



THE NINETEENTH ANNUAL SESSION OF GLOBAL FORUM ON HUMAN SETTLEMENTS

OUTCOME DOCUMENT

As a follow-up discussion and action of the United Nations Summit of the Future, the 19th Annual Session of Global Forum on Human Settlements and New Sustainable Cities and Human Settlements Awards Ceremony (GFHS 2024) was successfully held at the United Nations Headquarters in New York City on October 24, the UN Day, with the theme being ***“Invigorate Innovation and Local Leadership for a Sustainable Urban Future”***. The forum brought together nearly 400 professional participants including 20+ ambassadors, representing 40+ countries. It was broadcast live on UN WEB TV.



GFHS 2024 at ECOSOC Chamber, UN Headquarters

As an important observance of the World Cities Day, this year's 19th Annual Session was co-organized and supported by more than 20 leading organizations, including relevant national governments, UN agencies and other international organizations. Participants had collaborative and productive dialogue and deliberation on 10 key issues, offering scientific solutions and policy recommendations, and recommending a group of outstanding sustainable development practices and innovations.

We, the participants of the 19th Annual Session of Global Forum on Human Settlements, acknowledge the issues and points recommended as follows, reaffirm the urgency of transformative action at all levels and across all sectors, and send an urgent message to accelerate innovation and invigorate leadership to ensure an inclusive, safe, resilient and sustainable urban future for all.

Key Recommendations

1. Multilevel governance is important for driving urbanisation in the direction we want. National aspirations, policies and regulations for urbanisation should be an inspiration and not a constraint to local innovation. Far too often, the absence of seamless whole-of-government approaches have led to innovations being frustrated and prospective positive outcomes lost. Sustainable development remains a long-term investment challenge and new public and private financing has to be evolved to address the growing need for affordable, well-planned, and sustainable human urban settlements.



Amb. Harold Adlai Agyeman, Permanent Representative of Ghana to the United Nations, Vice Chairman of the 79th Session of the UN General Assembly

2. Innovation and leadership should not discount the unique solutions that individuals and entities in local communities offer for sustainability. The prioritisation of foreign solutions over local ones is often not helpful, and nature-based solutions should not be ignored where they make the best sense of what to do. Moreover, local leaders, including traditional leaders, who often wield influence over land ownership and usage, need to be empowered and made a force of good for sustainable human settlements.
3. Innovation lies at the heart of urban resilience. There are three ways we can leverage innovation in making cities resilient and sustainable, including (a) innovation in the use of new technologies. For example, advances in meteorology and satellite technology can detect weather hazards long before they impact communities; (b) innovation in rethinking urban planning practices and investment in resilient infrastructure. We should implement risk-sensitive land zoning and promote the use of building codes that prioritize safety and resilience; and (c) innovation in applying traditional or nature-based solutions to urban challenges.



Dr. Ivor Richard Fung, Chief of Staff, Office of the President of
the 79th Session of the UN General Assembly

4. Governments must turn their attention to the needs of vulnerable populations as a matter of urgency as part of their development of effective and comprehensive responses to homelessness. The state of sheer homelessness in the world today along with the immense crisis faced by millions living in inadequate and insecure housing and living conditions, calls for a combination of a humanitarian and a human rights approach.

5. It is essential to implement end-to-end multi-hazard early warning systems that reach all communities, ensuring no one is left behind. Local leaders should integrate early warning systems with urban planning and digital infrastructure to improve real-time responses. National and local governments must scale up the development and implementation of integrated plans for disaster risk management and climate change adaptation through a comprehensive risk management approach with relevant data to inform decision-making.
6. In the face of the climate emergency, economic crises, and social tensions in our increasingly urbanized world, polycentric proximity emerges as the most effective resilience strategy for creating more livable and prosperous cities—serving as the key to enhancing our everyday lives, the “Proxilience”. It is essential that city leaders join the efforts in implementing innovative strategies. Together, we can create thriving, vibrant neighborhoods and make cities more livable for everyone.



Mr. Jamil Ahmad, Director, New York Office, United Nations Environment Programme (UNEP)

7. In order to make the necessary transformation of our cities possible, we need a new approach to the design and our city planning in general. Top down as it was done for decades doesn't work anymore especially in areas where there is already a large building stock in the cities. We need more bottom-up approaches which focus on inclusion and communication of the people living in their respective neighborhoods. One-fits-all or the understanding of a modern architecture and therefore our modern cities is outdated. We need to

find back to a climate and culturally sensitive design and therefore focus on the local and regional context much more than we have done so far.

8. It is essential that municipal regulatory systems offer meaningful choices for both living and working arrangements. By adopting codes that encourage compact, mixed-use, walkable development at varying levels of intensity, municipalities can ensure that most residents are within a 5 to 10-minute walk of many of their daily needs. Additionally, integrating the design principles of traffic engineering, public works, urban planning, architecture, and ecology into a comprehensive coding framework, such as a SmartCode, can help create a high-quality public realm set within a resilient settlement pattern.
9. We need to utilize light imprint planning and engineering techniques to economically and sustainably manage stormwater, while enhancing and integrating the existing terrain, geographical features, and hydrology into the project's green infrastructure. Strategically employ context-sensitive solutions, using paving, channelling, filtration, and storage tools in the design of green spaces and hardscaping to minimize or avoid the need for costly underground stormwater systems.



Distinguished keynote speakers

10. Recognizing the need for complete and diverse communities, we must apply sprawl repair techniques to retrofit our automobile-oriented, segregated-use communities at all scales, from regional plans to individual buildings. It is imperative to repurpose and transform poorly conceived developments—such as subdivisions, office parks, shopping centers, and dead malls—into

more livable, economically viable, and ecologically sustainable habitats. Through strategic design, policy reform, financing, infrastructure improvements, and revisions to outdated zoning codes, we must support the creation of toolkits and frameworks that promote a vibrant public realm, fostering neighborhoods that balance human-scale design with environmental stewardship.

11. We should promote the integration of agricultural activities from urban centers to rural edges as part of a sustainable community design approach focused on food production. Such an initiative can address key challenges, such as over-reliance on mass food distribution, environmental degradation, food security, and social inequities related to food access. Develop regulatory tools and community-based frameworks that enable participation in agricultural activities at various scales—from window boxes and community gardens to larger-scale farming cooperatives.
12. Policy tools like loan guarantees, tax rebates, low-interest loans, green bonds, and revolving loan funds can help incentivize private sector investment in sustainability, often in ways where government funds are matched 10x or more by the private sector. A small investment coupled with smart public policy can move the market towards sustainable growth.



Distinguished speakers at the high-level dialogue

13. Urban climate finance more than doubled between 2017 and 2022, from USD 382 billion to USD 831 billion annually. Public funds are generally allocated based on political priorities and social needs, focusing on long-term public

goods rather than immediate profitability. Private investment is significant at USD 440 Billion in 2022, but 96% goes almost entirely to GHG mitigation, leaving essential adaptation investments underfinanced and competing with other priorities for public funds. Only 0.2% of private finance goes to Least Developed countries. About 10% of total urban climate finance is concessional.



Distinguished speakers at the thematic session: directing and redirecting public and private funds for sustainable cities

14. Closing the urban climate finance gap will require a greater commitment to raising urban issues on global and national climate finance agendas; increased collaboration between all levels of government to improve the enabling environment and data sharing; capacity building for public and private actors to respond to climate change in cities and achieve urban climate finance goals; and greater capital mobilization at the city level through concessional finance and investment-ready projects for private investors.
15. Collaboration between public and private sector in funding urban development is crucial for building sustainable cities. While the use of public funding ensures addressing key social and environmental benchmarks, private funds can push the limits of the development to a whole new level. Public-private partnerships and other types of collaborations combine both sectors to achieve more comprehensive and effective urban solutions.
16. Nature-based materials offer significant potential for reducing embodied carbon, such as mass timber for structural elements, as well as natural insulation materials for building envelopes. In addition, we cannot manage what we don't measure". To effectively reduce embodied carbon, we must

understand its full life cycle, design with data and study the future climatic projections, and identify high-emitting components of our designs to prioritize effective emissions reduction solutions.



Distinguished speakers at the thematic session: foster innovation and integration in urban planning and design

17. In urban areas, we need to ensure that gardens are designed in ways that will create wildlife habitat and enhance biodiversity. Indigenous flora can support far more of the insects, birds and other creatures than those that co-evolved with the Traveller's Fan Palm from Madagascar, or a Bougainvillea from Brazil. It is essential that we create laws where most of the plantings are native as this will result in one BIG connected habitat for species we are driving to the brink.
18. This discussion is especially timely as the Pact for the Future adopted in September calls for member states to support developing countries to plan and implement just, safe, healthy, accessible, resilient and sustainable cities. Cities that not only restore ecosystems, but also integrate nature into their urban environments, experience numerous benefits improving the health of their citizens, species and ecosystems, as well as and the sustainability of their infrastructure. Nature-based solutions serve as a transformative framework for change, making cities more resilient and sustainable.
19. Reflexive monitoring systems for nature-based solutions that not only track progress through indicators but also integrate findings into ongoing design and implementation, using a mix of locally-relevant tools and data sources, and actively involving communities will ensure transformative and sustained impacts. Investing in research development and knowledge sharing, while

paying particular attention to learning from grassroots level initiatives, will support the stronger uptake of sustainable and inclusive nature-based solutions in cities worldwide.



Distinguished speakers at the thematic session: nature-based solutions for urban resilience and sustainability

20. To drive circular economy and climate resilience initiatives in urban settings, we must strengthen local governments' skills and resources, address the unique challenges of intermediate cities facing demographic pressure, empower cities to harness innovation within their delegated powers to enable actionable, locally adapted solutions, and step up substantial efforts to unlock climate financing for local projects.



Distinguished speakers at the thematic session: accelerate the circular economy towards zero-waste and zero-carbon cities

21. Centering adaptation and resilience in urban development is key to overcoming institutional, organizational, and financial obstacles. Given the limited decentralization in many countries, establishing a shared, transparent coordination and planning approach is vital to achieving alignment with NDCs and regional climate action plans.
22. Achieving 'net zero waste' and 'net zero emissions' goals requires embedding circular economy principles across all levels of governance. A transparent, measurable and cooperative framework that unites national and local governments is essential to scaling up circular practices, fostering resource efficiency, and advancing shared accountability in meeting these ambitious targets.



Distinguished speakers at the thematic session: human settlements
and modern health technology

23. Efforts to reduce health inequities will be prioritized, with the integration of technology and policies that provide more equitable access to healthcare services. Low-cost healthcare innovations, mobile health units, and scalable digital health platforms will help expand access to rural and underserved areas. It's also crucial to improve the quality of care and optimize healthcare systems, making them more efficient and patient-centric.

Experience from the winners of New Sustainable Cities and Human Settlements Awards

Global Human Settlements Award on Planning and Design

1. THE SOURCE, Munich, Germany

Located in Munich's Obersendling district on the southern edge of the city, the 22-storey high-rise will be redeveloped to become THE SOURCE, a state-of-the-art mixed-use complex with a work-life blending concept and a human centric approach. The renovation of an existing 80-meter-tall tower serves as a remarkable example of urban regeneration and the circular economy.

The decision to conserve and repurpose the existing concrete tower, leaving the cores and structures untouched wherever possible, saves over 5,000 tons of carbon. The original façade has to be replaced to increase the energy efficiency of the building. The new façade references the original pattern, facilitates sun shading between two glass layers while maintaining the intake of fresh air from outside. The building will be powered by geothermal and solar energy, with 3,000 square meters of photovoltaics integrated in the tower's façade and along the roof edges of the south building. The top of the southern building will be covered in green, contributing to the biodiversity on the site. The revitalization of the tower ensures an energy-efficient and resource-saving use in the long term.



The Source, Munich, Germany

2. Reserva Río Tenorio, Costa Rica

Located between the Miravalles and Tenorio Volcanoes in Costa Rica, Reserva Río Tenorio (RRT) aims to become a 'nature reserve' with a residential community within assembled 13,000 acres (5262 HA) of mostly undeveloped ranchland and forests. The vision of RRT is to provide rewarding life experiences that are the result of conservation-based development principles. It will be an authentic, organic, and original community and destination in one of the most sought-after natural environments in the Americas – Costa Rica.

The innovative plan is for RRT to become a model of sustainable development in harmony with nature and culture for family landholders. Key strengths include an approach that prioritizes being "EGO-LESS but ECO-MORE," utilizing six-senses metaphysical site analysis, and incorporating holistic management and regenerative practices for conservation. The project emphasizes safeguarding the sustainability and conservation of existing natural and cultural heritage, ensuring the land is protected for future generations. It will ensure that a 200m-wide wildlife corridor is created and protected to allow the Jaguars, Pumas and other species to cross safely. Additionally, the Conservation Education and Interpretation Center is set to enrich cultural and social life, enhancing the environmental, social, and cultural sustainability of the Reserve.



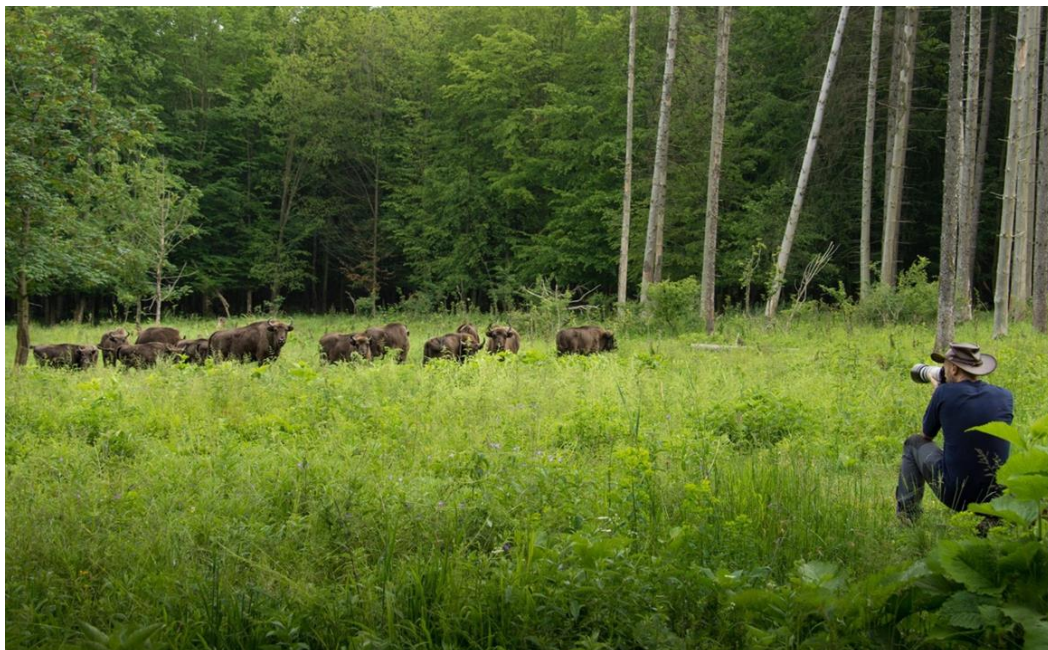
RRT Rendering – River House

Global Model of Sustainable Tourism

3. Bison Land, Romania

Bison Land spans Vânători Neamț Nature Park, Târgu Neamț, and Agapia, Bălțătești, Crăcăoani, Vânători Neamț communes, and is part of the "Discover Eco-Romania" network. This ecotourism destination harmoniously combines nature, spirituality, culture, and traditions. Bison Land Association and Vânători Neamț Nature Park Administration started the process of developing and promoting the area as an eco-destination in 2015. They collaborate with local authorities, businesses, artisans and artists to promote sustainable tourism.

Since 2012 European bison roam freely in the park thanks to the administration of protected area. Nowadays over 80 bison are free, more than half born in the wild. They've enhanced the area with trails, rest and information infrastructure, wildlife observatories, a modernized visitor center, encouraging nature-based activities. Events like Eco-Brunch, local markets, workshops and guided tours attract visitors, showcasing local culture, crafts, and cuisine while supporting conservation and protection of nature.



Bison Land, Romania

4. Weizhou Island Volcano National Geopark of Beihai City, Guangxi, China

Rated as one of China's first "beautiful islands" by the Ministry of Natural Resources, Weizhou Island Volcano National Geopark covers a total area of 24.98 square kilometers and boasts a forest coverage rate of 85%. It is blessed with unique tourism resources, rich biodiversity, and enjoys good environmental

quality. It is home to the most well-preserved multi-period volcanic relics in China and is the largest volcanic island in the South China Sea. It is also an important hunting site for the national second-class key protected aquatic wildlife-the Bryde's whale.

It has a variety of tourism business types, complete public supporting facilities, and profound historical and cultural heritage. The Island has been actively promoting zero waste initiatives, and advancing green energy use through a new smart power system model of "distributed photovoltaic + energy storage power station + waste heat recovery". More than CNY 80 million has been invested to carry out the ecological restoration project of coral reefs around the Island. The number of coral species has increased from 46 previously identified to 62.



Weizhou Island, Beihai City, Guangxi Province

Global Leadership Award for Sustainable Development

5. Carlos Moreno, Scientist and Professor at IAE - Paris1 Sorbonne University

As a scientist and urbanist, Carlos Moreno's great contribution to sustainable urban development is well known and is well documented to have high efficacy. The most notable achievement is his "15-minute city" concept which has already been supported, implemented, and recognized by high-level international organizations and mayors worldwide. He initiated the Global Observatory of Sustainable Proximity that has provided a platform for cities worldwide to share best practices and collaborate on innovative solutions.

Through the concept, he emphasizes integrated planning, mixed-use development, local living, reduced commutes, enhanced community engagement, and technological integration. Overall, he provides strategies for cities to recover and adapt to benefit residents, saving them precious time, and techniques to change the habits of automobile-dependent city residents and maximize social benefits of living in a human-centric city, as well as scientifically developed, research-backed solutions for enduring urban issues and problems. Deeply committed to science, progress, and creativity, Prof. Moreno presents an essential and timely resource in *The 15-Minute City*, to create more livable, viable, and equitable cities.



Walkable City: public open space on Broadway in New York City

6. The National Initiative for Smart Green Projects by the Government of Egypt

The National Initiative for Smart Green Projects (NISGP) is a presidential initiative launched by Egypt to localize the Sustainable Development Goals, by integrating environmental sustainability into the fabric of society. This nationwide competition is a unique platform that empowers individuals across Egypt's 27 governorates to contribute local solutions to combat climate change. The breadth of the effort on both the geographic and sectoral scope is admirable. The Initiative focuses on integrating sustainability into the core strategies as opposed to adding

sustainability to a conventional approach or doing one-off projects on sustainability, which is smart and ultimately essential.

NISGP has effectively reduced Egypt's carbon footprint through initiatives focused on renewable energy, water conservation, and waste management. The holistic approach has created a sustainable framework that balances environmental preservation with social equity and economic growth. By addressing the SDGs through a localized approach, NISGP demonstrates that sustainable development is not only achievable but also beneficial to society as a whole.

Global Innovation Award for Sustainable Development

7. Gravitational Vortex Water Turbine, Turbulent, Belgium

Turbulent was born from a vision to harness the untapped potential of rivers and canals for clean energy generation. Inspired by gravitational vortexes, the founders sought to develop a scalable water turbine solution capable of powering remote communities worldwide. Turbulent's technology addresses the critical need for sustainable and affordable electricity in off-grid regions with minimal environmental impact.

Guided by the vision of decentralized and interconnected devices inspired by nature's networks, Turbulent strives to create impactful, localized energy solutions, empowering communities and fostering sustainable development. By 2028, Turbulent aims to reach an installed capacity of 10 MW, thereby preventing 200,000 tons of CO₂ emissions, building on their current achievement of 1.8 MW.

8. Technology for the Production of Polylactic Acid (PLA) and co-production of Fulvic Acid from Lignocellulosic Bio-waste, China

Fengyuan Group uses cellulosic saccharides instead of grain-based starch saccharides as raw materials for producing biomaterials and biofuels. It can substitute petrochemical materials to produce biodegradable bio-based plastics, and the co-produced fulvic acid can be used as a fertilizer to improve soil and promote crop growth.

As a global first, this technology is economically viable and ready for industrial-scale application. A demonstration plant with an annual production capacity of 15,000 tons of straw-based saccharides and co-produced fulvic acid has already been put into operation in Bengbu city, Anhui Province. It offers solutions for tackling plastic pollution, addressing climate change, and ensuring food and

energy security. This represents an innovative breakthrough of sustainable bioeconomy and circular economy, with promising prospects.

Global Model of Smart Green Building

9. China Overseas Building

Located in Shenzhen city, the building was completed in Nov. 2023, with a total construction area of 61,186 square meters and a plot ratio of 10.64. The project has achieved a nearly zero energy consumption target, with advanced passive design, efficient energy systems, and renewable energy integration. It shows excellent incorporation of smart building technologies, including a sophisticated smart carbon management platform and AI-driven energy optimization systems. The building leverages renewable energy through photovoltaic installations and employs heat recovery systems to further reduce energy consumption.

The building design integrates multi-level three-dimensional greening, including roof gardens and balconies, contributing to urban cooling and enhancing the microclimate. Effective water management strategies, including rainwater harvesting, drip irrigation, and non-traditional water sources, are implemented to maximize water efficiency. In addition, it incorporates significant social and cultural considerations, including public accessibility, green spaces, and multi-functional spaces that enhance community engagement and social inclusivity.

Global Model of Smart Green Community

10. West Bund Media Port and West Bund AI Valley, Shanghai, China

The west bund is located in the riverside of Shanghai, China, and aims to be an international green, vibrant community in waterfront area. It features AI, Art, and media industry, integrating low-carbon technologies like green buildings, 2 levels walking platforms, resilient city, etc. The project demonstrates a strong commitment to sustainable spatial planning and development. It has incorporated green and public spaces effectively, ensuring that public open spaces are accessible and serve the community's needs, with a specific focus on inclusivity and universal access. Smart technologies were extensively integrated, including smart energy management, smart transportation systems, and a comprehensive smart operation platform.

The project has successfully integrated historical and cultural elements into the

urban renewal process, preserving and revitalizing old industrial buildings and spaces. The transformation of the Longhua Airport runway into a Sponge Park is a noteworthy example, highlighting the project's dedication to both heritage and environmental sustainability. The project emphasizes environmental sustainability and resilience through various measures, including the development of a continuous riverside greenway, application of sponge city principles, and extensive use of native plant species.



Aerial view of West Bund Media Port and AI Valley, Shanghai

Global Sustainable Development Outstanding Achievement Award

11. Youyu: Successful practice of desertification control, afforestation, and ecological restoration for over 70 years

After more than 70 years' efforts of several generations, Youyu County, Shanxi Province, has changed from a "barren land" to an "oasis beyond the frontier" today. The forest greening rate of the county has increased from less than 0.3% to 57%, and the ecological deficit has become an ecological surplus. It has achieved outstanding achievements and created miracles. Youyu's green development practice has also made great contribution to global land restoration, preventing desertification and enhancing drought resistance, developing forest carbon sinks and responding to climate change.

The county's forest stock volume has reached 1,155,413 cubic meters, capable of absorbing 2,114,000 tons of carbon dioxide. Its strengths include: a) strong leadership of the government. Successive Party Committees and Governments of Youyu County have formulated scientific plans with firm goals and perseverance;

b) the arduous efforts and extensive participation of the people of the county. The people are tenacious, optimistic and wise, and change their life through their own hard work, cultivating the "Youyu Spirit"; c) successful tree planting strategies and methods adapted to local conditions; and d) successful transformation brings significant environmental, economic and social benefits.



The scenery in Youyu County

Global Model of Environmental Protection and Restoration

12. Dongguan Downtown Environmental Protection Power Plant, Guangdong Province, China

Canvest Environmental Protection Group Company Limited ("Canvest") is a leading green electricity enterprise in China. In 2011, Canvest invested heavily in technology upgrades in Dongguan Downtown Environmental Protection Power Plant and transformed it into a garden-like facility with significantly improved environmental standards and processing capacity, effectively processing the accumulated landfill waste and new waste.

The project meticulously restored the original ecology and built an ecological park for the community. It also includes a 5,500 square meter environmental protection theme pavilion aimed at promoting environmental education and engaging the public in ecological protection. This vividly interprets the concept of "harmonious development between man and nature" and showcases Canvest's commitment to

"supporting social sustainable development and optimizing living environments." The project has a daily processing capacity of 3,000 tonnes. It can provide approximately 490 million kWh of electricity each year, avoiding the emission of 13,424 tonnes of carbon dioxide equivalent emissions and saving about 160,000 tonnes of standard coal.

Global Human Settlements Model of Village

13. Juxi Village, Pan'an County, Zhejiang Province, China

Known as the "Clan of Confucius in Wuzhou, located in southern China" and the "Third Holy Land of Confucianism", Juxi Village is the largest gathering place of Confucius descendants in the south of the Yangtze River, which is of great significance in Chinese history and culture.

The human settlements in Juxi Village, a thousand-year-old village, has extremely high cultural and technological value. The key advantages include: a) well-protected fine landscape and biodiversity; b) scientific site selection, complete planning, well-preserved spatial form and street structure authenticity; c) a large number of preserved, magnificent and distinctive traditional buildings; and d) wonderful and diverse rural life, unique settlement culture and well-inherited family rituals.



Juxi Village, Pan'an County, Zhejiang, China