



## Urban Agenda Platform

The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.

# Youth-led community low-carbon construction action supported by community deliberation

Region	Asia and the Pacific
Award Scheme	Shanghai Manual
Themes	Regeneration Social Inclusion Urban Governance and Legal Frameworks Youth & Livelihoods
Sustainable Development Goals	Goal 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable

## Summary

In the city of Nanning, Guangxi Province, China, a youth-led, community-supported initiative focused on low-carbon construction was launched to tackle the challenges presented by rapid urbanization.

## Background and Objective

China's rapid urbanization has significantly improved living conditions but has also brought challenges, particularly in managing construction waste and carbon emissions. By the end of 2000, China had built over 220,000 residential communities, which are now experiencing depreciation and lack proper infrastructure. In Nanning, these issues were particularly pressing, with many old communities struggling to manage waste, maintain infrastructure, and ensure urban sustainability. The municipal government, in collaboration with community groups, proposed a solution via a youth-led low-carbon construction action plan, aiming to facilitate sustainable urban renewal by engaging young people in the renovation of outdated infrastructure and promoting low-carbon practices through community-led governance structures.

## Actions and Implementation

The initiative was spearheaded by a joint working team comprising two groups: the Luobo Team, focused on public participation, and the Clover Team, which concentrated on community garden research and practice. The team mobilized university students, young professionals, and local residents to form volunteer groups that participated in various low-carbon construction actions. From 2021 to 2023, over 500 workshops were conducted, and a network of 100 communities participated in initiatives such as waste sorting, gardening, and community planting. In addition, national community garden design competitions were held to encourage youth participation. Key to the implementation was the establishment of the Old Friends Deliberation Council, which facilitated communication between youth, government



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bodies, and community members, ensuring that the renovation process was collaborative and transparent.

The success of the initiative was exemplified by the Ronghe Xincheng community, which became a model for the programme. Here, community residents engaged in waste sorting, and through a partnership with professional organizations, whereby kitchen waste and garden waste were processed into organic fertilizer, reducing the community's carbon footprint. The project also witnessed the transformation of public spaces, with residents contributing to the renovation efforts by organizing and financing the creation of green spaces, improving their own living conditions while promoting sustainable urban environmental practices.

### Outcomes and Impacts

The outcomes of the initiative were highly significant. Over the course of the programme, 100 communities in Nanning engaged in low-carbon construction actions, including waste management and space renovation. In Ronghe Xincheng, 308.82 tons of garden waste and 30.96 tons of kitchen waste were processed into 157.5 tons of fertilizer, a direct result of community participation in waste management. Additionally, carbon trading agreements were signed, which allowed the community to generate economic benefits from carbon reduction projects, thus connecting environmental sustainability with local economic growth. The initiative also fostered a sense of community pride and ownership, with residents actively involved in the renovation and maintenance of public spaces. This created a replicable model for other communities to follow, demonstrating the potential of youth-driven initiatives in achieving sustainable urban renewal.

### Sustainability and Scalability

The sustainability of the project lies in its focus on community participation and the long-term maintenance of renovated spaces. By involving residents in the renovation process and encouraging them to take responsibility for the upkeep of the spaces, the initiative ensured that the improvements would not deteriorate due to lack of care. The establishment of a community maintenance fund, supported by charitable investments and crowdfunding, further guarantees the ongoing care of public spaces. Moreover, the project's scalability is evident in its expansion from the initial renovation of Ronghe Xincheng to the involvement of 100 communities across Nanning. The success of the Seed Fund initiative, which encourages residents to transform underutilized spaces with minimal resources, provides a model that can be replicated in other urban areas, offering a cost-effective solution to community-based low-carbon renovation.

### Gender and Social Inclusivity



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The project made significant strides in ensuring gender and social inclusivity. By involving youth from diverse backgrounds, including women and marginalized groups, the initiative provided an equal platform for all to contribute to community development. The participation of young people, including university students and professionals from various fields, not only enhanced the technical aspects of the renovation but also ensured that diverse perspectives were considered in the decision-making process. The formation of the Old Friends Deliberation Council allowed for broad community engagement, including those who might otherwise have been excluded from urban renewal processes, ensuring that everyone had a voice in the transformation of their living environment.

### **Innovative Initiative**

The innovative aspect of this initiative lies in its holistic approach to urban renewal, integrating environmental sustainability, youth participation, and community engagement. The creation of the Old Friends Deliberation Council and the collaboration between local government, community members, and young professionals exemplified an innovative governance model that empowered residents and provided them with a direct role in the decision-making process. Furthermore, the initiative's focus on low-carbon construction, waste recycling, and the creation of green spaces using local materials demonstrated a forward-thinking approach to urban development that balanced ecological, economic, and social goals.

### **Resources devoted to delivery**

The resources devoted to the delivery of this project included both human and financial capital. The joint working team, comprising experienced consultants, designers, and volunteers, played a pivotal role in mobilizing the community and driving the initiative forward. Local government funding supported the renovation efforts, while additional resources were raised through independent fundraising and partnerships with professional organizations. The success of the initiative was also facilitated by the involvement of over 800 university students and 1,600 local residents, who contributed their time, expertise, and energy to the project. The involvement of professional partners, such as Lyondell Basell, also provided technical support and financial resources to ensure the effective implementation of waste management and carbon reduction initiatives.

### **Conclusion**

The youth-led, community-supported low-carbon construction initiative in Nanning has proven to be an innovative, inclusive, and scalable model for sustainable urban renewal. By combining youth participation, community deliberation, and government collaboration, the project has not only improved the living conditions of residents but also set a benchmark for future low-carbon urban renewal projects. The initiative's focus on sustainability, waste management, and the creation of green spaces has had a profound environmental impact, while its emphasis on community engagement has empowered residents to take



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ownership of their living spaces. The success of the project demonstrates the importance of youth-led initiatives in driving climate action and achieving the SDGs, providing a replicable model that can inspire similar efforts in other urban areas.