DEDICATED TO YOU

268万m²文旅大城, 尊重自然与人文 揽湖山之美, 尽建筑之音

A 2.68 MILLION SQUARE METERS MULTI FUNCTION TOURIST DESTINATION,
HONORED NATURE AND CULTURAL, EMBRACE LAKE AND MOUNTAINS VIEW
WHICH HAS ECHOES THE RHYTHM OF ARCHITECTURE

梦享欢乐 梦想小镇
DELIGHTFUL DREAM IN DREAM TOWN

中国·南宁北 4000万m²文旅大城

CHINA, NORTH OF NANNING, 2.68 MILLION SIWEN CULTURAL TOURISM AND LEISURE CITY

规划39%面积满足人文居住需求
39% OF AREA PLAN
FOR FULFILLING CULTURAL LIVING DEMAND

规划61%面积满足人们对自然田园生活的渴望
61% OF AREA PLAN
FOR SATISFYING DESIRES OF NATURAL RURAL LIVING

Leading the New Trend of Shopping Aegean Palace Brings You One-stop Shopping Experience

爱琴海购物公园一站式的购物体验 引领购物新潮流

导语 Foreword

爱琴海购物公园，一街皆一色，一步皆一景，这里充满着生活的惬意与休闲，于喧嚣的城市之中，尽显温馨！

透过亮丽的玻璃幕墙欣赏艺术的长廊，品味镜像的艺术，沉浸在光的空间里，嬉戏在冰雪的世界中，体验着耕耘收获的乐趣，充满着“绿色”赋予建筑的“生机”，是“绿色”与“商业”的完美结合。

上海爱琴海购物公园地处上海市闵行区吴中路虹井路，是集购物、休闲、娱乐、美食等功能于一体的商业综合体，集萃了文化、情感、生态与摩登，是国内首个文化体验商业综合体，也是上海地区商业新地标。

Every street holds its own characteristics, and each step offers its unique scenery. With a leisurely atmosphere, Aegean Palace came as a space of tenderness in the hustle and bustle of city life!

In here, you will appreciate art through the bright glass curtain wall, especially that of mirror image, you will indulge in the thrill of sports in the world of ice and snow, immerse yourself in the space of light, and experience the joy of cultivation and harvest. Aegean Palace is designed with abundant decorations made of green plants to endow the architecture with vitality and color afresh. It is the perfect combination of greenery and commerce.

Shanghai Aegean Palace is located in Hongjing Road Wuzhong Road, Minhang District, Shanghai. It is a commercial complex integrating shopping, leisure, entertainment, food and other functions. Gathering elements of culture, emotion, ecology and modernity, Aegean Palace is the first commercial complex that provides cultural experience in China and also a span-new landmark of commerce in Shanghai.

Flourishing in the Eye

Walking into the Aegean Palace, the first thing leaping in sight is the Shanghai Eye. With a unique dome, it stands in the center of the shopping plaza, paying tribute to the city in a vanguard architectural form.

Its exterior adopts the top-level multimedia technology to achieve brilliant lighting effects, creating a stunning view for the Aegean Palace, and displaying a three-dimensional, all-round ecological art mode that binds together different architectures, and coordinates buildings with nature. From time to time, various large-scale performances and interactive activities will be held here. It is the central area where citizens gather.

Upon approaching the shopping blocks of Shanghai Eye, you will see the dynamic design of lines everywhere. The introduction part of the blocks helps form an effective connection between the shopping center and the surrounding buildings, which makes the shopping park an organic whole and provides a convenient channel for shopping trips.

By taking the sightseeing elevator of Shanghai Eye which is located in the sunken square, you will enjoy the green atmosphere of the ecological park and appreciate the beauty of the city at a glance.

“眼”之所向，尽显繁华

来到爱琴海购物公园，首先映入眼帘的就是“上海之眼”，独特的穹顶造型巍然矗立于购物广场的中心，以先锋的建筑形态向城市致敬。

其外立面采用了顶级的多媒体技术，塑造璀璨绚烂的灯光效果，瞬间成为“爱琴海”之美的亮丽一角，呈现了一个建筑与建筑之间、建筑与生态之间相呼应的立体式、全方位生态艺术模式。在这里，会不定期举办各类大型表演以及与市民的互动活动，是市民汇集的中心。

走近“上海之眼”的购物街区，随处可见线条的动态设计，街区的引入让商场中心与周边建筑物形成有效连接，使购物公园形成一个有机整体，为购物之旅提供了便捷的通道。

Enjoy Life, Enjoy the Beauty of Ecology

The overall floorage of Aegean Palace is 550,000 m². It consists of 240,000 m² of commercial center, 100,000 m² of Universal Home Expo Center, 80,000 m² of international blocks, 80,000 m² of Maker Center and 50,000 m² of urban ecological park.



The Aegean Palace brings forests into shopping malls, making the greenness of the forest an indispensable ornament. The building is injected with greenery vitality, providing customers with unique experience in the hustle and bustle of urban life.

The roof of the building offers a 5,000 m² airborne organic farm. In the modern era which emphasizes light





漫步到下沉式的广场，可以乘坐“上海之眼”的观光电梯领略生态公园的绿色气息，将城市之美一眼阅尽。

品生态之美，享生活之乐

爱琴海购物公园总建筑面积高达55万平方米，由24万平方米商业主体、10万平方米环球家居博览中心、8万平方米国际街区、8万平方米创客中心、5万平方米城市生态公园组成。

将森林带进商场，让森林的绿意成为商场不可或缺的一丝点缀，在繁忙的都市生活之中，让建筑充满绿意生机，感受不一样的购物体验。

楼顶更有约5000平方米的空中有机农场，在现代这个强调“轻食·慢生活”的时代里，可以在城市之中体验农场生活，享受着返璞归真带来的生活乐趣，也可以与好友亲朋一起动手一起同游，体验生活的细致之美、享受之乐。

一店一馆，与艺文邂逅

“光的空间 & 新华书店”位于购物中心的7层，由著名的“清水混凝土诗人”安藤忠雄设计，与8层的明珠美术馆相连接，以独具匠心的设计风格，吸引了一批批前来驻足观赏的市民。



走进书店，首先映入眼帘的是高低排列的书架组合、独特的方形镂空设计。抬头望去，入眼尽是星空璀璨，看漫天繁星如坠即逝，是光和影的完美展现。

food and gentle pace of living, you can experience farm life right here in the city, enjoy life by returning to nature, and experience the delicacy and fun of life with family and friends.

A Journey of Cultural and Artistic Exploration

Space of Light & Xinhua Bookstore is located on the 7th floor of the shopping mall. Designed by the famous "Poet of Fair-faced Concrete", Mr. Tadao Ando, which is connected with the Pearl Art Gallery on the 8th floor. With its unique design, it has attracted a steady stream of visitors for a voyage of discovery.

Walking into the bookstore, the first thing that catches your eye is the combination of high and low bookshelves with unique square hollow-out design. Looking up, you will see the bright "stars" in the "sky". The falling of the "stars" is the perfect display of light and shadow.



Next to the bookstore is the Pearl Art Museum founded by Shanghai Xinhua Distribution Group and Red Star Macalline Group. It regularly hosts professional thematic exhibitions and solo exhibitions, displaying a wide range of exhibits from multidimensional fields, involving elements of paintings, portraits, installations, design, photography, books, fashion and performances. With an international vision, the Gallery provides high-level art exhibitions, a variety of activities for the public including multilevel art education activities, and an art

与书店相接的，是由上海新华发行集团与红星美凯龙家居集团共同合作创建的明珠美术馆，定期举办专业的主题展览和艺术家个展，涉及绘画、画像、装置、设计、摄影、书籍、时尚和表演等多元领域，以国际化的视野、高水准的艺术展览、多层次的艺术教育以及丰富的活动面向大众，还有以“艺术生活实验室”为主题的艺术商店，引领上海城市的艺文生活。

新华书店光与影的交错，美术馆艺术与文化的融合，让人不禁停下脚步，沉浸其中，细致品味艺术与生活。

结语

爱琴海，一个繁华的地标，一个畅享购物与生活体验而又富有情感的场所。立足上海，驻足爱琴海，领略这里的一街一景，一步一色，感受这里艺术与文化相融的气息，品味繁华背后的休闲生活。造一座美丽城市的新地标，让所有的人都能感受得到城市的温情，让城市也不再孤独，让明天更显繁华。

爱琴海购物公园更为便捷的一站式购物体验，引导购物新潮流！

shop with the theme of Art Life Laboratory, leading the art and literary life of Shanghai City.

The intersection of light and shadow in Xinhua Bookstore and the amalgamation of art and culture in the Gallery attract visitors to stop by, immerse themselves in it, and taste the daintiness of art and life.

Remarks

Aegean Palace is a prosperous landmark, a space where shopping meets with life, and a work of art embellished with rich emotions. Based in Shanghai and stop by the Aegean Palace, you will enjoy the street scenery step by step, feel the blend of art and culture, and taste the leisure life in urban prosperity. As a span-new landmark of a beautiful city, Aegean Palace invites every guest to get rid of loneliness and feel the warmth of the city with an outlook that seeks the best for all souls!

Guiding the trend of shopping, Aegean Palace is committed to bring you the most convenient one-stop shopping experience in this modern city! 



LONGi: Photovoltaic Technology Unlocks Better Settlements for Human Being 隆基股份：光伏科技让人居环境更美好

隆基绿能科技股份有限公司，成立于2000年，2012年4月在上海证券交易所主板上市（股份代码：601012，简称：隆基股份），致力于成为全球最具价值的太阳能科技公司。隆基股份正走在一条从产品创新改变行业到技术创新改变世界能源格局的创变之路上。从光伏材料、光伏发电设备到太阳能电站系统，为光伏发电事业提供全方位的服务。2018年全年隆基股份营业收入人民币219.88亿元、归属上市公司股东净利润人民币25.58亿元，公司在营收、利润两项关键财务指标中表现出高速增长性，营收5年CAGR（年复合增长率）为57.34%，净利润5年CAGR（年复合增长率）为104.8%。2018年公司市值最高超过人民币800亿元，为同期全球市值最大的光伏企业。

公司创始人李振国先生，现任隆基股份总裁。1990年毕业于兰州大学物理系半导体材料专业，李振国先生是中国横向磁场单晶知名专家，开发了多晶碳头料的除碳工艺，获得过国家科技创新基金资助，并在国内推广磁场单

LONGi Green Energy Technology Co., Ltd. was founded in 2000. In April, 2012, it was listed on main board of Shanghai Stock Exchange (Stock ticker: 601012, abbreviated as LONGi), aiming to be the most valuable solar technology company in the world. LONGi embarked on an innovative path from product oriented change for this industry to the technology oriented change for the world energy patterns. A full range of services are provided to the photovoltaic undertaking by the company, covering solar materials, solar power generation devices and solar power station system. In 2018, the Company had achieved 21.988 Billion Yuan as operating revenue, and net profit attributable to equity holders of the Company was 2.558 Billion Yuan. There was the big growth in perspective of revenue and profit, the two critical financial indicators. Compound Annual Growth Rate (CAGR) for revenues in 5 year period was 57.34%, and the Compound Annual Growth Rate (CAGR) for net profits in the 5 years is 104.8%. Maximum market value in 2018 had exceeded 80 Billion Yuan, becoming

晶技术。荣获“2009年度西安市有突出贡献专家”、“第二届西安市优秀中国特色社会主义事业建设者”称号，荣获“2016年度中国能源创新企业家”，入选福布斯“2018中国上市公司最佳CEO”。李振国先生在环境保护和绿色发展方面，围绕着光伏科技让世界更美好的理念，提出了一系列重要的观点。

1、“光伏+储能”是人类未来能源的解决方案之一

李振国先生认为光伏行业是对地球未来命运具有重大作用的行业，“100%可再生能源发电”是实现控温目标最有效的途径。近十年来，光伏的技术进步和成本降低超乎想象，并且仍在持续；而抽水储能、电动汽车储能、化学储能等储能技术的快速发展，也将有效解决光伏发电的非连续性问题。因此，光伏+储能会在10年之内成为全球最经济的电力能源，一旦这种结果形成，对传统能源的替代将会大规模发生。

the photovoltaic enterprise with largest market value in the world in the same period.

Mr. Li Zhenguo, founder of the Company and current President, graduated from the Department of Physics, Lanzhou University with a major in Semiconductor Material. He is a well-known expert of monocrystalline silicon technology in transverse magnetic field. He had developed a carbon removal process for polycrystalline carbon-head material and obtained the support of the National Science and Technology Innovation Fund. At the same time, he popularized monocrystalline technology under the transverse magnetic field in China. Mr. Li had won titles of "2009 Expert with Outstanding Contribution to Xi'an City", "Xi'an Excellent Builder of Socialism with Chinese Characteristics (Second Term)", and "2016 China's Energy Innovation Entrepreneur". Forbes listed him as "2018 Best CEO of Listed Companies in China". On environment protection and green development, Mr. Li Zhenguo had proposed a series of important ideas under the philosophy of PV technology making the word better.

1 "Solar + Energy Storage", one of the solutions for energy challenges to the human being in the future

Mr. Li Zhenguo believes PV industry plays a significant role to fate of the earth in the future, and "generate power entirely by renewable energy" is the



▲ 隆基股份建设的西安港务区屋顶电站
Roof Power Station of Xi'an International Trade & Logistics Park (ITL)

2、以清洁能源生产清洁能源，做清洁能源的搬运工

隆基股份在为全球创造低成本清洁能源的同时，确定了“清洁能源生产清洁能源”的绿色制造发展模式。2015年开始，隆基股份布局中国云南和马来西亚古晋，利用当地丰富的水电资源，用当地丰富的水电生产太阳能光伏产品，实现了以清洁能源制造清洁能源，让耗费1度电的光伏产品，在全生命周期内可以产生30度的清洁电力，做清洁能源的搬运工。

3、提出 Solar For Solar 负碳地球理念

2018年12月，在第24届联合国气候变化大会上，李振国先生发布了“Solar For Solar”的负碳地球设想，计划在全球光照资源丰富、同时临海又有落差的地方，建设光伏电站，设立光伏产品工厂，以光伏发电制造光伏产品，形成以光伏电力驱动光伏制造的全产业链零碳模式（Solar For Solar），并将光伏和抽水蓄能相结合，通过光伏发电的大规模应用，可以利用光伏进行海水淡化、沙漠灌溉，起到绿化荒漠、提高植被覆盖率的作用。当地球70%荒漠变成绿洲时，就会吸收人类活动以来造成的所有碳排放，实现“负碳地球”！



▲ 隆基股份建设的库布其沙漠光伏电站夜景
Night view of Kubuqi Desert photovoltaic power station built by LONGi

隆基股份在改善人居环境、可持续发展方面，也积极推动技术研发创新，不断推进光伏电站城市和乡村社区的落地，产生了巨大的社会效益和经济效益。

隆基股份坚持共享主张，开放关键技术突破工艺如 LIR 技术与行业企业分享，并培育关键环节配套链成长、促进全产业链提前进入“金刚线切割”时代，引领光伏发电度电成本快速下降，在过去十年里，光伏发电成本下降幅度

most effective approach to achieve goal of temperature control. In past decade, it has witnessed unprecedented PV technical advancements and cost reductions, and this trend still continues. The rapid development of energy storage technologies such as the pump storage, electric vehicle storage and chemical storage will effectively address the discontinuity problem of PV power generation. Therefore, solar + energy storage will become the most economical power source in the world in next decade. Once these achievements are made, the substantial substitutions to traditional energy will occur.

2. Producing Clean Energy with Clean Energy, and Being A Clean Energy Carrier

It had adopted the green manufacturing and development mode of "Producing clean energy with clean energy" by LONGi while it is creating low-cost clean energy for the whole world. Since 2015, LONGi deployed its production facilities in Yun Nan Province of China and Kuching of Malaysia. The abundant hydropower available in these areas had facilitated solar productions and materialized producing clean energy with clean energy. When 1 KWh power requires to be consumed in production of photovoltaic products, 30 KWh clean powers could be generated in the entire life cycle of these products so we are the carrier of clean energy.

3. Proposed Concept of "Solar for Solar" to Pursue Negative Carbon Effect on Earth

During the 24th UN Climate Change Conference in December, 2018, Mr. Li Zhenguo announced the development vision of "Solar for Solar" to pursue the negative carbon effect, and the plan to build solar stations and factories in coastal areas with rich sunshine resource and appropriate terrain capable to produce solar products with solar power generated with these facilities so that the whole industrial chain of the Solar for Solar Production mode driven by PV power could emerge. At the same time, LONGi will integrate solar power with pumped storage power stations. Seawater desalination and desert irrigation are the other applications throughout PV power generation applications in large scales as well. Deserts will be greener and vegetation coverage expects to be expanded. By the time when 70% of the earth's desert transform into the oasis, all carbon emissions caused by human activities could be absorbed and the negative carbon effect could be realized on this planet.

Alongside efforts invested on human settlement optimization and sustainable development, LONGi



▲ 李振国总裁在第二十四届联合国气候大会发言
President Li Zhenguo delivered a speech at the 24th UN Climate Change Conference

超过了90%，推动了光伏发电“平价上网”的早日到来，让光伏发电成为在世界范围内最便宜的清洁能源，进而走入千家万户，改善全球的人居环境。

隆基积极探索 BIPV(光伏建筑一体化)，2018年，隆基新能源在北京城市副中心行政中心建设 BIPV 项目，电站采用隆基高效双面双玻组件，将为行政中心提供清洁无污染的绿色电力能源，将为解决京津冀地区雾霾天气提供一条行之有效的解决思路，有助于打造和谐宜居、协同发展的示范区。

在关注城市人居环境改善的同时，隆基股份也将光伏应用到中国西部贫困地区的脱贫攻坚和应对气候变化方面。2017年，隆基股份投入4000余万元，向宁夏固原全市544所村卫生室捐建光伏取暖设备，大大改善了贫困山区的基层村卫生室的就医环境，让卫生室由原来的燃煤烧炉子取暖变为清洁无污染的太阳能发电供暖，为村民就诊时提供了良好的室内温度及干净的环境，降低了疾病的再发率，改善了固原地区几十年、几代人的就医环境。

have been proactively promoting the research and innovations of the technologies, and persisting in landing the PV power stations in urban and rural areas. Remarkable social and economic benefits yielded throughout these efforts.

The company consistently endorses view of sharing, and opened its critical process breakthroughs to this industry, the LIR technology is one example. LONGi nurtures development of key steps on the accessional chains of this industry, ushered and accelerated entire business chain entering an era of "Diamond Wire Slicing". PV Cost of energy had been reduced in a fast manner, and LONGi had its leadership role played in it. In last decade, cost reduction ratio of PV power generation was down by 90% and more, which had expedite the earlier arrival of grid parity with PV power generation, making the photovoltaic power generation the cheapest energy across the world and access into ordinary households to change the global settlements for human being.



▲ 隆基股份建设的山西大同熊猫电站
Shanxi Datong Panda power station built by LONGi

在李振国先生的领导下，隆基还在建设中国首家大型光伏产业主题公园，公园位于中国西安，是集隆基全球总部、先进生产制造示范工厂与光伏主题展示项目相结合的综合统一总部基地，主题公园不仅是隆基企业对外形象展示的窗口、光伏行业的展示标杆，国内外光伏行业高峰论坛举办地，也是面向世界的一体化光伏城市和人居环境建设指导平台，引领中国乃至世界光伏与人居环境建设的趋势。

李振国先生热心公益慈善事业，2010 年在中国红十字会参与设立“隆基百分之一基金”，秉承“百分之一的奉献，百分百的改变”公益理念，倡导每个人将个人百分之一的收入、时间或精力，投入到公益事业中。基金成立以来，捐助青海玉树地震灾后重建，救助先心病儿童，在兰州大学、呼伦贝尔学院和山东莱西等地发放助学金，支持教育，迄今已帮助超过 600 名学子完成学业。



▲ 隆基股份建设的宁夏宝丰集团光伏电站
Ningxia Baofeng Group photovoltaic power station built by LONGi

LONGi explores development potentials of Building Integrated Photovoltaic (BIPV) actively. In 2018, the Company built a BIPV project in administrative center of the sub-central business center in Beijing. The power station adopts bifacial modules produced by the Company with high-efficiency. This project could provide clean and green power for the administrative center without pollutions. This is a workable solution against the haze weathers in Beijing-Tianjin-Hebei region to assist on building of this region into a harmonious, livable demonstration area with coordinated development.

Attentions given to improvement of urban living environments, LONGi applied PV products in poverty alleviation efforts in poverty-stricken areas and climate change efforts in western China concurrently. In 2017, LONGi invested more than 40 million Yuan as donations to build heating facilities for 544 rural clinics in poor mountainous areas in Gu Yuan city, Ningxia Hui Autonomous Region. The original coal-fired stoves were replaced by clean PV heating systems without pollutions. A comfortable indoor temperature and clean environment is available to the villagers and their disease recurrence rate had been reduced. Rural health care conditions in this poor mountainous area had been improved greatly and the medical environment sustained for several generations in past decades in this area is enhanced.

Under the leadership of Mr. Li Zhenguo, LONGi is building the first and a large sized theme park in PV industry in Xi'an, China. LONGi will integrate the global headquarter, demonstrative factory with sophisticated productions and the PV theme demonstrations into one comprehensive headquarter base. This park features with multiple functions not only as an enterprise profile demonstration window to externals, the benchmark of PV industry, site for photovoltaic summit of home and aboard, it is also a guiding platform for integrations among PV products, cities and human settlements, ushering the PV construction trend for human settlement environments of China and even the world.

Mr. Li Zhenguo is warmhearted to undertakings of public welfare and charity. In 2010, "LONGi One Percent Fund" was established with participation of Red Cross Society of China. This fund adheres to the public charity concept of "One Percent Devotion, Hundred Percent of Change", advocating everyone spares one percent of their income, time or effort for causes of public charities. From the establishment day of this fund, there were donations made for reconstruction of Yu Shu Tibetan Autonomous Prefecture in Qing Hai Province after the strong earthquake, for rescues to the children

在李振国先生的领导下，隆基股份对标联合国 2030 可持续发展目标 (SDGs)，积极践行企业社会责任，以支持教育 (SDG4)、气候行动 (SDG13) 和社区发展 (SDG1 和 SDG11) 为重点，先后参与建设海南、陕西、山西和河北的光伏扶贫电站建设，以高效可靠的光伏产品，惠及建档立卡贫困户家庭；隆基坚信“教育推动科技进步，并促进人类生活更美好”的理念，先后向北京大学物理学院、云南华坪女子中学、陕西西乡县隆基中学等捐赠光伏电站，在兰州大学设立“助学助教”基金，捐资助学，持续支持教育和科研，让光伏科技照亮更多人的生活！



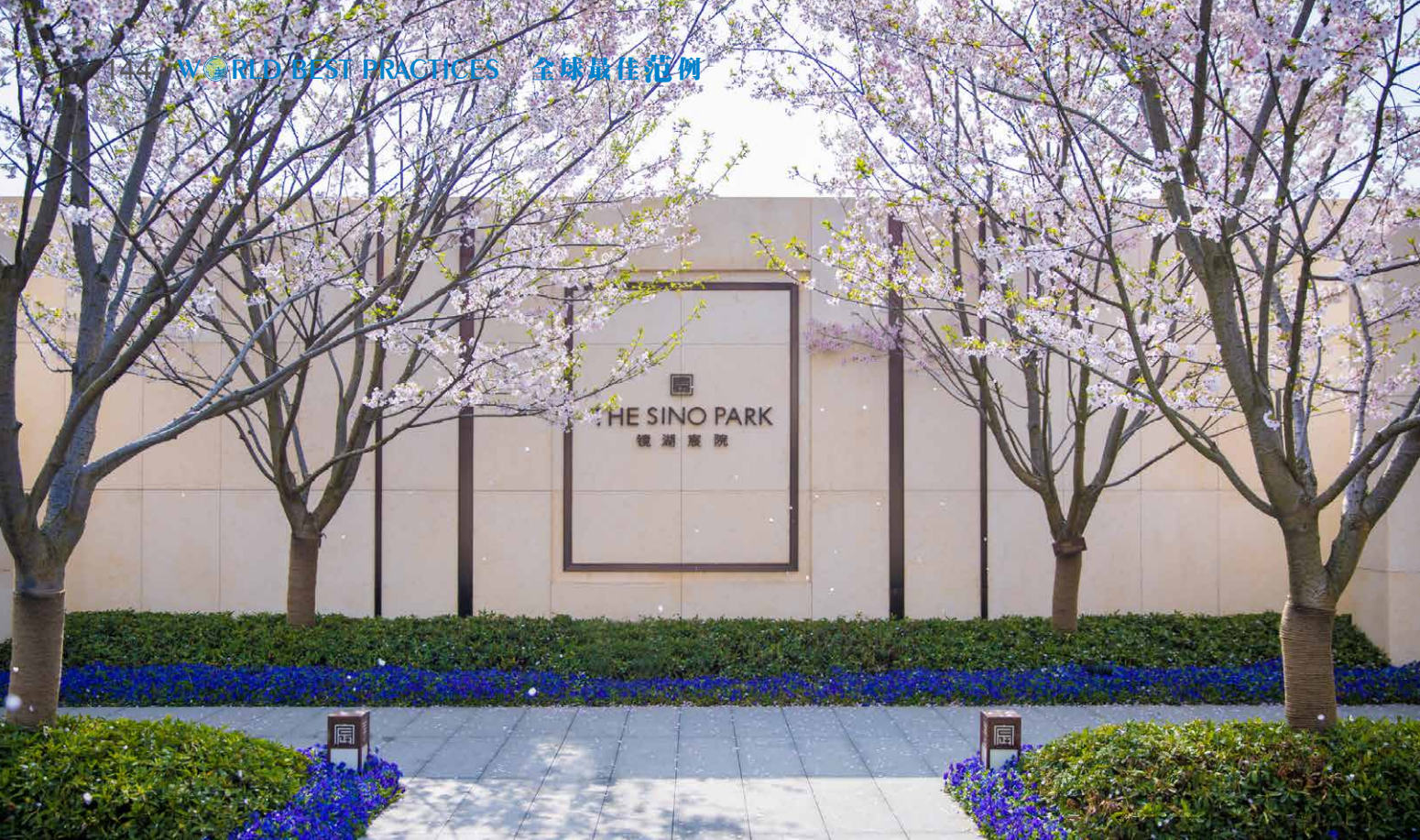
▲ 隆基股份建设的山西大同石仁村光伏扶贫电站
Shanxi Datong Shiren Village photovoltaic power station built by LONGi

with congenital heart diseases, and for students' aid in Lanzhou University, Hulunbuir University and Lai Xi County in Shandong province. Over 600 students benefited from these and they had completed their studies up to now.

Under the leadership of Mr. Li Zhenguo, LONGi Group has been actively fulfilling its corporate social responsibilities by regarding the UN 2030 Sustainable Development Goals (SDGs) as the benchmarking basis to prioritize supports to education (SDG4), actions for climate changes (SDG13) and community development (SDG1 and SDG11), with participations into the constructions of PV power station for poverty alleviation in Hainan, Shaanxi, Shanxi and Hebei Provinces successively. The archived poverty-stricken households were benefit from the high efficient and reliable solar products in these processes. LONGi firmly believes "education advances science and technologies, and better life of human being". It had donated PV power stations to School of Physics in Peking University, Yun Nan Huaping Girls' High School, and the LONGi Middle School in Xi Xiang County of Shaanxi Province. A "Study and Teaching" fund had set up in Lanzhou University, and it has donated this University to support education and scientific researches to let the ray of photovoltaic technology shine in more people's daily life. 



隆基股份建设的河北饶阳光伏电站
Hebei Raoyang photovoltaic power station built by LONGi



THE SINO PARK— Ushers into a Chinese Cover of Global Human Settlements

镜湖宸院— 肇启全球人居环境的中国封面

上有天堂、下有苏杭，世上湖山、天下常熟。

镜湖宸院，地处苏州·常熟·国家5A级虞山尚湖旅游度假区，占地面积约10万平方米。是由融创中国（01918.HK）、卓越集团、景瑞地产中国三大千亿房企，倾力打造的低密山水墅区。镜湖宸院，近揽千顷尚湖浩瀚，远观十里虞山叠翠，续承中国山水文化，接轨国际最高标准，开启全球人居环境的中国封面。

全球第六大城市群 核心枢纽

苏州常熟，紧邻上海，是“长三角城市群”核心区经济重镇，汇聚汽车及零部件、装备制造、纺织服装三大千亿级完整产业链，人均GDP超过3.3万美元，蝉联中国县域经济TOP4。在“长三角一体化、长江经济带、一带一路”三大国家战略汇集的历史性机遇面前，常熟数字城市建设全

Just as there is paradise in the heaven, there is Suzhou and Hangzhou on earth; east or west, lakes and mountains of Changshu are best.

The Sino Park, located in National 5A-Level Yushan Shanghu Tourist Resort, Changshu, Suzhou City, covers an area of 100,000 square meters. It is low density landscape villa elaborately built by China's three 100 billion real estate tycoons, Sunac China Holdings Limited, Excellent Group and Jingrui Estate (Group) Co., Ltd. The Sino Park, embraced by a thousand-hectare vast Shanghu and ten-li green trees amid Yushan's pinnacles, essentially prolongs the Chinese mountains and waters culture in line with the world highest standards; then ushers into a Chinese cover of global human settlements in the midst of clear sounds from mountains and waters, interests from grass and trees, graceful living places and humanity spaces.



面提速，氢燃料电池、人工智能等高科技龙头企业抢滩入住，沪通、苏嘉杭、沿江三条高铁汇聚——一座数字经济引领的科创之城，一座先进制造支撑的产业之城，一座全面融入上海“半小时经济圈”的活力之城即将全面建成。



世上湖山 江南福地

常熟，“土壤膏沃，岁无水旱之灾”，素有江南福地的美誉，人居环境建设成就斐然。先后荣获“国际花园城市”、“中国优秀旅游城市”、“世界首批国际湿地城市”、“中国人居环境范例奖”等荣誉称号。虞山尚湖景区地处常熟主城区，总面积42平方公里，十里虞山，800顷尚湖与古城、新城浑然一体，共同构建起常熟“山湖同城”的世界级生态格局。



World Sixth Largest City Clusters Core Hub

Changshu, Suzhou City, close to Shanghai City, represents an important economic town of core region of “Yangtze River Delta City Clusters” where three 100 billion complete industrial chains respectively automobile spare parts, equipment manufacturing, textiles and garments. The per capita GDP exceeds 33,000 USD, which ranks the top 4 of China's county economy. Confronted with the historic opportunity of the three national strategies including “Yangtze River Delta Integration”, “Yangtze River Delta Economic Belt” and “Belt and Road Initiative”, digital city building of Changshu is speeding up in an all-round way, marked by high-tech leading enterprises rushing settlement here such as hydrogen fuel cells and artificial intelligence and there high railway lines converging including Shanghai to Nantong railway, Suzhou-Jiangxing-Hangzhou railway and railway passage along the Yangtze River. A city of scientific innovation driven by digital economy, a city of industry supported by advanced manufacturing and a vibrant city integrated into Shanghai “half an hour economic circle” and Yangtze River Delta will be completed soon.

World Best Lakes and Mountains in Changshu, A land of Promise in Southern Yangtze River

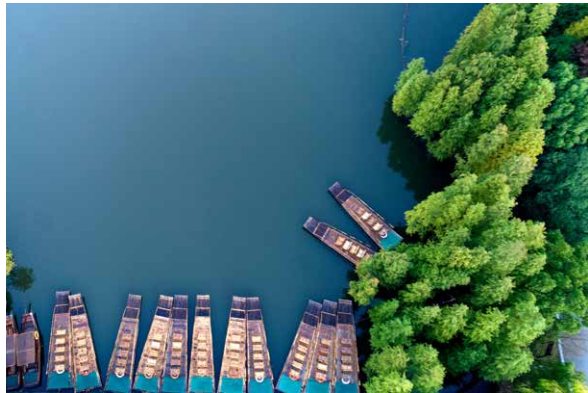
Changshu, is famous for “fertile land never suffers from droughts or flooding” which is consistently dubbed as the land of promise in southern Yangtze River. Changshu has made a great achievement and has been successively awarded with honors like “International Garden City”, “China Excellent Tourism City”, “The First International Wetland Cities” and “China Habitat Environment Example Prize”. Yushan Shanghu Scenic Area is located in the main urban area of Changshu, with a total area of 42 square kilometers. 10 miles Yushan, 800 hectares shanghu is integrated with the ancient town and the new city to jointly build a world-class ecological pattern of Changshu “mountain and lake”.

100 Billion Real Estate Tycoons Building Up Together

Sunac China, the integrative good-life service provider for Chinese families which ranked Top 4 of Chinese real estate companies by sales volume in 2018, adhere to focus of deep-tillage and high-end fine-quality

千亿房企 联袂钜著

融创中国，2018 中国房企销售额排名 TOP4，中国家庭美好生活整合服务商，坚持聚焦深耕和高端精品发展战略，砥砺 16 载，布局全国 8 大核心区域，近百座城市，业务覆盖地产、服务、文旅、文化四大板块。



城市山水 湖心半岛

作为融创中国高端“院”系的迭代力作，镜湖宸院，择址尚湖之畔，共鸣城市山水，近赏浩渺湖景，远眺黛青山色，坐拥城市中心山、湖、湾、岸等卓越资源，尽享高尔夫、游艇、瑜伽、垂钓、慢跑等运动休闲设施，国际化教育与商业配套悉数汇聚，集资源大成，揽胜境造极。



低密度山水文化墅区

镜湖宸院坐拥 1.05 超低容积率、35% 的超低密度和 32% 超高绿化率，景观设计溯源常熟千年地脉“石梅洞”，续承苏州园林意境，融合波士顿“翡翠项链”前瞻理念，全冠移植数十种珍贵梅花及乔灌木，高度凝练五重立体景观。石梅广场，林荫大道、山水会客厅等景观节点与典雅隽永的别墅、洋房错落其间，虽由人作，宛自天工。

development strategy for 16 years. Sunac China has laid out eight core regions of China covered with nearly 100 cities and the business covers four major blocks of real estate, service, tourism and culture.

Mountains and Waters in the City Peninsular in the Center of the Lake

As an iterative masterpiece of the Sunac China "Park" series, the Sino Park selects the site along the bank of Shanghu so as to closely appreciate vast lake scene and overlook green mountain, echoing with mountains and waters in the city and lying in the Changshu's downtown. In possession of the top natural resources including mountains, lakes, bays and banks, the Sino Park fully enjoys various international sports and leisure facilities such as golf, yachting, yoga, fishing and jogging on the basis of commercial auxiliary resources on a par with international education. The Sino Park, on behalf of a comprehensive expression of resources and peaks in the scenic spot, attributes to a bright converging of scarce ecological resources, rich cultural precipitation and luxurious international auxiliary amid of lakes and mountains.

Low Density Villa with Landscape Culture

The Sino Park, in possession of ultra-low capacity rate of 1.05, ultra-low density of 35% and super-high greening rate of 32%, originates from the "Shimei Ravine", namely Changshu's 1000-year-old underground vessel to inherit the elegant prospect of Suzhou mountains and waters garden and integrate itself with prospective Boston "jadeite necklace" idea. The Sino Park chooses to plant dozens of precious plums and trees and shrubs by crown grafting and highly condense the five-way cubic greening, a foil of orderly standing platforms and pavilions and flourishing trees and blooming flowers. Scenic spots like Shimei Square, Forest Avenue and Shimei Ravine Mountain and Water Living Room are well-proportioned with elegant villas and townhouses, which looks like natural works regardless of human craftsmanship.

Community auxiliary for all ages Cares for all life cycles

The Sino Park attaches great importance to residents of all ages, marked by interactive living places including prevailing accessible faculties, 500-meter-long

全龄社区配套 全生命周期呵护

镜湖宸院关注各年龄层居住者的需求，大量采用无障碍设施，特别设置 500 米儿童骑行道、1200 米荧光塑胶慢跑、500 平方米童梦乐园、680 平方米综合活动中心、320 平方米康体健身场地、母婴哺育港湾等强调室内外使用的互动式乐活空间。



至臻美学作品 简约法式建筑

镜湖宸院从法式宫廷建筑中汲取灵感，以现代主义审美化繁为简。恢弘的对称布局、雍容的三段式立面、遒劲有度的斜坡屋顶，宛若一场非凡的当代建筑艺术博览。在绿色建筑科技方面，镜湖宸院 100% 预配太阳能供水设施，垃圾分类、隔音降噪、保温围护、电动车充电、室外 WIFI 等前瞻科技一应俱全。



美好服务理念社交生活平台

镜湖宸院秉承“服务生活美”的服务理念，对标国际至臻管家服务标准，为居住者量身定制恰如其分的上乘服务。依托 3500m² 山水会客厅，设立业主圈层社交生活平台——ONE 家族俱乐部，以 9 大“ONE 专属资源体系”，于山水之间，肇始一场永不落幕的社交资源生活盛筵。

中国的山水 世界的期许

未来，镜湖宸院将在虞山尚湖景区“保护为主，精细开发”的战略指引下，进一步加大绿色、生态、健康、科技领域研发投入，致力构建并完善国际领先的人居环境体系，为全球提供一个可资借鉴的中国范例。一幅涵养生命的山水画卷，一张全球人居环境的中国名片，一个人类共同的终极居住梦想，已然绽放。

Extraordinary Aesthetic Work Simple French Architecture

Inspired from the French palace architecture, the Sino Park simplifies modernism aesthetics, from classic symmetric display to graceful three section elevation and from simple and towering architecture outline to vigorous titling roof. Simple French aesthetics leading in the era expresses freely as far as architecture design reaches, just like an incredible modern architecture expo. With regard to green building technology, the Sino Park is equipped with prospective technology such as 100% solar energy water supply as well as waste sorting, sound insulation and noise reduction, heat preservation guardrail, charging for electric vehicles and outdoor WIFI.

The Social and Life Platform of Great Service

The Sino Park is committed to the service philosophy of "Service makes a happy life", and provides customized high-end services for residents in strict accordance with international attaining housekeeper service standards. Relying on the 3,500 square meters landscape living room, the Sino Park makes the point of establishing resident social life platform named "ONE family club" and continuously introduces superior brand resources to let social life feast never end in the midst of mountains and waters through nine "ONE exclusive resource system"

China's Mountain and Water World Expectation

In the future, the Sino Park will further increase the investment in the fields of green, ecology, health care and scientific technology to build an international advanced human settlements system and provide a China's good practice for the whole world, under the guidance of Yushan Shanghu scenic spot protection and fine development. It is a China name card for global human settlements and there blossoms a mountain and water nurtures lives and a ultimate settlement dream pursued by all human beings.

THE PENINSULA IN THE CITY OF LAKE AND MOUNTAIN 城市山水 湖心半岛

THE VILLA OF GREAT LAKE AND MOUNTAIN IN THE SHANG LAKE AREA, A CHINESE AAAAA SCENIC AREA

CHINA 尚湖 中国5A级景区 低密度山水别墅

To continue the 5000 years of Chinese civilization and initiate the song of Wu culture.

To embrace the thousands of hectares of Shang Lake nearby and overlook the Yu Mountain forane.

To monopolize the lake, the bay, the shore, the park, the forest and the golf course in the city centre.

The rare and precious villas which synchronize the world.

脊续5000年华夏文明，肇启3000年吴地长歌

近揽千顷尚湖荡碧，远观十里虞山叠翠

独占城市中心湖、湾、岸、公园、森林、高尔夫版图

同步世界的的稀世资源别墅恒产

THE SINO PARK 镜湖宸院

VIP-LINE
86 512 / 5115 9999

Address: No.18 Chunhui Road, Shanghu Area
Changshu, Suzhou, China

中国·苏州常熟尚湖中央大道春晖路18号

CHINA SUZHOU
CHANGSHU
中国·苏州·常熟

Shang Lake
A Chinese AAAAA
Tourism Resort

CHINA 尚湖
国家AAAAA级景区



CONFERENCE

会议活动

Ha Noi Declaration adopted at the “12th Intergovernmental
Regional Environmentally Sustainable Transport Forum in Asia”
第十二届亚洲政府间区域环境可持续交通论坛通过了《河内宣言》

Sustainable City and International Green Model
City Workshop 2019 Successfully Held in Qingdao
2019 可持续城市暨国际绿色范例新城研讨会在青岛成功举办





Ha Noi Declaration adopted at the “12th Intergovernmental Regional Environmentally Sustainable Transport Forum in Asia”

第十二届亚洲政府间区域环境可持续交通论坛通过了《河内宣言》

“第十二届亚洲政府间区域环境可持续交通论坛”（EST12）于10月28日至30日在越南河内成功举办。论坛由越南交通运输部、自然资源与环境部、建设部、河内人民委员会、日本环境部（MoE），联合国亚太经社理事会（UNESCAP）以及联合国经社部可持续发展目标司联合国区域发展中心（UNCRD）共同主办，探讨了以“通过低碳和智能交通系统实现智慧和弹性城市”为主题的相关内容。来自25个国家和地区的约350名代表参加了本次论坛，越南副总理阮晋勇（Trinh Dinh Dung）出席了大会并致开幕词。

其他与会代表包括相关国家部长、科学家、国际组织和私营部门负责人、联合国学者和专家等。全球人居环境论坛秘书长吕海峰应邀出席了论坛，并作了题为“低碳智能交通使生活更美好”的演讲，分享了国际绿色范例新城

The “12th Intergovernmental Regional Environmentally Sustainable Transport Forum in Asia” (EST12) was successfully held from October 28-30 in Hanoi, Vietnam. Co-organized by the Ministry of Transport, the Ministry of Natural Resources and Environment, the Ministry of Construction, the Hanoi People's Committee, Japan's Ministry of the Environment (MoE), the United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP), and the United Nations Center for Regional Development of the Division for Sustainable Development Goals, UN DESA, the forum centered around “Achieving Smart and Resilient Cities through Low Carbon and Intelligent Transport Systems”, and brought together some 350 delegates from 25 countries and territories. Vietnam's Deputy Prime Minister Trinh Dinh Dung attended and delivered an opening address.



▲ 吕海峰 Lu Haifeng

（IGMC）标准3.0中有关绿色出行的关键策略、指标和案例。吕秘书长还强调了智能驾驶的基本内涵和趋势，并通过IGMC动画短片中关于交通的精彩视频展示了可持续交通怎样帮助实现行云流水的未来。IGMC标准3.0和可持续交通动画短片得到了与会者的高度认可和好评。

闭幕式上，论坛与会代表一致通过了《河内宣言》。来自15个亚洲城市的市长或代表签署了《京都宣言河内附录》，旨在通过发展环境可持续交通，实现智慧城市。

The participating delegates include ministers, scientists, representatives of embassies, principals from international organizations and the private sector, UN scholars, and experts. Lu Haifeng, Secretary General of Global Forum on Human Settlements was invited to make a presentation titled “Low Carbon Smart Mobility Makes Life Better”, and shared the International Green Model City (IGMC) Standards 3.0, especially the key strategies, indicators and cases on green mobility. Mr. Lu also emphasized the fundamental principles and trends of intelligent driving and ended his presentation with a video clip from the IGMC animation film in which sustainable transport and mobility helps shape a city with unimpeded traffic flow. Both IGMC Standards 3.0 and the sustainable mobility model illustrated in the video clip were highly recognized and well received.

The forum was productively concluded by adopting the Hanoi Declaration. Representatives from 15 Asian cities signed a Hanoi Addendum to the Kyoto Declaration to promote environmentally sustainable transport towards the realisation of smart cities.

Ha Noi Declaration on Realizing Smart Cities and Communities in Asia through Environmentally Sustainable Transport (EST) Solutions and Measures¹

《河内宣言——通过环境可持续交通解决方案和措施在亚洲实现智慧城市和社区》¹

前言

为了确保经济、社会和环境利益，重新考虑城市和城市地区的设计、开发和管理方式迫在眉睫。最先进的城市设计，综合的土地利用和多模式交通规划，低碳交通解决方案，具有抗气候和灾难能力的基础设施，环境友好的交通系统以及现代信息和通信技术（ICT）的应用不仅对应对当前的城市挑战，使城市蓬勃发展至关重要，而且对于实现包容和可持续的城市并满足所有人（包括最弱势和边缘化人群）的需求也非常重要，确保“不让任何人掉队”。

目前，全球一半以上的人口居住在城市地区，到2050年，这一比例有望超过68%。亚太地区是最容易遭受气候

Preamble

There is a clear global imperative to re-think the way cities and urban areas are designed, developed and managed in order to secure economic, social and environmental benefits. State-of-the-art urban design, integrated land-use and multi-modal transport planning, low-carbon transport solutions, climate and disaster resilient infrastructure, people and environment friendly transportation system and application of modern information and communication technologies (ICT) are not only vital to addressing current urban challenges and prepare cities to thrive in the future, but also critical to achieve inclusive and sustainable urban development

¹ 《河内宣言》是一份善意、自愿和不具法律约束力的宣言。

¹ The Ha Noi Declaration is a good-will, voluntary and legally non-binding Declaration.

变化和自然灾害影响的地区之一，同时该地区也引领着全球城市化进程。智慧城市的最终目标是通过促进有效利用资源和使用可提高城市居民生活质量的智慧解决方案来降低成本，从而使城市更加安全、繁荣、公平和可持续。

智慧城市利用现代信息和通信技术（ICT）等最先进的技术，通过优化其市政设施和服务以改善生活质量，使城市更加高效。它还通过减少环境负担和碳足迹帮助提升生活水平，这有助于实现可持续发展目标 11 的要求，即建设更加安全、有弹性、宜居、包容和可持续的城市。

城市交通对于任何城市都是至关重要的。智慧交通在减少交通拥堵、空气污染、温室气体（GHG）排放以及交通事故、伤害和死亡方面发挥着越来越重要的作用，从而提高城市安全性、效率和便利性。

宣言

我们——亚洲区域环境可持续交通（EST）论坛的成员国和地方政府²的代表、国际组织、双边和多边机构、民间社会组织、科学和学术界、私营部门、可持续交通专业人士，和其他利益相关方于 2019 年 10 月 28 日至 31 日在越南河内举行的第十二届亚洲 EST 区域论坛上一致通过了《河内宣言——通过环境可持续交通解决方案和措施在亚洲实现智慧城市和社区》，以进一步激励和鼓励所有致力于促进环境可持续交通的人们。我们，

认识到人口的快速增长、低效的城市化以及对私人汽车日益增强的依赖性给亚洲许多城市带来了前所未有的压力，而且这些城市面临着共同的挑战，包括交通拥堵、空气和噪声污染，温室气体排放、道路交通事故和死亡、安全问题，以及基础设施和资金不足等；

注意到 2018 年高级别政治论坛（HLPF）的成果，作为跟进和审查 2030 年议程的全球重要平台，HLPF 的主题是“向可持续和有复原力的社会转型”，其中包括对可持续发展目标 11 的关注：建设包容、安全、有复原力和可持续的城市和人居环境，并通过了《部长宣言》“从全球到地方：支持在城市和农村地区建设可持续和有复原力的社会”；

and meeting the needs of all, including the most vulnerable and marginalized, ensuring that “no one is left behind”.

Currently more than half of the global population lives in the urban areas, and it is expected to be more than 68% by 2050. While Asia-Pacific region is one of the most vulnerable to climate change as well as the natural disasters, it also leads the global pace of urbanization. The ultimate goal of the smart city is to make the city safer, economically vibrant, social protective and environmentally sustainable by promoting effective use of resources and reducing the costs through smart solutions that enhance the quality of life of city residence.

Smart cities leverage state-of-the-art technologies such as modern information and communication technologies (ICT) to make cities more efficient and effective by optimizing its utilities and services towards improving the quality of life. It further helps in improving living standards by reducing the environmental burdens and carbon footprints, which help build cities safer, resilient, liveable, inclusive and sustainable as envisaged under SDG 11.

Urban mobility is fundamental to any city, and smart transportation is increasingly playing an important role to improve safety, efficiency and convenience by reducing traffic congestion, air pollution, greenhouse gas (GHG) emissions and traffic accidents, injuries and fatalities.

Declaration

We, the representatives of member countries and local governments of the Regional Environmentally Sustainable Transport (EST) Forum in Asia,² international organizations, bilateral and multilateral agencies, civil society organizations, the scientific and academic community, the private sector, sustainable transport professionals, and other stakeholders having met at the Twelfth Regional EST Forum in Asia, held in Ha Noi, Viet Nam, from 28 to 31 October 2019, unanimously adopt the “Ha Noi Declaration on Smart Cities Realizing



加强呼吁利用新技术改善经济、社会和环境，建设智慧城市和社区，而环境可持续交通在这方面中发挥至关重要的作用；

认识到环境可持续交通以及最新的先进技术和数字解决方案为运输行业带来了巨大的机遇，例如：人工智能（AI）、智能运输系统（ITS）、物联网（IoT）、信息和通信技术（ICT）等有助于交通管理和建立地理空间数据库以监控城市各方面的情况；城市空间数据信息系统；数据分析以支持城市运营并推动创新和自动化；

注意到私人机动车 / 汽车使用量的增加对公共健康造成了许多直接和间接的负面影响，如交通事故和汽车空气污染造成的死亡和伤害等；

回顾 2010 年 8 月 23 日至 25 日在泰国曼谷举行的第五届区域 EST 论坛上，与会者达成了 2020 年曼谷环境可持续交通宣言（2010-2020 年），承诺实现可持续交通目标；

注意到东亚峰会领导人关于东盟智慧城市的声明（2018 年 11 月 15 日，新加坡，第 13 届东亚峰会），其中特别呼吁采取包容性方法建设智慧城市，重点关注以人为本的解决方案、人民福祉和生活质量，提升包容性有利于在城乡之间创造机会，扩大公民的声音，不让任何人掉队，包括妇女、儿童、青年、老年人、残疾人和其他弱势群体；

认识到东盟—日本智慧城市网络高级别会议（2019 年 10 月 8 日至 9 日，横滨），讨论了促进智慧城市相关的主题和重要问题，以及东盟与日本之间未来合作的理想前景，并肯定了“面向挑战”概念的重要性，该概念采用了先进技术以解决各种城市挑战，例如减少灾害风险，提升水资源管理、城市规划和交通，以及“全面优化”的概念，即

Smart Cities and Communities through Environmentally Sustainable Transport (EST) Solutions and Measures” to give further inspiration and encouragement to all who are working on promoting environmentally sustainable transport with

Understanding that rapid population growth, inefficient urbanization and increasing private motor vehicle/automobile dependence are putting unprecedented pressure on many cities in Asia, and that such cities face common challenges including traffic congestion, air and noise pollution, greenhouse gas emissions, road accidents and fatalities, safety and security issues, insufficient infrastructure and financial resources, among others;

Noting the outcome of the 2018 High-level Political Forum (HLPF), the central global platform for follow-up and review of the 2030 Agenda, which was convened under the theme “Transformation towards sustainable and resilient societies,” including a focus on SDG 11, making cities and human settlements inclusive, safe, resilient and sustainable, that adopted a Ministerial Declaration “From global to local: Supporting sustainable and resilient societies in urban and rural communities”;

Reinforcing calls for the development of Smart Cities and Communities that harness new technologies for the betterment of the economy, society and environment in which environmentally sustainable transport can play a vital role in creating cities and communities;

Recognizing that environmentally sustainable transport and recent advances in state-of-the-art

² 阿富汗、孟加拉国、不丹、柬埔寨、中华人民共和国、印度、印度尼西亚、伊朗伊斯兰共和国、日本、大韩民国、老挝人民民主共和国、马来西亚、马尔代夫、蒙古、缅甸、尼泊尔、巴基斯坦、菲律宾、俄罗斯联邦、新加坡、斯里兰卡、泰国、东帝汶、越南和观察员国家（…………）。

² Afghanistan, Bangladesh, Bhutan, Cambodia, People's Republic of China, India, Indonesia, Islamic Republic of Iran, Japan, Republic of Korea, Lao People's Democratic Republic, Malaysia, Maldives, Mongolia, Myanmar, Nepal, Pakistan, the Philippines, Russian Federation, Singapore, Sri Lanka, Thailand, Timor-Leste, Viet Nam and observer countries (…………).

通过使用先进技术和专业知识的来优化整个城市或区域，从而全面地解决各项挑战；

1) 对现有的相互关联和相辅相成的全球议程中与可持续发展有关的承诺表示支持，例如：“联合国可持续发展目标（SDGs）”、《新城市议程》、《仙台减轻灾害风险框架》、《巴黎气候协定》，以及《亚的斯亚贝巴行动议程》等；

2) 我们愿意通过综合和可持续的交通解决方案，为智慧城市制定和引入有效的政策、规划和基础设施建设，以提升城市和社区的社会、经济和环境效益，并与地方政府合作，为可持续发展目标 11 做出贡献，以应对日益增长的私人汽车带来的挑战和相关问题；

3) 促进创新的公私伙伴关系（PPP），将土地利用和交通运输规划结合起来，并通过综合的公交导向型发展（ToDs），特别是使用新技术的公交系统，吸引私营领域对公交基础设施的投资；

4) 寻求展示如何使用最先进的智能技术创造更好的可持续交通选择，而不是简单地提高汽车和卡车的利用率，并分享在交通规划和工程领域的最佳实践和经验教训；

5) 促进交通运输和城市规划的整合，以避免由于城市和城市群的快速发展而导致的“过度机动化”；

6) 通过各种智慧措施，例如，物联网（IoT）、信息和信息技术（ICT）、智能交通系统（ITS）、电动汽车、自动驾驶汽车、传感器、智能应用程序和移动设备等，整合有效的交通管理、公共交通、专用自行车和步行设施，优化道路网络以及完善城市停车系统，从而推动智慧交通解决方案的应用。

7) 支持在公共电力运输、自行车和步行领域实施最佳实践的解决方案，包括使其在交通、空间规划和政策中有所体现；

8) 加强现有融资，探索新的创新融资机制和投资机会，以建设可持续、智慧、优质和有弹性的基础设施，使城市、郊区和农村周边地区受益；

9) 促进和鼓励创新和企业精神，以释放数字技术和初创企业的潜力，并分享最佳实践以促进智慧城市的发展，同时考虑到城市发展的不同水平、文化和优先事项；

10) 通过开展联合研究活动，协调专家，出版科学期刊和出版物，组织有关可持续城市发展的研究和培训计划，加强在可持续发展领域的科学合作；

11) 通过分享先进技术方面的最佳范例和成功经验，并通过亚洲区域 EST 论坛和相关的国家可持续交通论坛促进知识管理，从而鼓励智慧城市项目的产生；

technologies and digital solutions which present significant opportunities in transport sector, such as: Artificial Intelligence (AI); Intelligent Transport Systems (ITS); Internet of Things (IoT); Information and Communication Technology (ICT) which helps with traffic management, and geospatial databases to monitor various aspects in the city; urban spatial data information systems; data analytics to support city operations and drive innovation; and automation;

Noting that the increase of private motor vehicle/ automobile usage leads to many direct and indirect negative effects on public health, as fatalities and injuries caused by traffic accidents and vehicular air pollution;

Recalling the commitments to achieve the sustainable transport goals under the Bangkok 2020 Declaration on EST (2010-2020) agreed upon by the participants at the Fifth Regional EST Forum, held in Bangkok, Thailand, on 23-25 August 2010;

Noting the East Asia Summit Leaders' Statement on ASEAN Smart Cities (13th EAS, Singapore, 15 November 2018), which calls inter alia for inclusive approach to smart city development with a focus on people-centric solutions, well-being and the quality of life, which creates opportunities across the rural-urban continuum, amplifies the voice of citizens, and leaves no one behind including women, children, youth, elderly people, persons with disabilities and other vulnerable groups;

Recognizing the ASEAN-Japan Smart Cities Network High-level Meeting (Yokohama, 8-9 October 2019), which discussed the subjects and important issues in promoting smart cities, the ideal images, as well as the future view of the cooperation between ASEAN and Japan, and affirms the importance of the “Challenge-Oriented” concept, where advanced technologies are incorporated in order to solve various urban challenges, such as disaster risk reduction, water management, city planning, and transportation, and also the “Overall Optimization” concept, where optimizing the entire city or region through management using advanced technologies and wise know-hows is considered to solve the challenges cross-cuttingly and comprehensively;

1) **Express** our support for the sustainable transport-related commitments in existing interlinked and mutually reinforcing global agreements such as: the United Nations Sustainable Development Goals (SDGs); the Habitat III New Urban Agenda'; the Sendai Framework for Disaster Risk Reduction; the Paris Climate Agreement; and the Addis Ababa Action Agenda, among others;

12) 提倡将本宣言概述的可持续交通选择纳入与气候变化和与可持续性相关的承诺以及国际议程中，以推动国际社会为实现可持续发展目标做出努力；以及

13) 请求联合国机构、多边银行和捐助机构帮助各国和城市缩小在能力建设方面的差距，采取可持续交通解决方案和措施，以实现国际议程和相关协定，如“联合国可持续发展目标（SDGs）”、《新城市议程》、《仙台减轻灾害风险框架》、《巴黎气候协定》和《河内宣言》。



2) **Express** our intent to develop and introduce effective policies, planning and infrastructure development for smart cities through integrated and sustainable transport solutions to improve social, economic and environmental outcomes in cities and communities working with local governments to contribute to SDG 11, to combat growing private motor vehicles/automobile dependence and the associated issues;

3) **Promote** innovative public-private partnerships (PPP) that integrate land use and transport planning to attract private investment in transit infrastructure based on opportunities for integrated Transit-oriented Developments (ToDs), particularly when using new technology transit systems;

4) **Seek** to demonstrate how state-of-the-art smart technologies can be used to create better sustainable transport options rather than simply assisting greater use of cars and trucks, and share lessons learned in manuals of best practice in transport planning and engineering;

5) **Promote** integrated transport and urban planning to avoid "excessive motorization" because of rapid development of cities and agglomerations;

6) **Promote** smart transport solutions by integrating transport network of effective traffic management, public transport, dedicated cycling and walking facilities, optimized road networks, and well-managed city parking using various smart solutions such as - internet of things (IoT), information and communication technologies (ICTs), intelligent transport systems (ITS), electric mobility, autonomous driving vehicles, sensors, smart apps and mobile devices, among others;

7) **Endorse** solutions aimed to implement best practices in sphere of public electric transport, cycling and walking, including its reflection in transport and spatial planning and policies;

8) **Enhance** existing financing and explore new innovative financing mechanisms and investment opportunities to build sustainable, smart, quality and resilient infrastructure development to benefit urban, periurban and rural surrounding areas;

9) **Promote** and encourage innovation and entrepreneurship to unlock the potential of digital technology and start-ups, as well as to share best practices to spur smart cities' development while taking into account different levels of city development, cultures and priorities;

10) **Strengthen** scientific cooperation in the field of sustainable development with joint research activities, coordination of experts, publishing of scientific journals and publications, organization of study and training programs on sustainable urban development;

11) **Encourage** the project formation of smart cities by sharing best practices with advanced technologies and success stories, and by promoting knowledge management through the Regional EST Forum in Asia, and relevant national sustainable transport fora;

12) **Advocate** for the sustainable transport options as outlined in this agreement to be part of climate change and sustainability related pledges and international agreements to promote international efforts in delivering the SDGs; and

13) **Request** the UN organizations, multilateral banks and donor agencies to minimize the capacity gaps of countries and cities in implementing sustainable transport solutions and measures in achieving the international agenda and agreements such as United Nations Sustainable Development Goals (SDGs), the Habitat III New Urban Agenda, the Sendai Framework for Disaster Risk Reduction, the Paris Climate Agreement and the Ha Noi Declaration. 



Sustainable City and International Green Model City Workshop 2019 Successfully Held in Qingdao

2019 可持续城市暨国际绿色范例新城研讨会在青岛成功举办

2019 可持续城市暨国际绿色范例新城研讨会于 11 月 19 日 -20 日在青岛西海岸新区成功举办，国家住房和城乡建设部原副部长姚兵、中国城市发展研究会可持续城市专业委员会会长吕海峰、青岛市西海岸新区副区长李金国出席会议并致辞，来自全国多个城市的政府官员、知名企业代表和专家学者近百人出席会议。

会上，青岛西海岸新区融合控股集团正式加入国际绿色范例新城大家庭并获颁国际绿色范例新城倡议伙伴牌匾，并将在青岛桥头堡国际商务区未来规划建设中导入国际绿色范例新城标准。同时，范例新城倡议又与三家知名

单位在会上正式签订了战略合作协议，共同打造更多绿色智慧城市优秀范例。

中国城市发展研究会可持续城市专业委员会会长吕海峰认为，未来城市发展呈现出绿色低碳、便捷高效、数字智能、健康弹性、包容公平等主要趋势，可持续城市规划建设治理需要高瞻远瞩和“治未病”理念，需要一盘棋统筹考虑，也需要整合的策略、系统的方法、连续的行动计划与评估标准。

国家住房和城乡建设部原副部长姚兵以“推动绿色城市高质量发展的五大精神力量”为题发表演讲。这五大精



▲ 姚兵



▲ 李金国



▲ 吕海峰



▲ 王德辉

神力量是：新时代的企业家精神力量，知识经济时代的专家精神力量，追求卓越的品牌精神力量，新时代的企业文化精神力量，精益建造的工匠精神力量。姚兵指出，国际绿色范例新城倡议与标准同我国生态文明建设和绿色发展的方针政策相一致，为我国城市高质量可持续发展提供了可借鉴的技术策略和工具，对于推动更加有效地规划和管理城市空间发展与城市治理能力的提升将发挥积极作用。

中国环境保护部自然生态保护司原副司长（正司级）兼“中国履行生物多样性公约办公室”主任、中国环境保

护部环境工程评估中心专家组长王德辉，青岛中德生态园管委会副主任张建国，青岛市规划局原总工程师、青岛中德生态园总规划师、上海合作组织地方经贸合作示范区顾问总规划师展二鹏，联合国环境署国际资源小组专家、法国巴黎城市形态与复合系统研究院院长、国际绿色范例新城标准 3.0 首席专家薛杰，以色列内政部建筑部门原负责人、以色列智慧城市技术与战略发展有限公司执行总裁拉菲·里奇，政府间气候变化专门委员会（IPCC）交通报告首席作者、澳大利亚勋章（可持续交通与城市设计）得主、澳大利亚科廷大学彼得·纽曼教授等发表了演讲。





▲ 薛杰



▲ 拉菲·里奇



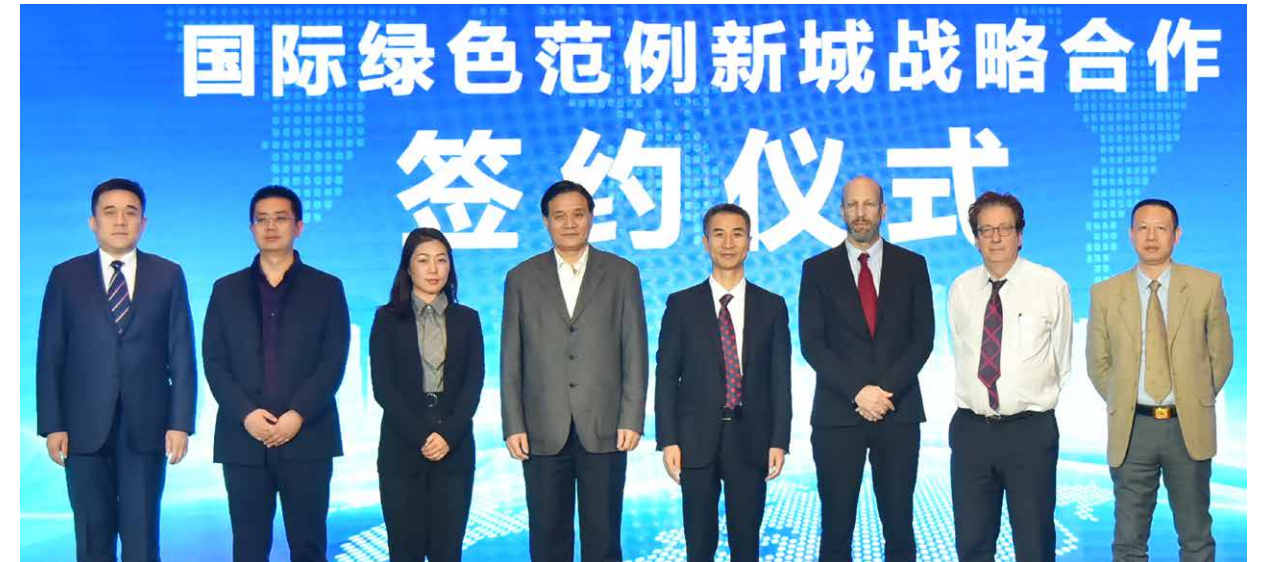
▲ 张建国



研讨会由中国城市发展研究会可持续城市专业委员会主办，青岛桥头堡国际商务区开发建设指挥部、青岛中德生态园管委会和青岛西海岸新区融合控股集团有限公司等联合参与，也得到了青岛西海岸新区管委会的大力支持。会上分析了国际国内绿色智慧的未来可持续城市发展趋势，研

讨了可持续土地开发利用，也为青岛西海岸新区的创新发展提供了有益的思路和建议。

会上分享了国际绿色范例新城标准 3.0 版的主要内容。该标准植根于《2030 年可持续发展议程》与《新城市议程》，提出了“安全、可持续、公平、个性、繁荣、幸



福”六项渐进的基本原则，这六项原则导向了六个维度：“空间规划与开发、基础服务、环境、经济、社会和文化”，每个维度又包括了若干科学细分的类别，通过这十八个类别贯彻这些原则，实现这些目标。与会专家认为，该标准是在总结全球城市规划建设发展规律和众多成功经验的基础上编制的一套行之有效的策略文件包括评估认证系统，能适应未来至少二、三十年内的可预见的变化，与中央城市工作会议精神相一致，具有普遍的指导意义和参考价值。该标准不仅重视硬件、空间和产业方面，而且重视软件、文化、社会包括城市治理方面，进而真正地读懂城市，规划、建设和治理好城市，提高生活质量。

会议期间，参会代表还集体参观考察了青岛中德生态园。该园区被中德两国政府誉为“中德两国政府间生态领域灯塔式项目”，曾荣获 2018 年度“可持续城市与人居环境奖”。参会代表目睹了包括范例新城标准在内的策略方法在绿色低碳园区项目上的具体应用和良好表现，现场交流互动，增强了研学效果。WBPM





Join “International Green Model City Initiative”
to implement 2030 Agenda for Sustainable Development
and the New Urban Agenda

加入“国际绿色范例新城倡议” 贯彻《2030年可持续发展议程》和《新城市议程》

Safety • Sustainability • Equity • Identity • Prosperity • Happiness
安全 · 可持续性 · 公平 · 个性 · 繁荣 · 幸福



▲ 《IGMC 标准 3.0》发布仪式，联合国高级官员及知名专家代表出席，基多，人居三期间，2016 年 10 月
右二为现任联合国副秘书长、联合国人居署执行主任麦姆娜·谢里夫女士

Publishing ceremony of IGMC Standards 3.0 during the Habitat III in October 2016, Quito, Ecuador, attended by UN senior officials, mayors and well-known experts. Second from right: Ms. Maimunah Mohd Sharif, United Nations Under-Secretary-General and Executive Director of UN-Habitat

为应对 21 世纪城市化的巨大挑战，在联合国环境规划署和有关国家与地方政府的支持下，全球人居环境论坛（GFHS）于 2011 年在联合国总部发起了 IGMC 倡议。作为一种创新的绿色低碳城镇发展行动计划，IGMC 倡议激发前瞻性的政府、企业和社会力量共同努力，探索可持续的城市发展和城镇化模式。作为里约 +20 和《2030 年可持续发展议程》的自愿承诺成果之一，IGMC 倡议已经在联合国注册，成为在区域和地方层面贯彻可持续发展目标（SDGs）、《巴黎气候协定》和《新城市议程》的自觉行动。

In response to the enormous challenges of urbanization in the 21st century, Global Forum on Human Settlements (GFHS) launched the International Green Model City ("IGMC") Initiative at the United Nations Headquarters in April 2011, in close collaboration with various international organizations including UNEP and national as well as local governments concerned. As an innovative green low-carbon urban development action plan, the IGMC stimulates forward-looking and responsible governments, businesses and social forces to work together on exploring sustainable urban



▲ 2019 年 9 月 5 日，IGMC 倡议伙伴授牌仪式在亚的斯亚贝巴联合国会议中心隆重举行

On 5th September, 2019, the International Green Model City Partner Award Ceremony was successfully held at UN Conference Center in Addis Ababa, Ethiopia.



▲ 2018 年 4 月 2 日

*第十四届绿建大会·国际绿色范例新城论坛在珠海举办
The International Green Model City Forum of the Fourteenth International Conference on Green and Energy-Efficient Building was held in Zhuhai, April 2-3, 2018*



▲ 2017 年 8 月 16 日，浏阳经开区加入“IGMC 倡议试点”签约仪式
On 16th August 2017, The Signing Ceremony of Liuyang Economic and Technological Development Zone joining the "IGMC Initiative pilots"

加入 IGMC 倡议的益处

- ◆ 通过 IGMC 标准制定带有测量目标的行动计划和政策选项；
- ◆ 评估诊断建成的城市，帮助城市管理者更有效地管理其城市、人口和资源；
- ◆ 评估诊断处于规划设计阶段的项目，识别不足之处和改进机会，规避风险，提高投资效益；
- ◆ 进入 IGMC 数据系统，和同类比较学习；
- ◆ 通过培训、研讨会和活动加强能力建设，获得专业资讯；
- ◆ 获得以需求为导向的解决方案和互动性的咨询服务，应对挑战和差距；
- ◆ 根据情况实施 IGMC 试点项目，示范绿色转型；
- ◆ 建设新型伙伴关系；
- ◆ 提升品牌价值和使商业机会最大化。

development alternatives and urbanization models. The IGMC Initiative has been registered with the United Nations as a voluntary commitment of Rio+20 and 2030 Agenda for Sustainable Development as well as a conscious action to implement the Sustainable Development Goals, Paris Climate Agreement and New Urban Agenda at the regional and local levels.

The Benefits of Joining the IGMC

- ◆ Through the IGMC Standard, to develop action plans and policy options with measurable goals;
- ◆ To use the IGMC Standard for assessment and diagnosis of existing urban areas, enabling city administrators to manage their cities, people and resources more efficiently;
- ◆ To use the IGMC Standard for assessment and diagnosis of projects at the planning or designing stage, and identify challenges, gaps and opportunities so as to reduce risks and to facilitate the effective investment;
- ◆ To access IGMC data system, learning from each other and comparing with counterpart;
- ◆ To strengthen capacity building through various trainings, workshops and activities, obtaining professional technical information and knowledge;
- ◆ To obtain demand-oriented solutions and inter-active consultation services to address existing challenges and gaps in certain cities and projects;
- ◆ To conduct IGMC pilots as appropriate to demonstrate the green transformation;
- ◆ To build up new type partnerships;
- ◆ To enhance the brand value and maximize business opportunities.

● 更多信息 *More information* <https://www.igmc.org>

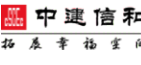


贯彻新城市
议程

WORLD BEST PRACTICES 全球最佳范例

ASIA-PACIFIC EDITION 亚太版

部分合作伙伴 PART OF PARTNERS

						
无锡市人民政府	丽江市人民政府	伊春市人民政府	三亚市人民政府	大理市人民政府	章丘市人民政府	美国圣塔莫尼卡市
						
遂宁市人民政府	贵州省都匀市人民政府	江山市人民政府	淳安县人民政府	武义县人民政府	常山县人民政府	武汉长江新城管委会
						
黄果树风景名胜	鞍山汤岗子新城	观澜湖集团	峨眉山风景区管委会	普陀山风景区管委会	中国·清溪	深圳东部华侨城有限公司
						
世界一带一路组织	融合控股	青岛中德生态园	碧桂园集团	重庆市潼南区城市建设投资(集团)有限公司	红星美凯龙控股集团有限公司	隆基股份
						
湖南中建信和	广西江宇集团	北京建工	万科企业股份有限公司	中海兴业(西安)有限公司	深圳市振业(集团)股份有限公司	四川省大卫建筑设计有限公司
						
雷诺-日产联盟	华西希望集团	深圳市天健(集团)股份有限公司	华电山东分公司电力股份有限公司	深圳市循环经济协会	深圳市中幼国际教育科技有限公司	四川省城市建设工程监理单位

定价 PRICE
HKD90元 CNY80元 USD20元

ISSN 2072-392X



9 772072 392000