

Rebuilding cities for people in Ukraine



Introduction: what kind of cities did Ukraine have before the war?

Once Ukraine's greatest hope for green development, the country's cities have been fighting for survival since the Russian invasion began on 24 February. Before the start of war, Ukraine demonstrated slow but certain progress on environmental policy and dealing with climate change. In 2021, the country approved an ambitious nationally determined contribution, committing to reduce emissions by 65 per cent relative to 1990 levels. There were plans to reduce industrial pollution.

An important factor that contributed to cities' green development was decentralisation reform.² Thanks to this reform, Ukrainian cities and communities

For more information

Vladlena Martsynkevych Project leader

CEE Bankwatch Network vladlena@bankwatch.org

Khrystyna Rybachok

Campaigner
CEE Bankwatch Network
khrystyna.rybachok@bankwatch.org

Learn more: bankwatch.org







¹ Saphora Smith, <u>Climate: Ukraine hope for a green city lost amid devastated Mariupol's rubble</u>, *The Independent*, 14 March 2022.

² Decentralisation, <u>Decentralisation in Ukraine</u>, <u>Decentralisation</u>, accessed 8 August 2022.

acquired more self-governance powers, especially in shaping communities' strategic development, filling local budgets with tax revenue, and allocating those local budgets. This enabled cities to spend a part of their budget on and attract foreign investments for environmental and climate-related projects. Ukrainian cities have also spearheaded digitalisation, e-services that simplify bureaucratic procedures and allow for more transparent and less time-consuming services.

Although decentralisation helped cities to be more self-organised and resilient, since the invasion, survival has become a top priority for many of the cities and development and environmental initiatives have been put on hold. Some cities have been occupied or heavily destroyed, showing tremendous courage and resistance against Russian occupation. Now, some cities, especially those located in the safer western region of the country, have started to resume their environmental and development initiatives.

What damage has been done to the cities and how is it being documented?

The costs of destruction are being thoroughly documented by the Ukrainian government and non-governmental organisations. One such initiative is the project 'Russia will pay', ³ organised by the Ministry of Economy, the Office of the President and Kyiv School of Economics (KSE). According to this initiative's early analysis, the cost of the war's physical direct damage had already exceeded USD 113.5 billion as of 22 August, an increase of USD 3.1 billion compared to 1 August. These numbers do not include indirect damage, such as economic or agricultural losses. The largest share of the damage is in housing – USD 48 billion, or 131,300 housing units, including 15,270 multifamily residential buildings and almost 116,000 private residential buildings. The second largest share is in infrastructure, particularly roads and airports – USD 35.1 billion. According to 'Russia will pay', damage to industry and enterprises is estimated at USD 9.5 billion. ⁴ These figures are constantly rising due to ongoing attacks by the Russian Federation on Ukrainian cities and civilian objects.

The invasion has also caused environmental scars. To assess these environmental damages, the government of Ukraine is collecting evidence of environmental damage and crimes against the environment. As of June 2022, the Ministry of Environment's crowd-sourcing platform for collecting crimes against the environment, EcoZagroza (Environmental Threat), had documented⁵ over 2,000 cases of environmental damage in Ukraine. Several civic initiatives, including Ecoaction, are also collecting⁶ data on crimes against the environment. This evidence must be thoroughly documented, as it could be used in international court to claim compensation

³ Kyiv School of Economics, <u>Russia will pay</u>, *Kyiv School of Economics*, accessed on 12 August 2022.

⁴ Kyiv School of Economics, Russia will pay, Kyiv School of Economics, accessed on 12 August 2022.

⁵ Ministry of Ecology and Natural Resources of Ukraine, <u>Briefing on the environmental damage caused by the Russia's war of aggression against Ukraine</u>, *Ministry of Ecology and Natural Resources of Ukraine*, 27 August 2022.

⁶ Ecoaction, Month of War. Crimes against the environment, Ecoaction, accessed on 8 August 2022.



from Russia in the future. Many of these impacts have seriously affected and will continue to be felt in urban areas. Below, we look at how some of Ukraine's cities were affected by the war.

Before the war, seven cities joined the European Bank for Reconstruction and Development's (EBRD) Green Cities⁷ programme and developed or were in process of developing Green City Action Plans (GCAPs) to help them deal with environmental issues and adapt to climate change. This briefing focuses on cities that are a part of this initiative because they made commitments before the war to improve the environmental situation in their cities and many of the priorities identified in the GCAPs will be crucial after the war. Moreover, these cities have changed since the war started, as have their needs and priorities for reconstruction.

Which Ukrainian cities are involved in the EBRD Green Cities programme?

Decentralisation encouraged Ukrainian cities to join initiatives like EBRD Green Cities – through such programmes, they could cooperate with international multilateral institutions as well as receive funds for modernisation and access to European technologies.

Among Ukraine's cities, Lviv⁸ was the first to join Green Cities at the beginning of 2019 and adopted its GCAP in 2020. In 2019, Kyiv⁹ became a part of Green Cities and its GCAP was about to be adopted by the Kyiv city council before the war started. Mariupol,¹⁰ Khmelnytskyi¹¹ and Kryvyi Rih¹² joined the programme later in 2019, and their GCAP processes were ongoing. Dnipro¹³ and Kharkiv¹⁴ joined in 2021.

⁷ European Bank for Reconstruction and Development, <u>EBRD Green Cities</u>, *European Bank for Reconstruction and Development*, accessed on 8 August 2022.

⁸ European Bank for Reconstruction and Development Green Cities, <u>Lviv</u>, *European Bank for Reconstruction and Development*, accessed on 12 August 2022

⁹ European Bank for Reconstruction and Development Green Cities, <u>Kyiv</u>, *European Bank for Reconstruction and Development*, accessed on 12 August 2022.

¹⁰ European Bank for Reconstruction and Development Green Cities, <u>Mariupol</u>, *European Bank for Reconstruction and Development*, accessed on 12 August 2022.

¹¹ European Bank for Reconstruction and Development Green Cities, <u>Khmelnytskyi</u>, *European Bank for Reconstruction and Development*, accessed on 12 August 2022.

¹² European Bank for Reconstruction and Development Green Cities, <u>Kryvyi Rih</u>, *European Bank for Reconstruction and Development*, accessed on 12 August 2022.

¹³ European Bank for Reconstruction and Development Green Cities, <u>Dnipro</u>, *European Bank for Reconstruction and Development*, accessed on 12 August 2022.

¹⁴ European Bank for Reconstruction and Development Green Cities, <u>Kharkiv</u>, <u>European Bank for Reconstruction and Development</u>, accessed on 12 August 2022.

At least four cities identified air quality and air pollution¹⁵ as major environmental issues to be addressed by the GCAP and the coming investments. Lviv, Kyiv, Khmelnytskyi and Mariupol committed to modernising their waste and transport systems in order to decrease carbon pollution and negative environmental impacts. Many of the agreements and the progress made as part of this programme will need to be updated given the current situation.

What is the situation in Ukrainian cities now?

The war in Ukraine has touched every city and citizen, creating the most destruction in the released northern and occupied eastern and southern parts of the country. While cities in the north try to revive after liberation, those that are occupied or close to the front line have stopped their daily operations, environmental issues have been left to the side and the priority has switched to saving lives and defending the country. Bellingcat's interactive map of civilian infrastructure damages¹⁶ allows tracking damages in real time.

Mariupol

The most horrific example of a destroyed city is the city of Mariupol. In recent years, Mariupol launched promising environmental initiatives, such as a Green Council¹⁷ and city parks. Joining Green Cities, the city committed to improving solid waste collection and electrification of public transport, attracting¹⁸ investments of tens of millions of euros from the EBRD and other funders.

The city, with over 400,000 inhabitants, became a target of the Russian military in the early days of the war. The city was encircled and sieged, and residents left without food, water, heating, sanitation and safe humanitarian corridors, which led to a humanitarian catastrophe. Reportedly, the population of Mariupol has decreased to a fifth of its pre-war size both because of mass murders and forced deportations to Russia. The occupied and destroyed city may be on the verge of environmental catastrophe. The air is heavily polluted, the demolished largest metallurgical facility in Ukraine Azovstal is releasing chemicals, and there was a fire in a Mariupol landfill. Biosafety concerns and the high risk of a cholera outbreak have also been alarming developments for the city.

¹⁵ Saphora Smith, <u>Climate: Ukraine hope for a green city lost amid devastated Mariupol's rubble</u>, *The Independent*, 14 March 2022.

¹⁶ Bellingcat, <u>Civilian harm in Ukraine</u>, *Bellingcat*, accessed on 12 August 2022.

¹⁷ Mariupol City Council, <u>Vadim Boichenko at the conference in London: Mariupol is on the path of green sustainable development</u>, *Mariupol City Council*, accessed on 4 July 2019.

¹⁸ Ibid.

¹⁹ Mariupol City Council, Official Telegram Channel, Mariupol City Council, accessed on 12 August 2022.



According to the preliminary calculations²⁰ of the city administration, at least USD 10 billion will be needed for the reconstruction of the city's infrastructure.

Kharkiv

Kharkiv is the second largest city in Ukraine. Located 40 kilometres from the Russian border, it appeared to be in the epicentre of the Russian aggression. Despite continuous shelling, around 1 million residents had not fled from the city²¹ as of the end of June 2022. Official data²² on the destruction in Kharkiv show that as of 28 March (the latest available data), around 1,500 infrastructure objects, 1,929²³ out of 8,000 residential buildings, 69 schools, 53 kindergartens and 15 hospitals were completely or partially destroyed.

Kharkiv's municipal administration is already discussing the sustainable reconstruction of the city with international donors and investors. The plan is to use the city's scientific and technological potential to rebuild Kharkiv as a green city. The administration is striving to keep the city alive by continuously repairing the destroyed infrastructure and implementing innovative solutions. For example, the first public transport stop in Kharkiv was designed as a bomb shelter,²⁴ a good practice that can be used in other cities.

Kyiv

As the capital of Ukraine was strongly fortified, military attacks were concentrated on the cities in the outskirts of Kyiv. Russian troops have now retreated from the Kyiv area, leaving destruction and human casualties in the towns on the outskirts of Kyiv. However, Kyiv was also targeted by missile and artillery attacks. According to the information from the Kyiv city administration²⁵ on damages in the capital, as of 8 April, 208 residential buildings were damaged or destroyed, as well as 46 schools, 29 kindergartens, one orphanage, 13 administrative buildings, 17 hospitals and 48 objects of transport infrastructure. As of 18 July, the capital of Ukraine was sheltering²⁶ 100,000 displaced people.

²⁰ Mariupol City Council, Official Telegram Channel, Mariupol City Council, accessed on 12 August 2022.

²¹ Kharkiv City Council, <u>Igor Terekhov: Over 1 million residents are in Kharkiv right now, Kharkiv City Council</u>, 25 June 2022.

²² Kharkiv City Council, <u>1457 objects were destroyed in Kharkiv</u>, *Kharkiv City Council*, 29 March 2022.

²³ Marta Kushka, <u>In Kharkiv, as a result of shelling, almost 2000 residential houses are destroyed</u>, *Channel 24*, 20 April 2022.

²⁴ Kharkiv City Council, The first public transport stop as a bomb shelter was designed in Kharkiv, Kharkiv City Council, 19 August 2022.

²⁵ Official Portal of Kyiv, <u>Damages in the capital since the beginning of full-scale Russian invasion</u>, *Official Portal of Kyiv*, 8 April 2022.

²⁶ Official Portal of Kyiv, Since 24 February almost 100,000 IDPs are registered in Kyiv, Official Portal of Kyiv, 18 July 2022.



Dnipro

The region of Dnipropetrovsk is surrounded by fighting from three sides, and the city of Dnipro's critical infrastructure was targeted by massive missile attacks. The city, a technological and industrial centre, became a logistical hub for humanitarian aid and is accepting refugees from the eastern parts of the country; thus, it has become a target for Russian bombings.²⁷ Despite this, it is unlikely that Russia plans to control the city right now, but as a major humanitarian and military point, it will likely continue to be a target of missile attacks from the sky.

Kryvyi Rih

Kryvyi Rih, in the region of Dnipropetrovsk (Ukrainian President Volodymyr Zelenskyi's native city) has suffered from shelling, particularly the prohibited cluster munitions. Like Dnipro, it has become a point for accepting refugees from southern and eastern Ukraine fleeing from war²⁸ and sending them further to the west and humanitarian aid points. In all these cities – Kharkiv, Dnipro and Kryvyi Rih – Russian troops have targeted objects of critical infrastructure.

Lviv and Khmelnytskyi

Cities in western Ukraine like Lviv and Khmelnytskyi are not as drastically destroyed as those in the east. However, Russia has still shelled them, damaging critical infrastructure, like oil depots, and military objects. Targeting such objects unavoidably leads to air pollution. The major challenge that the cities in western Ukraine are currently experiencing is the need to accommodate the influx of displaced people. These cities need sufficient infrastructure and public services to shelter the displaced population and provide them with public services. Moreover, these regions have become popular destinations for business relocations.²⁹ Both have slowly resumed development initiatives, addressing the needs of the internally displaced population as an issue of the utmost importance. For example, as part of the Green Cities programme, the city of Khmelnytskyi has resumed its GCAP development.³⁰ The updated plan will address the needs of internally displaced people.

²⁷ Becky Salivan, <u>With front lines on 3 sides</u>, <u>Ukraine's Dnipro sharpens its focus on the war</u>, *NPR*, 29 March 2022.

²⁸ 1kr.ua, <u>Over 100,000 of refugees went through Kryvyi Rih</u>, *1kr.ua*, 5 April 2022.

²⁹ Ministry of Economy of Ukraine, <u>Program of Business Relocation</u>, accessed on 5 September 2022.

³⁰ Vanora Bennett, <u>Despite war</u>, <u>EBRD Green Cities resumes work in Ukraine's Khmelnytskyi</u>, <u>European Bank for Reconstruction and Development</u>, 4 July 2022.



Looking forward

The situation and needs in cities vary, as cities in the east and south suffer from massive destruction whereas cities in western and central Ukraine have seen an influx of displaced people. In order to react to this diversity, in July, Ukraine's parliament (the Verkhovna Rada) updated the law 'On principles of state regional policy'³¹ to assist with properly allocating support to different areas of the country based on their needs. The law divides Ukrainian regions into four functional types according to the level of damage and development needs.³²

A special commission made up of Ukrainian members of parliament will assign regions functional types. This will define the level of support the state will provide. The new law also sets the whole framework for regional development of Ukraine, establishing three-level strategic planning: a country-level regional development strategy, regional strategies, and community or city level development strategies. In order to be eligible for state support, the territories will have to adopt development strategies (except for regions that will need to be rebuilt first before developing their strategies). This functional approach will hopefully help address the reconstruction and development issues of specific regions and communities.

How to support the green post-war reconstruction of Ukrainian cities

It is very important to ensure that international funders and donors use their leverage to rebuild and modernise cities in Ukraine in a way that ensures their sustainability and liveability, including the voices of residents in the process.

Support for the post-war reconstruction of Ukrainian cities should accelerate the green transition, taking into consideration both short-term needs and long-term strategic approaches to sustainable reconstruction. Among the short-term needs for the cities are post-conflict waste management, particularly managing debris; restoration of critical destroyed infrastructure; and financial support to local authorities to ensure the provision of public services. The long-term needs, however, will largely coincide with those identified in the priorities of cities' strategic plans before the war, similar to the green cities action plans – air quality, clean urban transport, energy efficiency, etc.

1. The regions of recovery where the military actions took place and that were occupied (around 20 per cent of Ukraine's territory).

³¹ Verkhovna Rada of Ukraine, The draft law "On principles of State regional policy", Verkhovna Rada of Ukraine, 9 July 2022.

³² The regions will be divided into the following functional types according to the law:

^{2.} The regions of economic growth are those that have better geographic, socioeconomic, and demographic indicators that also impact the development of nearby regions.

^{3.} Territories with special conditions for development are those that have low level of development connected with geographical, natural, or security factors.

^{4.} Territories of sustainable development are those that have potential for sustainable growth.

In addition to preparing national measures to support its reconstruction, Ukraine has also sought international support. In July, the National Council of Reconstruction, co-chaired by Ukraine's head of the Office of the President and its prime minister,³³ presented proposals for reconstruction to Ukraine's international partners and donors, as well as for Ukrainian society, in Lugano, Switzerland at the Ukraine Recovery Conference.³³

At this event, Ukraine's prime minister Denys Shmyhal presented a system where particular countries take on the reconstruction of specific cities and regions. For example, Denmark has committed to rebuild the oblast of Mykolaiv, the UK to rebuilding the oblast of Kyiv, and Germany to rebuilding the oblast of Chernihiv. Yet it is also important to merge the international best practices that these partners will bring with the local context and solutions. This means that the reconstruction of cities should be a joint and participatory process where the voices of local communities are heard and their efforts are included in the planning and implementation. Therefore, Ukraine's international partners who have committed to rebuilding particular regions should make sure that local communities are a part of this process.

International partners should also insist that the Ukrainian government together with business, civil society and local authorities come up with a joint vision of the country they want to build and which principles should guide this reconstruction. It is important not to attempt to build a new Switzerland in Odesa or new Italy in Rivne, but to make sure that reconstruction is done according to a holistic picture rather than fragmented visions for each city. Therefore, it is important to ensure that these overarching principles are set in the national reconstruction plan.



Kyiv, Ukraine – 26 June 2022: missile attack on Kyiv. Photo by uwstas via depositphotos

³³ Ukraine Recovery Conference, <u>Recovery Plan</u>, *Ukraine Recovery Conference*, accessed on 11 August 2022.



Among those principles **should be green and sustainable solutions for reconstruction**. In May, over 50 Ukrainian environmental organisations developed joint principles³⁴ for green reconstruction.

However, on green development, the plans presented in Lugano provided more questions than answers. Although the reconstruction plan had a whole section on environmental recovery, the environmental principles do not seem to be mainstreamed into other sections of the plan like economic recovery and infrastructure recovery. Therefore, it is not clear, for example, whether environmental impact assessments will be required during particular industrial projects' appraisal. Or, on the other hand, whether Ukraine will choose economic development at the expense of the environment.

Funders must ensure that green and sustainable reconstruction is prioritised because of both environmental and economic gains. Berlin Economics together with Ecoaction and Bankwatch prepared a list of the economic reasons for sustainable reconstruction, arguing that while moving to green solutions will require higher investment costs, such as in renewable energy infrastructure and electromobility, it will raise efficiency in the long-term. ³⁵ For example, Ukraine's funders could make it a precondition that a considerable part of its reconstruction funding is spent on projects that have climate change and environmental components, in line with the European Green Deal and Paris Agreement.

Another crucial issue is the **engagement of civil society and local communities in the reconstruction**. A number of civil society organisations signed an open letter³⁶ to the head of the European Commission Ursula von der Leyen calling for a transparent and participatory process for the reconstruction of Ukraine. Effective civil society participation will minimise corruption risks and help develop cities for people, by people.

For the international partners willing to contribute to Ukraine's reconstruction, it is crucial to set cooperation directly with the communities in need of reconstruction. Given the decentralisation reforms the cities underwent prior to the war, local communities have all the necessary tools for cooperation with foreign cities and countries or international businesses. For example, the Association of Ukrainian Cities together with the Council of Europe and their German and French counterparts established a platform Cities4Cities³⁷ that connects Ukrainian cities and communities with the cities in the EU willing to support reconstruction. Another good initiative is Eurocities,³⁸ a network of European cities, representatives of which travelled to Kyiv and

³⁴ Ecoaction, <u>Green reconstruction of Ukraine: position of civil society</u>, *Ecoaction*, accessed on 11 August 2022.

³⁵ David Saha et al., <u>Economic reasons for a green reconstruction programme for Ukraine</u>, *Vox Ukraine*, 8 June 2022.

³⁶ Vladlena Martsynkevych, NGOs call on the European Commission to ensure transparency and public participation in Ukraine's green reconstruction, CEE Bankwatch Network, 10 June 2022.

³⁷ Cities4Cities, Congress of Local and Regional Authorities of the Council of Europe, Cities4Cities, accessed on 11 August 2022.

³⁸ Eurocities, On Ukraine visit, mayors pledge sustainable rebuilding, Eurocities, 20 August 2022.



signed a political agreement on supporting the reconstruction of Ukrainian cities and setting principles for such a reconstruction.

Ukraine's cities and their international partners should ensure to:

- Base reconstruction plans on a strategic vision for how cities should look in 5 to 15 years;
- Ensure this strategic vision embraces the principles of sustainability and environmental protection, especially given the need for fast solutions that may not be sustainable;
- Put the needs of people in the centre of planning and reconstructing cities;
- Arrange the reconstruction planning in a participatory way and involve city residents.

Looking at initiatives like the GCAPs, we can see that urban transport, waste management systems and energy efficiency are sectors that were prioritised for cities' development before the war. ³⁹ Since the war has exacerbated many of these issues, it is critical to address them in the reconstruction and modernisation of Ukrainian cities. Below we provide more context on the situation in these sectors and recommendations for how they can ensure Ukraine's successful green reconstruction.

Urban planning

As much as the destruction of cities is a great tragedy, it is also an opportunity to build Ukrainian cities according to modern principles that prioritise human comfort and liveability. It is time to say good-bye to Soviet-era modernist architecture that looks beautiful from an airplane but is unfriendly to people (it lacks



Soviet-style residential blocks in Mariupol, now destroyed. Photo by darvik.photography@gmail.com via depositphotos

³⁹ Kyiv city official portal, <u>Draft of Kyiv Green City Action Plan was presented for the public</u>, 19 November 2022.

green and public spaces and is only good for cars and large transport). Sustainable reconstruction in the urban planning sector should put people in the centre of planning. Public participation and the voices of local residents will be crucial to the rebuilding efforts. Thus, reconstruction should combine the highest environmental principles, international technical expertise and residents' voices. In addition, urban planning should include increased measures for providing security. For example, residential and other types of buildings should be designed and built to provide shelter for civilians in the case of various types of emergencies. Kharkiv's introduction of the first public transport stop designed as a bomb shelter is one such example.⁴⁰

Decentralised clean energy sources and energy efficiency

In March 2022, in the middle of war, Ukraine joined the EU's energy system. This opened opportunities for the diversification of energy resources, increased quality for consumers, and provided new opportunities for the renewable energy market. As the nuclear power plants were occupied by the Russian army and nuclear remains the primary energy source in Ukraine, it is important to reconsider nuclear energy and its safety, as well as possible nuclear emergency situations in the future.

On the other hand, using the opportunity of Ukraine's EU energy system membership, it is important to continue to support renewable energy sources produced locally. Ukraine should be encouraged to apply energy decentralisation and diversification as a matter of security and independence from Russia. The state should promote more efficient energy consumption for households as well as measures for raising energy efficiency to replace fossil fuels.

Energy efficiency in the housing sector, especially in reconstructed buildings, should be a top priority. Using the available mechanisms of Ukraine's energy efficiency fund, energy efficiency needs to be fostered by simplifying the procedures for the population.

Transport and infrastructure

The costs of road infrastructure damage already exceeds USD 33.4 billion⁴¹ (compared to 25 billion reported in April). Reconstruction of urban transport should modernise infrastructure and roads, modernise the transport fleet and implement digital solutions. Wherever roads are rebuilt after the invasion, they need to be built for people, not just for vehicles, prioritising sustainable and emissions-free public transport. Reconstructed road infrastructure must ensure pedestrian mobility and safety and more pedestrian areas that will increase cities liveability and comfort. The new roads, including those connecting cities and towns, should have lanes for

⁴⁰ Kharkiv City Council, The first public transport stop as a bomb shelter was designed in Kharkiv, Kharkiv City Council, 19 August 2022.

⁴¹ Kyiv School of Economics, <u>Russia will pay</u>, *Kyiv School of Economics*, accessed on 11 August 2022.



bicycles and scooters as well as infrastructure for public transport. The new infrastructure needs to accommodate the needs of electric urban transport such as trams, e-buses and trolleybuses, including the introduction of electric suburban and regional trains. The promotion of electric transport should be accompanied by establishing charging stations for electric vehicles, scooters, and bikes. Finally, like in other sectors, it is crucial to implement digital solutions in urban transport, such as single ticket, interactive schedules that will encourage residents to use public transport by simplifying processes and providing information.

Waste management

On 20 June, Ukraine's parliament approved⁴² a law on waste management that has been under development for several years. The law defines the system of managing waste, including collection, transportation, recovery, and disposal. The law extends the responsibility of the producers for managing waste and introduces the requirement of 'polluter pays'. Proper implementation of this law is crucial for Ukraine, especially now when the cleaning of waste is an urgent necessity for liberated cities and people are relocating and concentrating in safer areas of the country, such as western Ukraine.

Conclusion

As many of Ukraine's donors and funders have already supported Ukrainian cities in building a greener future, they should continue to support cities' sustainable reconstruction. This reconstruction, while providing a fast response, should also be based on a strategic vision for building cities that are green, liveable and people-friendly. Many cities that will be built from scratch have a unique opportunity to be built on the highest standards of sustainability and become the most comfortable and safest places to be.





This publication has been financed by the Swedish International Development Cooperation Agency (Sida) and the European Climate Foundation. Responsibility for the content rests entirely with the creators. Sida and the European Climate Foundation do not necessarily share the expressed views and interpretations.

⁴² European Business Association, Parliament adopted the Law on Waste Management, European Business Association, 24 June 2022.