

metropolis ●

# How do children imagine the future of their metropolises?

Inspiring ideas for policy-makers



# Research and writing

Stephanie Watt and Margaret Fraser

Cover drawing:  
Ciro Mancini, 5-8 years.  
Buenos Aires, Argentina.



**METALUDE**  
Sphère publique + enfance

## Editing

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During the depths of the COVID-19 pandemic, when disease and the associated lockdowns and disruptions transformed everyday life in unprecedented manners, unexpected things happened. Mountains, long hidden by thick smog, came back to view in large metropolises. Nature, in particular animals, roamed freely in places where they had not ventured for decades, if not centuries. Neighbors, who hitherto had hardly crossed a word, formed solidarity and reciprocal help networks. Homes turned into offices, classrooms, spaces of production, gyms. Gardens and parks were priceless oases, every bit of green an invaluable asset, every minute spent outdoors a gift. Some workers, whose essential jobs had been invisible or taken for granted, became the new heroes. In trying times for our cities, the possibility of new, better urban life emerged and shone through the fog of anxiety.

In those difficult weeks and months, children lost some of their most basic rights: the right to schooling, to play, to interact with peers, to exercise. Children, however, did not just sit and wait; they also observed, learned, and dreamt of different metropolises. We all imagined new possibilities for our cities, but children, their minds fresher, their eyes wide open, their imagination fertile, with time in their hand, could, and did, dream bigger.

In 2021 Metropolis, the global network of major cities and metropolitan areas, launched a global call for children to draw the city of the future, to imagine a different future for metropolises. The success was overwhelming, with hundreds of drawings from dozens of cities from around the world answering the call. Put together, all these drawings channel a torrent of imagination, and are a treasure trove for fresh ideas to rethink our metropolitan spaces.

This report is only a first attempt to dig into this wealth of ideas and narratives, and extract from them useful ideas for rethinking the future of our cities. In the document you have in your hands, policymakers will find some recommendations based on the analysis of all the drawings we received, recommendations for the future made from one of the toughest times cities around the world have ever faced.

When you read this report and, more importantly, when you look at the drawings, you will agree with me that the city planners of the future are already here. City Planning in the 21st Century can no longer be considered an activity limited to professional planners and policy-makers: the participation of all dwellers with their knowledge, their experiences, their preferences and their ideas has become an indispensable part of contemporary city planning. All city inhabitants are called to make their contributions, and children are no exception. We just need to find the appropriate ways for them to convey these ideas onto the table of those in charge of drafting new urban visions.

**Jordi Vaquer**  
Metropolis  
Secretary General

**“Each and every one of us always breathe the same, share the same future, and stay truly connected with the people. Love transcends the infliction caused by the virus. The outbreak of this epidemic requires us to seriously reflect on our behaviour. I will self-start to protect animals.”**

Yuchen Li, 11 years old Xian, China

For many of the children who contributed to the drawing contest, a better future for the city was closely tied to the end of the Covid-19 pandemic. However, these drawings go beyond the end of the virus to give insight into which elements of the metropolis are essential to children’s everyday lives and how children can be full participants in the metropolis.

Related recommendations:

- 6.1.1 Children are today’s urban actors, not just tomorrow’s adults.
- 6.1.2 Child-friendly public spaces and parks are for the whole community.
- 6.1.3 Architecture and culture are strong markers of identity and belonging.

Children also shared insights into ways in which the built environment and municipal planning more broadly could facilitate mobility and access to their basic needs, while also promoting sustainable, resilient and innovative processes moving forward.

- 6.2.1 Innovate for resilience.
- 6.2.2 Neighbourhoods connect and protect.

Another important theme was social dynamics, particularly promoting diversity and declaring a right to peace. Drawings about gender confirmed the importance of gender-mainstreaming parks and public services. In addition, there was a strong call to consider the needs of the natural world and promote positive reciprocal relationships between humans and nature.

- Related recommendations
- 6.5.1 The metropolis is for everyone.
- 6.6.1 Human well-being depends on the natural world.
- 6.7.1 Gender mainstreaming applies to children.

Connection and nature-based solutions are central to the vision of the future metropolis shared through the drawing contest. Across regions, there was a recurring theme of the metropolis as interconnected with other metropolises and the world beyond its limits. With an understanding that local actions can have a wider, even global, impact, agency was shown to be limited by mobility and collaboration, not administrative boundaries. A particular area of concern with regards to collective action was climate emergency.

- Related recommendations
- 6.6.2 Metropolises are interconnected.
- 6.8.1 The acceleration of the climate emergency is foreseeable.

Most children remained optimistic with regards to the future of the metropolis. Not only did they show a willingness to imagine new, at times fantastical, paths to aligning emerging needs and values, but they also showed a willingness to take action. If harnessed, the children’s creativity and commitment will contribute greatly to creating a better future for the metropolis.

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## Introduction

# From drawing contest to policy recommendations

The Covid-19 pandemic has shown the importance of expanding on existing participatory tools and these tools' value in imagining the future of metropolises. In this context, Metropolis, with the support of UCLG, launched in 2021 a drawing contest for children aged 5-14 years: Metropolis Through Children's Eyes.

Nearly 1,200 children from metropolises across five continents answered the question "how do you imagine a better future for your city?" in a drawing. The objective was to bring the children's voices into the metropolitan policy debate in the form of policy recommendations.

The first step in lifting children's voices was the selection of winners and finalists for each of the three age categories (5-8, 9-11, 12-14) so that their drawings and their contributions to metropolitan policy could be distributed widely. The selection was made by a jury of urban planners, primary teachers and healthy-city experts.

### Jury members:

**Astrid Ruiz.**  
Director and co-founder of the primary school Congres Indians in Barcelona. A school recognized for its holistic innovation.

**Jordi Pascual.**  
Coordinator of the culture committee, of the United Cities and Local Governments (UCLG).

**Jens Aerts.**  
Senior urban planner and co-creator/lead of the ISOCARP Community of Practice on Urban Health.

**Nicholas You.**  
Executive Director of the Guangzhou Institute for Urban Innovation.

**Lorena Zarate.**  
Founder & Member of Support Team, Global Platform for the Right to the City (2014-present).

# Huang Luoyao

**Gender:** Girl  
**Metropolis:** Fuzhou  
**Country:** China  
**Region:** Asia and the Pacific

[Read more](#)

Winner  
category  
5-8 years



At the centre of the drawing is the child herself, witnessing ancient and modern eras in her glasses. Behind her is the post-pandemic future metropolis and its happy people, efficient transportation, joyful architecture and renewable energies.

This drawing is about resilience generally, and the built environment, Covid-19, culture, renewable energy and technology more specifically.

# Emily Mikaela Obando Nieto

**Gender:** Girl  
**Metropolis:** Quito  
**Country:** Ecuador  
**Region:** Latin America & the Caribbean

[Read more](#)

Winner  
category  
9-11 years



She describes her future metropolis as one that has learned from the Covid-19 pandemic; its inhabitants are environmental stewards who take care of their health and spend quality time with friends and family. The drawing also depicts active mobility, street trees, clean streets and

density, themes that the children care deeply about. This drawing is about resilience generally, and pets, active mobility, the built environment, caring, Covid-19 and pollution more specifically.

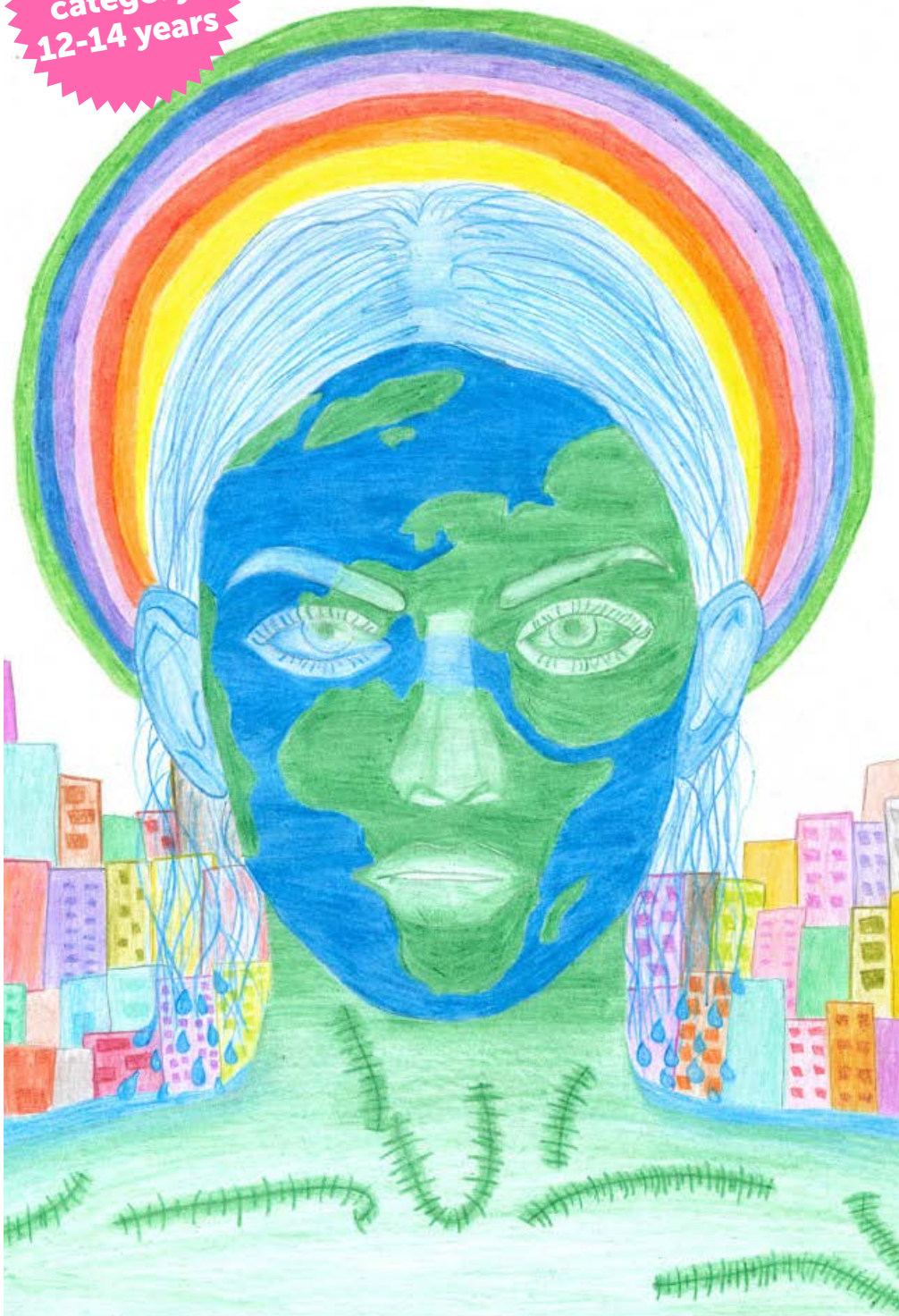


# Hayle Stigling

**Gender:** Girl  
**Metropolis:** Johannesburg  
**Country:** South Africa  
**Region:** Africa

[Read more](#)

Winner  
category  
12-14 years



Hayle imagines a metropolis and country that has healed from its historical wounds, just as the earth will heal from its ecological ones. The cityscape in the background is colourful and dense, hinting at the importance of architecture but also perhaps symbolising the “rainbow nation.” This drawing is about resilience generally and culture, quality of life and natural regeneration more specifically.



**Methodology**

# **Pathways of dialogue**

The 1,190 drawings, using an iterative method, were tagged and organised to capture the depth and diversity of the children’s drawings for an audience of metropolitan policy-makers and decision-makers. The objective was to accurately identify the children’s contributions while remaining as concrete and actionable as possible for adults.

## “Accurately identify the children’s contributions while remaining as concrete and actionable as possible for adults”

To do so, a list of adult terms and concerns was gleaned from key Metropolis documents, such as the 2021-2023 Strategic Action Plan and gender glossary. Then the nearly 1,200 drawings were browsed to create another list, this time of child-centric areas of interest. Finally, these distinct lists were analysed side-by-side to create **40 tags that represent shared perspectives** between adults and children.

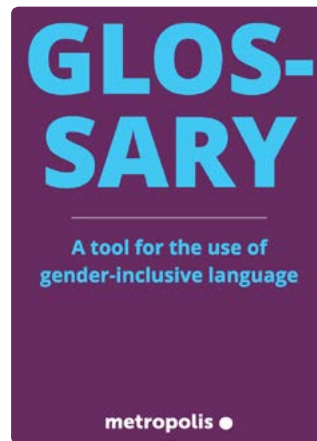
For example, adults discussed caring activities, domestic work, food, shelter and unpaid labour. Meanwhile, children primarily talked about their relationships with caregivers and did not describe adult caring activities as work. These two perspectives were combined to create a tag called caring.

It is important to note that the drawings were submitted between June and October 2021, a time when the social impact of the pandemic varied between countries. Regardless of the restrictions in place, the pandemic had a necessary influence on what the children expressed in their drawings.

**Parmida Shirzad.**  
12-14 years.  
Shiraz, Iran.



2021-2023  
Strategic Action  
Plan



Gender  
glossary



# Demographic overview

Chart 3.1

## Participants by region

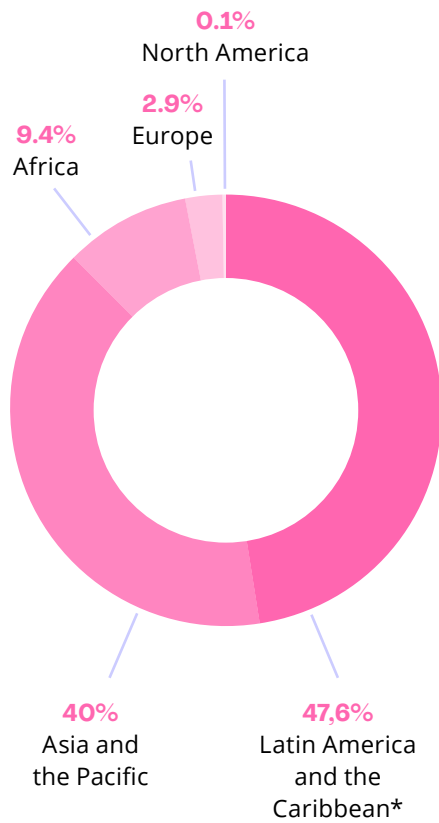


Chart 3.2

## Participants by age

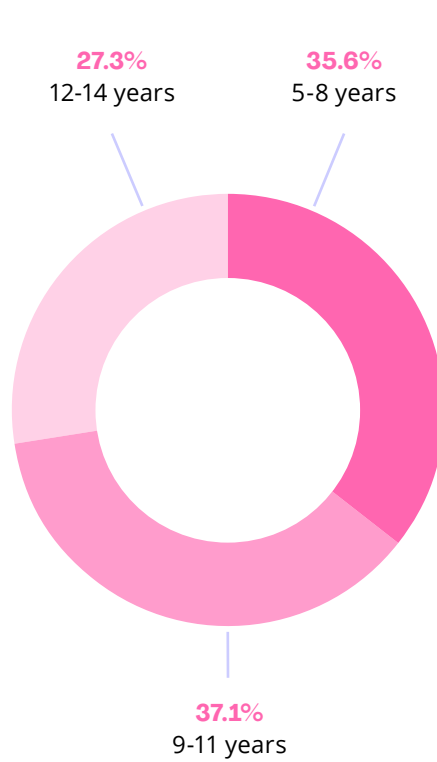
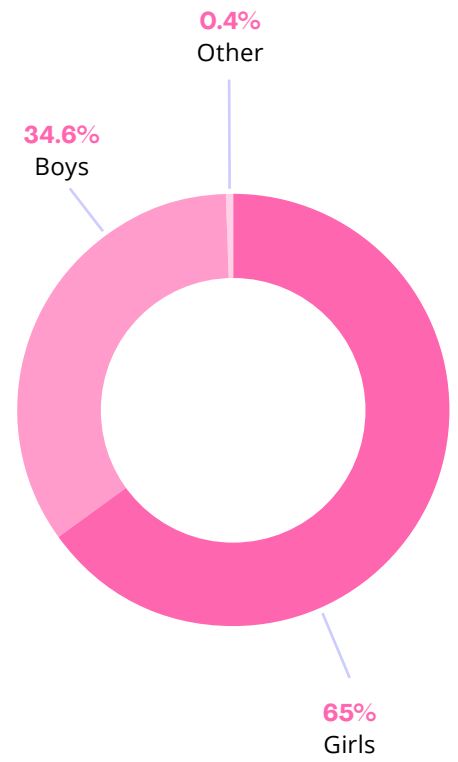


Chart 3.3

## Participants by gender



\*It is statistically significant that 96% of these drawings are from Quito, Ecuador.



**Ciro Mancini.**  
5-8 years.  
Buenos Aires,  
Argentina.

# Trends by cluster

The tags are organised into thematic groups, called clusters. The clusters help to identify the links that children are making between different elements of metropolitan futures and are bridges between the children's themes and policy-makers' and adults' language.

The drawings were categorised into 9 clusters, covering 40 tags. These tags were created to provide greater specificity where the children offered it. The number of tags per cluster is therefore related to the number of specific topics connected to the cluster theme and not necessarily an indicator of the cluster's importance.

Cluster	Definition	Tags associated
 <b>The metropolis as experienced by children</b>	This cluster is about how the children experience metropolitan and urban spaces in their daily lives on a human scale.	<ul style="list-style-type: none"> <li>caring</li> <li>children</li> <li>culture and heritage</li> <li>parks and green spaces</li> <li>play</li> <li>quality of life</li> <li>school</li> <li>inclusive</li> </ul>
 <b>City planning and operations</b>	This cluster is about how the children imagine land use in urban spaces and how they imagine metropolises to operate public services.	<ul style="list-style-type: none"> <li>city maintenance</li> <li>cityscapes</li> <li>housing</li> <li>recycling</li> <li>smart city</li> <li>co-created city</li> <li>gender-sensitive city</li> </ul>
 <b>Nature</b>	This cluster is about the children's deep appreciation for nature and its connection to metropolitan spaces.	<ul style="list-style-type: none"> <li>animals</li> <li>bodies of water</li> <li>naturalisation</li> <li>urban agriculture</li> </ul>
 <b>Mobility</b>	This cluster is about the solutions that the children imagine for the future, based on mobility trends and challenges in their own metropolis.	<ul style="list-style-type: none"> <li>active mobility</li> <li>aircrafts</li> <li>motor vehicles</li> <li>public transportation</li> <li>safety</li> </ul>
 <b>Social dynamics</b>	This cluster is about the societal and social dynamics that form the backdrop of urban lives.	<ul style="list-style-type: none"> <li>Covid-19</li> <li>equality</li> <li>health</li> <li>migration</li> <li>peace</li> <li>safety inclusion</li> <li>violence</li> <li>gender violence</li> <li>gender equality</li> </ul>
 <b>Worldviews</b>	This cluster is the framework that children see as the basis of future metropolitan spaces.	<ul style="list-style-type: none"> <li>imaginary cities</li> <li>interconnected worlds</li> <li>nature-based solutions</li> <li>inclusive cities</li> <li>co-responsible relationships</li> </ul>
 <b>Gender</b>	This cluster is about how the children imagine gender equity in metropolitan spaces.	<ul style="list-style-type: none"> <li>gender equity</li> <li>girls</li> <li>women</li> <li>empowerment</li> <li>participation</li> <li>parity</li> </ul>
 <b>Climate emergency</b>	This cluster is about how the children imagine the negative impacts of the climate emergency on urban lives and futures.	<ul style="list-style-type: none"> <li>air pollution</li> <li>natural disasters</li> <li>renewable</li> <li>energy</li> <li>water pollution</li> </ul>
 <b>Economy</b>	This cluster is about the economic processes that the children see as integral to metropolitan life and that, through their impact on caregivers and caregiving, influence children's general well-being.	<ul style="list-style-type: none"> <li>consumption</li> <li>employment</li> <li>caring economy</li> <li>informal employment</li> </ul>

For an overview of how the clusters ranked among the children, by region and age, please see Appendix A. The following analysis of the 9 clusters is organised by rank, from most to least drawn cluster.



## 4.1 The metropolis as experienced by children

This cluster foregrounds the daily needs of children, often against a backdrop of urban landscapes and skylines. Nearly 3 in 4 of the children (71,3%) drew about this cluster. Girls and children of other genders drew about this cluster slightly more than boys did (see Appendix A).

Children imagine themselves as “city changers,” and as having agency and a right to the city. This is not to say that children didn’t draw vulnerability. They did. Vulnerability – and sacrifice – came up often in regards to Covid-19.

In nearly 20% of the drawings, children are seen playing outside, in clean, rubbish-free spaces, alone, with other children or with adults. The younger the child, the more likely they were to draw about play. Play, described by one child as the right to play, is not depicted as exceptional; it is simply a matter of everyday life.

The playground with its swings and slides, especially for the children aged 5-8 years, was an important site of play. But play also spilled out into parks, onto sports pitches, onto sidewalks and into the city, especially among the children aged 9-11 and 12-14 years. This pattern coincides with the (independent) mobility patterns of children and at what age they can play far from home. However, it may also reflect where they feel welcome at different stages of childhood, not necessarily where they most want to play. This avenue for reflection invites municipalities to consider how older children and teenagers’ needs for more risky play (for example, higher swings, more difficult equipment), for socialisation spaces and for privacy might be overlooked in traditional playground design.

Outdoor social play was narrated as a post-pandemic priority, as something the children yearned to return to. In fact, video, digital and on-screen games were all but absent from the drawings. Sports and organised games, in particular football, and adults’ play were sporadic, though present. The rare ferris wheel and playful architecture were nods to play on a grander scale: play as destination and play as urban aesthetics.

Cultural and historic destinations (such as landmarks and historical centres), architecture, and food traditions and specialties (see Asia and the Pacific section of this document for more on this) made up most of the drawings tagged as culture and heritage. 25% of the children, of which 70% were girls, drew this theme.

Though narrations of architecture were rare, drawings of architecture spoke to its importance as a marker of shared aesthetics and even happiness. Building forms and colours, but also architectural representations of animals and food, made up these drawings.



Mieke Wandrag. 12-14 years. Johannesburg, South Africa.



Yucheng Gao. 5-8 years. Xi'an, China.



Keily Anchaluisa Valverde. 9-11 years. Quito, Ecuador.



Jael Moreta. 5-8 years. Quito, Ecuador.



Cultural and historical landmarks acted as symbols of local or metropolitan identity, at times drawn in the background, waiting to be recognised though not narrated as significant. In other drawings, these destinations were foregrounded through descriptions of leisure time with family and of mobility beyond the everyday.

Care work – the “work of looking after the physical, psychological, emotional and developmental needs of one or more other people” – was drawn by children as a rich array of intergenerational relationships with caregivers. Though only 6% of the children drew about caring, it is important to note that 79% of these children are girls. Indoor, home-based scenes of caring feature pets, domestic chores such as cleaning, and rituals such as eating food together. This sometimes intersects with technology and robots, hinting perhaps at children’s desire to see their parents work less and spend more time with their family.

Beyond representations in the home, caring was also present in public outdoor spaces. For example, children often depicted families gathering and picnicking in public parks. This indicates that the strict private/public binary is actually blurred in the daily life of children. We can gather two ideas from this. One, that children gain agency through relationships with caregivers, namely the agency to physically explore their metropolis. Two, the ability for children to participate in the metropolis is directly connected to the capacity of public spaces to support caregiving.

Parks and green spaces, the most popular tag of this cluster (1 in 3 children), were the stage for intergenerational gatherings and socialisation, play, sport and everyday nature (from domestic animals to birds and butterflies, from plant life to tree life).

Maintaining public spaces came up often, suggesting that children’s sense of belonging, even safety, is tied into how adults maintain or not urban space, including parks and green spaces. Rarer were drawings of toilets and drinking fountains, though they were present.

The school appeared as a key site of childhood, even if drawn by only 6% of the children. School, along with outdoor play, were symbols of a “normal” post-pandemic life. Absent from the drawings were teachers and the other adults who work in schools. What mattered most was re-connecting with other children and resuming an in-person social life.

Returning to school and to “normal” life points, in a way, to the idea of quality of life, which wasn’t always easy to see or tag. But nearly 20% of the drawings were about quality of life in one way or another, especially happiness at an individual and a collective level. Smiling suns and clouds hint at happiness as an atmosphere, while architecture or the general disposition of inhabitants, especially their empathy, were also linked to collective happiness.



**Melisa Demir.** 9-11 years. Gaziantep, Turkey.



**Jana Shaat Alagha.**  
9-11 years. Barcelona  
Metropolitan Area,  
Spain.



**Chenxi Zhang.** 5-8 years. Changsha, China.



**Wang Yang Jingyue.** 5-8 years. Changsha, China.

Holidays and time off from school and work expressed rest, health and quality of life. Money as a metric for quality of life didn't emerge. Some drawings discussed housing and food for all as the basis of a good future, but equality and solidarity seemed more important than prosperity itself.

Recommendations for *the metropolis as experienced by children* can be found in section 6.1.

## 4.2 City planning and operations

This cluster is about how the children imagine land use in urban spaces and how they imagine metropolises to operate public services. It was drawn by 65,8% of the children, making it the second cluster in importance.

Though the language and tools of land use and planning were wholly absent from the drawings, cityscapes and urban landscapes were common. A vibrant density of people, buildings and spaces, activities and vehicles characterised these landscapes. In contrast, some drawings didn't show even one person, while others featured empty streets, as though streets, whether or not they were used or useful, were a necessary feature of metropolitan life.

Skyscrapers and downtown skylines were often drawn far in the background, and only a handful of drawings showed low-density, exclusively residential areas (that is, suburbs). The medium- to high-density, mixed-use neighbourhood was the favoured scale of everyday life, a scale centred on walking, and on home, school and parks, where children play freely and socialise easily. Nearly 7% of the children drew something related to the maintenance of these cityscapes and neighbourhoods, namely trash and recycle bins and clean streets and rubbish-free parks.

Cityscapes also coincided with naturalisation, suggesting that density should not sacrifice nature. And though this theme will be discussed in 4.3, it is worth noting here that children often wrote about density as fitting with and in nature, never instead or over nature. At the very least, children imagine streets lined with trees and flowers. That some children drew the countryside and rural life when asked to draw a metropolis suggests the desirability of proximity between urban and rural life.

Children even brought the natural world into their drawings of home and housing, namely with eco housing and treehouses, but also with rooftop and vertical green spaces. The vertical form of housing itself was posited as a way to free up land for nature, in particular wild animals. Within the same neighbourhood, four- to six-storey apartment buildings and high-density housing was mixed in with classic representations of single-family dwellings: a rectangle base and a triangular roof.



Milagros Catucumba. 5-8 years. Quito, Ecuador.



Yue Yin. 5-8 years. Changsha, China.



Sarina Shahriarpoor. 9-11 years. Shiraz, Iran.



Li Yan. 9-11 years. Fuzhou, China.

Teenagers (12-14 years) more than the younger age groups linked different elements of metropolitan life to equality and rights. In this sense, a child drew about housing for the homeless.

As discussed in the earlier section on the metropolis as experienced by children, the wide use of technologies and robots are seen supplementing urban infrastructure and supporting or enacting care work. This is a mirror to how the children see the metropolis more generally – as networks of objects and infrastructure but also as networks of people and relationships. Rarely was technology shown to disrupt social life or aggravate problems. Rather robots care for children and plants, clean homes, serve meals, deliver mail and food, clean streets, sort rubbish and control traffic. Reloadable smart cards for public transportation and eye scans make movement easier and safer. And personal devices – smart phones, air-powered shoes and personal smart vehicles, namely flying ones – make life more interesting.

A language of zombies and bunkers alludes to climate emergency and pessimism, while the development of human-robot alliances and even cyborgs suggests optimism. This tension is present in many drawings. Robots and machines perform risky and dangerous work, such as tracking and eliminating viruses or cleaning up natural and toxic disasters. Wireless solar power stations and intelligent air purifiers are nature-based solutions for a better world. It is worth noting that boys aged 9-11 years (regardless of gender) are overrepresented in this theme.

Recommendations for the city planning and operations cluster can be found in section 6.2.

## 4.3 Nature

Nature is a fundamental part of children’s lives in metropolitan spaces, as demonstrated by its representation in 50.7% of all drawings. Girls were slightly overrepresented, having contributed 67.7% of the drawings tagged nature compared to 65% of total drawings submitted.

Naturalisation is shown in 26.6% of all drawings. With plant life being inherently specific to region and climate, many children have shared a view of naturalisation as a cultural signifier. As a result, it contributes to a sense of belonging and connection, as demonstrated by the 71 drawings that share both naturalisation and culture and heritage tags.

Naturalisation is shown at two different interconnected scales. The first scale is trees and plants in residual spaces such as between buildings and along sidewalks and roads. When children depict themselves in metropolitan spaces, they are rarely amongst large towers but rather in smaller-scale naturalised spaces, such as a tree-lined street. Second, naturalisation is part of the cityscape, where



**Helen Villacis.** 12-14 years. Quito, Ecuador.



**Zhou Si Yu.**  
9-11 years.  
Hangzhou,  
China.



**Alireza Radfarnia.** 5-8 years. Karaj, Iran.



**Wu, Yu-Zuo.** 9-11 years. Kaohsiung, Taiwan.

people are often absent but flora can be seen either replacing or woven in amongst the different elements of the built-environment. In fact, of the 317 drawings tagged naturalisation, 204 are also tagged the tag cityscape, showing to what extent children want naturalisation on all scales.

Animals is another significant tag within the nature cluster with 22.1% of all drawings. They are of particular importance for girls who contributed 70% of these drawings. While the children depicted a variety of animals, including domesticated animals, wildlife as well as zoo and farm animals, the common theme among drawings of both domesticated and wild animals was their well-being as urban actors. Children are concerned with animals' access to the natural environment, the relationship between animals and humans and animal rights more broadly.

Present in 14.5% of drawings, bodies of water focus on the following themes: bodies of water as a key component of the cityscape (and as a result of local identity), their role within the biosphere, and as a signifier of cleanliness and well-being.

Urban agriculture was shown at two different scales serving two different purposes and was present in only 0.5% of all drawings. These drawings are either of large-scale food production inside the metropolis through urban farms and greenhouses or of smaller-scale community gardening where the benefits to nature and social participation are more apparent than any significant contribution to food security.

Recommendations for the nature cluster can be found in section 6.3.

## 4.4 Mobility

This cluster showcases both existing and fantastical solutions to children's mobility needs. 48% of children drew about mobility, with boys between 5 and 8 years old over-represented in this cluster.

Children see mobility as an essential factor in building more and deeper connections. They imagine new forms of transportation and travel that allow people to easily be physically present in other parts of the world or even other planets, promoting connections across the globe. In this way, in an interconnected world, the metropolis' reach is not defined geographically but rather by the limits of mobility and by feelings of social belonging.

Motor vehicles were almost always presented as sources of air pollution, while aircrafts and trains were symbols of progress, inter-urban freedom and a hopeful future. Many children drew electric cars and vehicles that run on other renewable energies, reducing emissions. Others drew aircrafts replacing more traditional motor vehicles, thereby freeing land from roads for other uses and allowing for "easy living and entertainment."



**Luo Shansheng.**  
12-14 years.  
Guangzhou,  
China.



**Ciro Mancini.**  
5-8 years.  
Buenos Aires,  
Argentina.



**Huang Qingru.** 9-11 years. Nanjing, China.



**Malefo Moses.** 9-11 years. Gauteng, South Africa.

Active mobility is an essential part of the metropolitan future. The children often drew either motor vehicles or pedestrians and cyclists, perhaps hinting at the difficult cohabitation between active mobility and motor vehicles. One drawing of a child with a bicycle explicitly asked for a traffic-calmed environment around schools, with slower speed limits and the reduced presence of cars.

Another child saw in the relationship between land use and active mobility a question of density; in a metropolis of tall buildings, bikes rule and trucks “don’t go too far.” When bicycles were drawn, they were often in streets, rarely on dedicated bike paths. Walking was the most diverse form of active mobility represented, showing streets and sidewalks open to people with mobility devices, caregivers with strollers, tourists and locals, dog walkers, friends, solo walkers, children, teens, adults, intergenerational families and robots.

Regardless of mode of transportation, streets and the absence of streets conveyed information about proximity and connectivity. Children often positioned three key sites of childhood – parks or playgrounds, schools and homes – in close proximity to each other, most often connected by a simple, narrow path or street without intersections or turns, conveying easy and safe connectivity.

Public transportation – buses, trains and metros – was also present. Trains were symbols of progress, interconnectivity and resilience. Like for motor vehicles, renewable energies were presented as a desirable solution. The children also drew railway stations as well as bus stops, shelters and benches. Interestingly, of all the mobility themes, public transportation was most drawn by girls and the most evenly drawn across the age groups.

Several aspects of mobility were largely overlooked by the children. Taxis, for one. But also parking, whether on-street, underground, stacked or in large-surface lots. In the few images depicting parking, one explicitly shows parking for persons with disabilities. Carsharing and ridesharing were wholly absent.

Recommendations for the mobility cluster can be found in section 6.4.

## 4.5 Social dynamics

The social dynamics discusses the societal conditions that form the backdrop to metropolitan life. When social dynamics is considered without Covid-19, almost three quarters of all tags in the cluster, it represents 11.3% of total drawings and overrepresent boys in the gender analysis.

The accompanying texts were essential to understanding the primary message of the drawings in this cluster as children primarily depict an environment free of negative societal conditions, the absence of which is difficult to con-



张诗唯. 5-8 years. Changsha, China.



谢佳欣. 5-8 years. Changsha, China.



Sogand Dinarvand. 9-11. Shiraz, Iran.



Arshida Naseri  
5-8 years.  
Mashhad,  
Iran.

vey in a drawing. For example, without its text description, the meaning of the drawing by Mehrnia Rahnana (9 years old from Shiraz, Iran) would be difficult to decipher: “A city without a hospital and a city jail without clouds of green trees where we can walk without a mask on its streets, and the sound of the police car and ambulance isn’t there.”

While they are very clear about the conditions they want for their metropolis, children are less concerned with the process by which they are achieved. In fact, children are not committed to any existing tool or process for achieving positive societal conditions and as such are open to exploring new paths forward. For example, elections and governance at large are completely absent from the children’s drawings.

Since the onset of the Covid-19 pandemic, the virus has become a common feature of metropolitan life, present in 27.8% of all drawings. While children lost opportunities for outdoor play, socialisation and in-person learning, some children had a greater appreciation for nature and time spent with family since the onset of the pandemic.

When looking to the future, many children drew life as they remembered it prior to Covid-19, others drew fantastical means of defeating the virus and still others drew ways in which people adapted to Covid-19. An example of adaptation is living in bubbles in outer space or even underwater to be away from the virus.

Children are certainly not unaware of the human toll of the pandemic, leading to a more pessimistic worldview and a greater concern for their own safety. Children connect the loss experienced due to the pandemic with the loss of the natural world and the climate emergency. Of the 331 drawings of Covid-19, 4.5% are also tagged nature-based solutions, 31.4% were tagged parks and green spaces, 7.85% shared tags from the climate emergency cluster and 38.7% shared tags from the nature cluster. Moving beyond the nature connection, 22.4% were also tagged for quality of life. These numbers show a significant relationship between Covid-19, children’s connection to the natural world and their well-being more broadly.

Showing equal rights for people of all genders and races, children’s desire for equality is broad reaching. They want access to spaces and services for all, including but not limited to children, people with disabilities, animals and the elderly. Mobility and care work are important filters to children’s experience of the metropolis and are at the heart of their concerns for social inclusion. For example, they present accessible mobility through parking spaces reserved for people with disabilities and accessible care work by community-supported access to food. The long-term impact of needing to transfer care work to other members of the family or community is explored in the one drawing of migration.

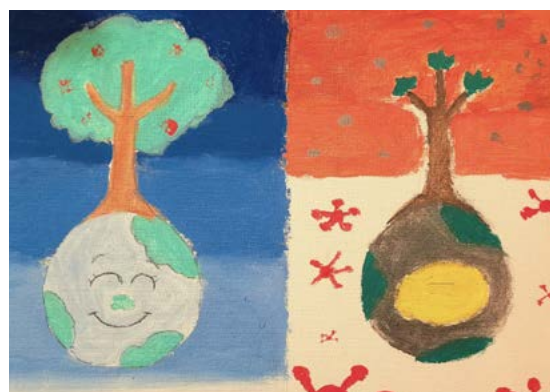
With 31 of the 70 drawings of social inclusion also being tagged for Covid-19, it was clear that equality and to a greater extent social inclusion were negatively impacted



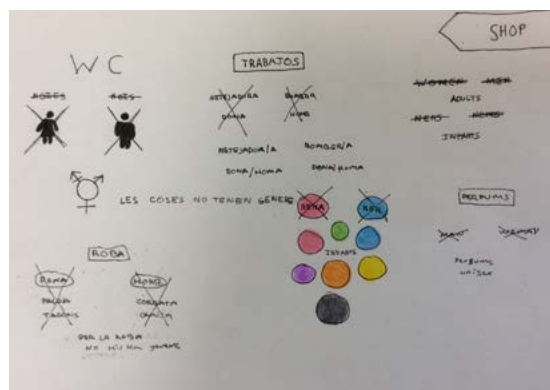
**Chang An Yu**  
12-14 years.  
Taipei,  
Taiwan.



**Tsung Huan Hsieh.** 9-11 years. Kaohsiung, Taiwan.



**Paula Márquez.** 9-11 years. Quito, Ecuador.



**Leire Sánchez Perdiguer.** 9-11 years. Barcelona Metropolitan Area, Spain.

by the pandemic. Children long to feel a part of society in a way the pandemic has prevented and to help people who continue to be negatively impacted by the pandemic. However, a number of children specifically cite the pandemic as an important opportunity to strengthen solidarity. The children show a future in which the pandemic has taught people to celebrate each other and stand together in support of each other's needs and those of the natural world.

Covid-19 was not the only health concern, although it does represent 35 of 72 health-related drawings. Air pollution and its impact on health was another serious concern. In drawings of the world as it exists today, there is a clear desire for healthcare in proximity and infrastructure supporting healthy life habits. This includes peaceful green spaces as necessary oases within the metropolis necessary for mental health. Hospitals and healthcare workers are rarely the sole focal point of a drawing, but rather a sign that the intangible quality of good health is present, among other indicators of quality of life. Notably, two girls in the 12-14 years category included access to abortion clinics in their drawings.

While many hope for cures to known diseases, children have an expectation that technology will improve health outcomes overtime, including in ways that haven't yet been imagined. There are flying mobile hospitals, robots providing healthcare and saving humans from imminent danger on earth. However, one child questioned whether the health of robots could be guaranteed long-term.

In addition to environmental and structural influences on social dynamics, children are interested in the nature of relationships between people, with animals, with the environment and even with robots. These relationships are connected to peace and harmony, showing that children see peace as an agreement between two or more distinct groups to live together in a mutually acceptable or even beneficial way. It is important to note that none of the drawings show these harmonious relationships being enforced.

The children's understanding of safety differs from peace in that it is experienced primarily on an individual level. The concern for safety is connected to concern for the actions of individuals, and not for broader societal agreements. Children's concerns for safety at an individual level can be summarised in two broad categories: crime and the impact of the built environment. While crime reduction is of great importance to children, law enforcement is rarely present. Police officers and security guards are seen either as a symbol of societal well-being or as an indicator of crime. In many drawings, safety is inextricable from the built environment, where certain structuring measures have an important impact such as facial scanners and street calming. In these ways, the built environment has a role to play in restricting or promoting certain individual behaviours for the safety of others. A successful safe public space is shown to be well-maintained, clean, inhabited and open to socialisation.



Alexis Josue Azaña Iza. 12-14 years. Quito, Ecuador.



Azelle Malherbe. 5-8 years. Johannesburg, South Africa.



Miduo Shi. 12-14 years. Fuzhou, China.



Mateo Vallverdú. 9-11 years. Barcelona, Spain.

Violence is a rare occurrence, present in only nine drawings. Acts of violence are shown as one part of the wider cityscape, existing primarily in the background of metropolitan life and may be experienced by the general population, children or animals. An additional three drawings cite a lack of violence in the text descriptions, showing instead the positive elements of peace, safety and social inclusion. In this way, violence is a signifier of an extreme breakdown in relationships either between groups as with peace or within a group as with safety and social inclusion, the former being in regard to the general population and the latter to minorities prone to exclusion.

Recommendations for the social dynamics cluster can be found in section 6.5.

## 4.6 Worldviews

Worldviews represent the frameworks from which children view metropolitan spaces and the possibilities available to them. Present in 22.4% of all drawings, they do not convey specific requests but rather convey a set of values and opportunities that allows decision-makers to compare their larger vision with that of the children. Girls are slightly overrepresented in this cluster, having contributed 66.7% of all drawings with a worldview tag compared to 65% of total drawings.

The children show a desire to move from a human-centric perspective to an ecocentric one which considers the needs of animals, plants and the biosphere as a whole. Nature-based solutions are present in 7.1% of all drawings. While these drawings overlap at times with the climate emergency cluster, the focus is on building resilience and harmony between the human and natural world so that all species may flourish.

Land use is an area where children commonly apply nature-based solutions. Aware of the impact of the built environment and habitat loss for the biosphere, many children have drawn themselves living in trees or even underwater as they share the limited space available on earth with all living things.

Children see cooperation as essential to improving their well-being and that of the world as a whole, understanding that they live in an interconnected world. The global pandemic and the climate emergency have made concrete for children the ways in which experiences and challenges are shared across political borders. They want to build positive relationships with people, allowing for collective action on shared problems.

Fantasy and science fiction are used to explore new possibilities for the future of the metropolis beyond what is possible now as made possible by technology or magic. Children often show technology as a tool to bring people closer in harmony with nature and each other. However, in some drawings the problems cease to exist because



**Ляйсан Зулкарнаева.** 5-8 years. Kazan, Russia.



**张睿恬.** 5-8 years. Changsha, China.



**李梓璇.** 5-8 years. Fuzhou, China.



**Mina Memar Behabadi**  
5-8 years.  
Mashhad,  
Iran.



technology has allowed humans to relocate, either by living in space or under the sea, thus extending the reach of human life. Still other drawings show that humans must accept and adapt to these problems to survive. In all three situations, it is clear that imaginary cities are imagined in response to real problems. They are an important window into children's hopes and fears.

Recommendations for the worldviews cluster can be found in section 6.6.

## 4.7 Gender

Girls dominated the gender cluster, contributing 93.1% of its drawings. Older children were less likely to contribute drawings about gender but more critical when they did. When analysed by age, 41% came from the 5-8 years category, 34.1% from 9-11 years category and 24.9% from 12-14 years.

For the children in the two younger age groups, the dominant theme was girls enjoying public spaces such as parks and green spaces or tourist districts. In this way, the well-being of girls depends upon their access to safe spaces for socialisation.

Few drawings explicitly addressed gender equity, but those that did were primarily from children aged 12-14 years. The focus of gender equity was on accessing rights and services specific to women such as access to free abortions or freedom from street harassment and other safety concerns of particular importance to girls and women.

There are almost no depictions of women in roles of leadership or authority. Women are primarily represented in a caregiving role.

Recommendations for the gender cluster can be found in section 6.7.

## 4.8 Climate Emergency

The climate emergency is a clear cause for concern amongst children. Although present in only 9.4% of drawings, addressing the climate emergency is a defining feature of a better metropolis for many children.

A deep concern for pollution is shared equally across the five global regions and is inextricably connected to health, nature-based solutions and well-being more broadly. The primary sources of air pollution described by children are motor vehicles and factories. Children are similarly concerned about water pollution. However, water pollution is shown as primarily impacting animals and their habitats.



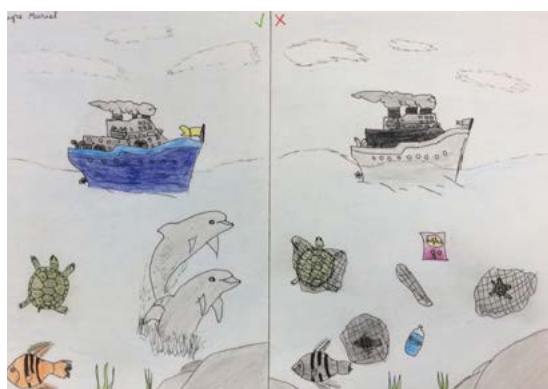
**Ke Weilin.** 5-8 years. Fuzhou, China.



**Atrin Afshari Tavana.** 5-8 years. Tehran, Iran.



**Valentina Anahí Collaguazo Ichau.** 9-11 years. Quito, Ecuador.



**Leyre Muriel Belio.** 9-11 years. Barcelona Metropolitan Area, Spain.

Ultimately, many children hope that technology will be able to reduce and eventually eliminate pollution.

Natural disasters such as fires, floods, rising sea levels and drought are present in the children's drawings. At times, the natural disasters are directly connected to negative human activities such as deforestation and pollution. While some drawings attempt to use technology to mitigate the impacts of natural disasters, a more common theme is disregard and in-action in the face of their growing impact. Children draw people who do not see the reality of the climate emergency even in the face of more frequent natural disasters.

For the children, renewable energy is just one of many elements necessary for the metropolis to achieve harmony with nature. It is not seen as a solution to the climate emergency unto itself. Wind and solar energy are most common, the latter of which is often shown on a small scale powering individual buildings.

Recommendations for the climate emergency cluster can be found in section 6.8.



**Elifşah Nisan Kumaş.** 9-11 years. Gaziantep, Turkey.



**Camila Rafaela Calispa Chicaiza.** 5-8 years. Quito, Ecuador.

## 4.9 Economy

Children primarily experience the economy through consumption and employment, both of which are filtered through their caregivers. While economy is the least common cluster, it is notable that 52.1% of drawings in this cluster came from children aged 9-11 years, who contributed only 37.1% of total drawings.

Consumption is a means for children to assert agency and participate in the metropolis. Food is a common theme as it takes transactional experiences one step further, both confirming children's right to enjoy non-productive time in public spaces and connecting them to elements of local culture.

When it comes to employment, children want their parents to have enough money and resources to care for them and enough time and space to play with them. They do not depict prestige or status related to employment and do not seem to aspire to work themselves. They instead want their basic needs met such that they can enjoy leisure activities.

Recommendations for the economy cluster can be found in section 6.9.



**Emily Viteri Fiallos.** 9-11 years. Quito, Ecuador.



# Regional analysis

# 5.1 Latin America and the Caribbean



## The most relevant clusters for the region

- The metropolis as experienced by children
- City planning and operations
- Social dynamics

## Recommendations of interest for the region

- 6.1.2 Child-friendly public spaces and parks are for the whole community.
- 6.1.3 Architecture and culture are strong markers of identity and belonging.
- 6.1.4 Opportunity is the necessary spark for children's play.
- 6.2.2 Neighbourhoods connect and protect.
- 6.3.1 Connectivity supports biodiversity and human well-being.
- 6.5.1 The metropolis is for everyone.

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Children from 4 metropolises (Buenos Aires, Bogotá, Guayaquil and Quito) submitted 567 drawings, or 47,6% of the total number of drawings. Of these 567 drawings, 1 was submitted from Argentina, 19 from Colombia and 547 from Ecuador. The most important clusters in this region are the metropolis as experienced by children, city planning and operations and social dynamics. However, when Covid-19 drawings are removed from the analysis, nature rises to third position.

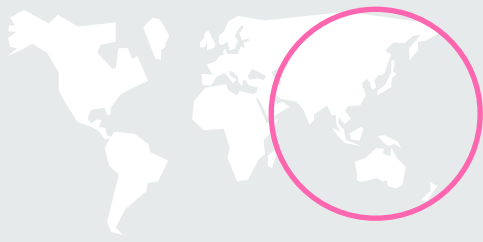
In this region, especially in Ecuador, culture and heritage emerge as an important backdrop of metropolitan life, chiefly as expressed through landmarks, architecture and historical areas of the metropolis, churches, statues and mountains.

Outdoor play is another important theme, namely in parks and playgrounds with friends and siblings. This is often framed as a return to “normal life” and a post-Covid resilient outcome. Children did not draw many indoor

scenes of leisure or play, hence these outdoor spaces are particularly important for a full, happy life as socialisation and relationship-building are happening in and through them. And though parks and green spaces and nature are important themes in this region, nature-based solutions didn't emerge at all. Finally, children from this region often drew and wrote about their yearning to return to school, showing the importance of this site for their social life and happiness.

Safety and health were also concerns for the children from this region. Through their short descriptions, it is understood that the metropolis of the future is free of Covid-19, pollution and crime.

# 5.2 Asia and the Pacific



## The most relevant clusters for the region

- The metropolis as experienced by children
- City planning and operations
- Nature

## Recommendations of interest for the region

- 6.1.3 Architecture and culture are strong markers of identity and belonging.
- 6.2.1 Innovate for resilience.
- 6.2.2 Neighbourhoods connect and protect.
- 6.3.1 Connectivity supports biodiversity and human well-being.
- 6.8.1 The acceleration of the climate emergency is foreseeable.
- 6.9.1 The exchange of goods is a meaningful form of participation for children.

Children from 21 metropolises submitted 476 drawings, or 40% of the total number of drawings. Of these 476 drawings, 310 were submitted from China, 125 from Iran, 33 from Taiwan and 8 from Turkey. Girls represent 70.6% of total submissions from Asia and the Pacific and only 65% across all regions. The primary clusters in Asia and the Pacific are the metropolis as experienced by children, city planning and operations and nature, consistent with the general trends across all regions. However, nature was given greater importance regionally as was mobility.

Children across the region clearly considered nature to be important to their lives in the metropolis. There was clear discussion of animal rights as they relate to public legitimacy, particularly among girls in China. By looking at the lives of animals, children in Asia and the Pacific explore who the metropolis is for and why. It was common to see harmonious relationships with the natural world and naturalisation, even in dense metropolitan spaces. Animals and bodies of water were particularly present in Taiwan, where the water was connected to a way of life.

Asia and the Pacific is the only region where the primary tag in the metropolis through children's eyes cluster is culture and heritage, showing how essential it is to children's understanding of the metropolis and their place within it. While there is a desire to combine new technology with heritage, children in Asia and the Pacific focus on architecture and landmarks, food and local flora, all of which are highly accessible forms of culture for children.

Of particular importance in China and Taiwan, food was a near ubiquitous sign of culture. Children in metropolises experience food as an essential component of urban identity and is often shared in public spaces and restaurants. It holds the history of the metropolis and is a source of pride, passed down between generations. Street food was a particularly prevalent way for children to access their local food culture. Others imagined food as the basis of a fantastical metropolis with an edible built environment, making it a literal building block for future metropolises.

# 5.3 Africa



## The most relevant clusters for the region

- City planning and operations
- The metropolis as experienced by children
- Nature

## Recommendations of interest for the region

- 6.2.4 Public works and environmental stewardship are interrelated.
- 6.3.1 Connectivity supports biodiversity and human well-being.
- 6.4.1 Make active and public transportation advantageous and accessible.
- 6.6.1 Human well-being depends on the natural world.
- 6.8.1 The acceleration of the climate emergency is foreseeable.

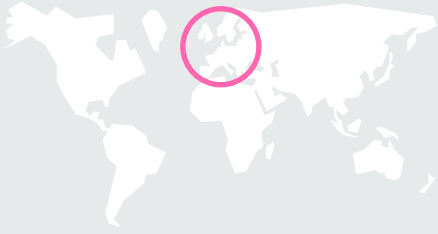
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Children from four metropolises (Johannesburg, Gauteng, Durban and Harare) submitted 112 drawings. Of these 112 drawings, 111 were from South Africa and one from Zimbabwe. The primary clusters in Africa are city planning and operations, the metropolis as experienced by children and nature.

Cityscapes were a dominant theme at 68.8% of all drawings from the region. There is a clear concern with littering and building maintenance, particularly in Johannesburg. Naturalisation is an important element of the metropolitan environment, with trees and plants present anywhere, from in the yards of single family homes to dangling from the windows of modern glass highrises.

The drawings from Africa also conveyed deep concern for the natural world. While motor vehicles are slightly overrepresented in Africa as a region, the climate emergency is significantly overrepresented, occurring twice as often at the regional level as it does when the regions are combined. The children in Africa want humans to take action against the environmental problems they have caused. They also have specific concerns about poaching and maintaining respectful, harmonious relationships with animals.

# 5.4 Europe



## The most relevant clusters for the region

- City planning and operations
- Nature
- The metropolis as experienced by children

## Recommendations of interest for the region

- 6.1.2 Child-friendly public spaces and parks are for the whole community.
- 6.2.4 Public works and environmental stewardship are interrelated.
- 6.3.1 Connectivity supports biodiversity and human well-being.

Children from three metropolises (Barcelona, Madrid and Kazan) submitted 34 drawings, that is, a little less than 3% of all the drawings. Of these 34 drawings, 28 were submitted from Spain and 6 from Russia. The most important clusters in this region are city planning and operations, nature, and the metropolis as experienced by children.

From Spain, city maintenance and clean streets and public spaces came up several times. Children made important connections between consumption, waste management (and lack of recycling) and water pollution. Parks and green spaces, including a hippodrome, made up the bulk of the drawings too.

From Russia came a diversity of drawings, if only six of them. They were about mobility, animal rights and freedom, the rich life of a neighbourhood, the Covid-19 pandemic, girls socialising and relocation to another planet.

## 5.5 North America



With only one drawing from Monterrey, Mexico, North America is underrepresented in this gallery of drawings. No trends or conclusions can be drawn from this drawing.



# Policy recommendations





## 6.1 The metropolis as experienced by children

### 6.1.1 Children are today's urban actors, not just tomorrow's adults.

- Plan official metropolitan communications assuming that children will be an audience (for example, by normalising the use of pictograms on signage).
- Develop participation methods that allow children and youth to influence the agenda.

### 6.1.2 Child-friendly public spaces and parks are for the whole community.

- Make universally accessible all public spaces and programming, especially, but not only, playgrounds, with services such as drinking fountains and toilets.
- Plan and design public spaces and parks for multiple users and uses, including children's and teen's play, social gatherings, dog walking and sports.
- Allow rooftop gardens and other vertical green spaces so that all inhabitants, no matter where they live, can access nature every day.

### 6.1.3 Architecture and culture are strong markers of identity and belonging.

- Develop urban planning tools that recognise and reinforce the aesthetic dimensions of a metropolitan identity (e.g., a local palette of architectural forms, functions and colours).
- Develop child- and teen-centric fares, programming and facilities at important cultural and historical sites.

### 6.1.4 Opportunity is the necessary spark for children's play.

- Plan playgrounds and provide play spaces and opportunities for all abilities, all genders and all ages, including teenagers. This might mean going beyond traditional risk-averse playgrounds to think about public space more broadly as playable.
- Demotorise and lower speed limits on the streets around schools to make room for children's active mobility and play.



## 6.2 City planning and operations

### 6.2.1 Innovate for resilience.

- Evaluate the goal of new technologies, with priority given to technologies that work towards socio-economic, climate and disaster resilience.

### 6.2.2 Neighbourhoods connect and protect.

- Regulate land use and zoning to favour mixed-use and medium- to high-density neighbourhoods, where inhabitants can easily play, work, go to school and access basic and health services near home.
- Plan neighbourhoods around their proximity and access to parks, green spaces and schools, ensuring all children have access to quality and nearby play spaces and playgrounds.
- Design and renovate streets as complete streets, with space for public transportation, active mobility and resilience-enforcing amenities (e.g., urban agriculture).
- Protect rural and natural spaces from urban sprawl and encroachment.

### 6.2.3 The metropolis is a home.

- Ensure all inhabitants have a right to the city by, for example, reserving public land for social housing or requiring the inclusion of affordable housing in new residential projects.
- Review legislation and standards to favour ecological materials, renewable energies and passive houses, as examples.

### 6.2.4 Public works and environmental stewardship are interrelated.

- Regularly maintain and clean public spaces. Equip these spaces with recycling and garbage bins and regularly empty and maintain these bins.
- Provide regular recycling opportunities (e.g., through neighbourhood-based infrastructure or curbside collection).
- Use legal frameworks to reduce or ban single-use plastics on a metropolitan territory.



## 6.3 Nature

### 6.3.1 Connectivity supports biodiversity and human well-being.

- Create a network of publicly owned parks, green spaces and wetlands of varying scales.
- Plant trees and vegetation on a large scale, prioritising indigenous plant species.
- Ensure that all park planning, design and programming favour biodiversity at all levels, from the birds and the tree canopy to the insects and the soil.
- Make waterways more accessible to people, with attention to planning for various modes of navigation.



## 6.4 Mobility

### 6.4.1 Make active and public transportation advantageous and accessible.

- Incentivise a modal shift towards active mobility, including family-oriented human-powered vehicles such as cargo bikes.
- Plan public transportation and all-ages and all-abilities active mobility routes, such that they are the most efficient choices moving within and between neighbourhoods.
- Adapt public transportation's existing fleet and infrastructure to make room for mobility devices, strollers and children (with varied seating, levelled entrances, elevators, etc.).
- Develop and offer flexible fares that encourage children, youth, families and child care and school groups to use public transportation.



## 6.5 Social Dynamics

### 6.5.1 The metropolis is for everyone.

- Apply an intersectional framework to policy and programmes, from preliminary budget to implementation and evaluation.
- Program intergenerational and intercultural leisure activities and spaces so that children may connect with a diverse cross-section of inhabitants.
- Consider signifiers of belonging that can increase feelings of safety, such as public programming, public art and interactions with maintenance workers.



## 6.6 Worldviews

### 6.6.1 Human well-being depends on the natural world.

- Incorporate biodiversity as a guideline for any policy design inside, nearby and around metropolises to ensure positive cohabitation with human life and economic activities.
- Develop strong environmental impact assessments and life cycle tools across all operations, but especially for waste management, land use and mobility.

### 6.6.2 Metropolises are interconnected.

- Encourage communication and cooperation between local and regional governments to cooperate on collective problems such as Covid-19 or climate migrations.



## 6.7 Gender

### 6.7.1 Gender mainstreaming applies to children.

- Integrate gender mainstreaming in the planning and programming of public spaces, with attention to socialisation and safety.



## 6.8 Climate Emergency

### 6.8.1 The acceleration of the climate emergency is foreseeable.

- Plan for the implementation of new technologies to reduce or mitigate the effects of pollution and natural disasters as they emerge.
- Promote the transition to renewable energy sources and carbon neutrality, especially in regards to top emission-producing activities like transportation and the built environment.
- Prioritise active mobility and public transportation.



## 6.9 Economy

### 6.9.1 The exchange of goods is a meaningful form of participation for children.

- Plan for children's care needs and play in commercial districts.
- Provide a framework for street food or vendors in metropolitan spaces.

# Final remarks

The drawings have been a meaningful way for many children to share their vision for metropolitan spaces. However, the need to translate children's creative expression into policy-oriented language offers a distinct challenge. The language of the metropolis is highly specific, such that it is difficult to fully convey the complexity of the paradigm shifts children are hoping for in practical terms that can lead to adult action. This is not a criticism of drawing as a participatory tool but rather an invitation for adults to explore the drawings further and immerse themselves in the metropolis through children's eyes.

After the success of the drawing contest, the question remains as to how children and youth's participation in metropolitan governance can occur on an ongoing basis and lead to accountability from decision-makers. For participation to be meaningful, it must move beyond confirming or denying adult assumptions to offer a constructive way forward, as the drawings have. Further phases could include a variety of participatory tools, with attention to offering tools that encourage contributions from children and youth of different ages, genders and abilities. Additionally, it is important that any participatory processes engaging children and youth be focused on areas that are of interest to children and youth such as climate action or ecological transition.

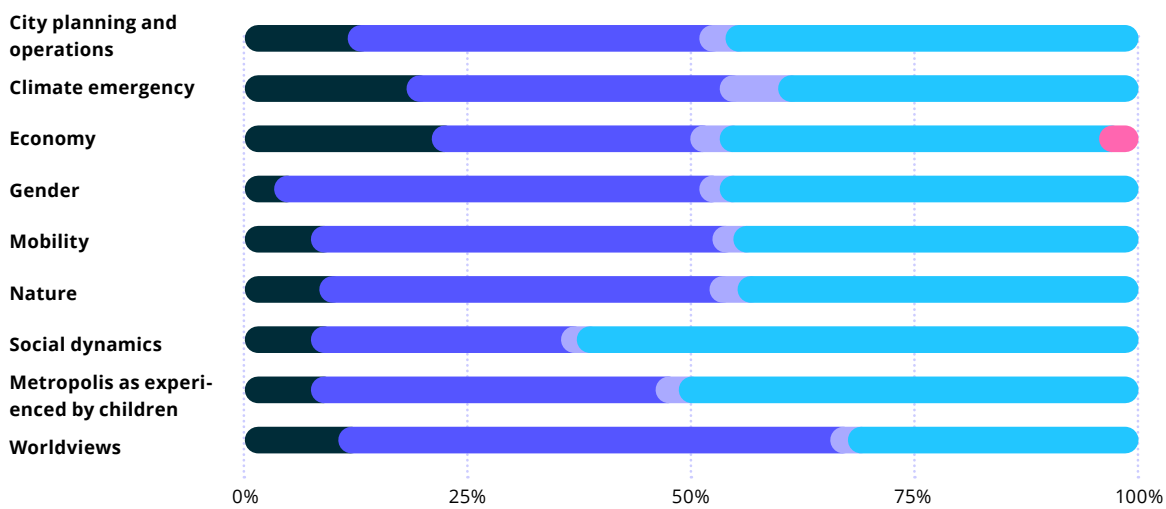
**The children have shared their hopes, fears and dreams. Now they want to help build a better future for the metropolis.**

## Appendix A

# Clusters by region and age

Chart A-1. Clusters by region\*

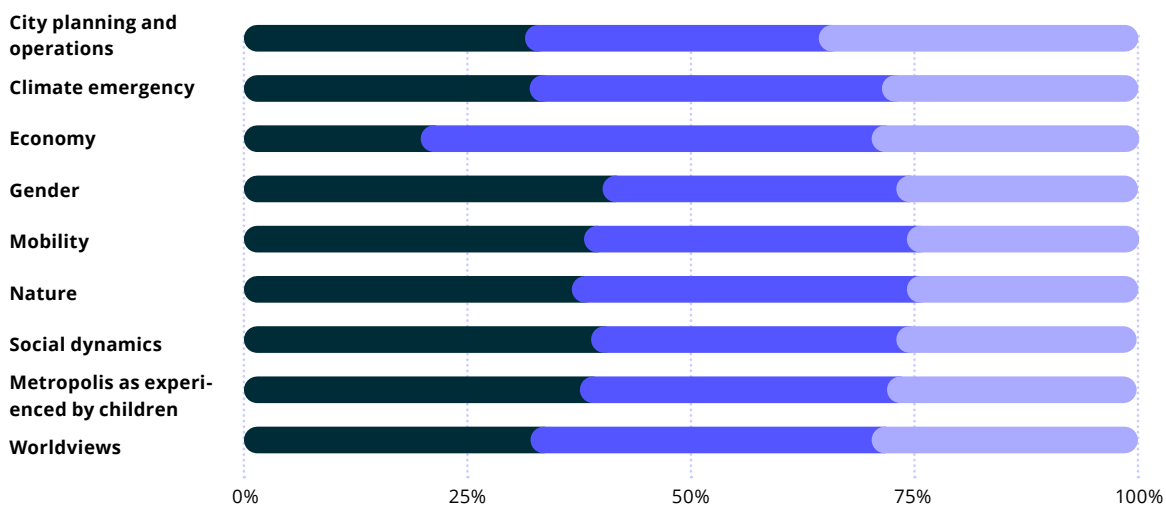
● Africa ● Asia and the Pacific ● Europe ● Latin America and the Caribbean ● North America



\* It is significant to note that 545 of 567 drawings from Latin America and the Caribbean are specifically from Quito, Ecuador.

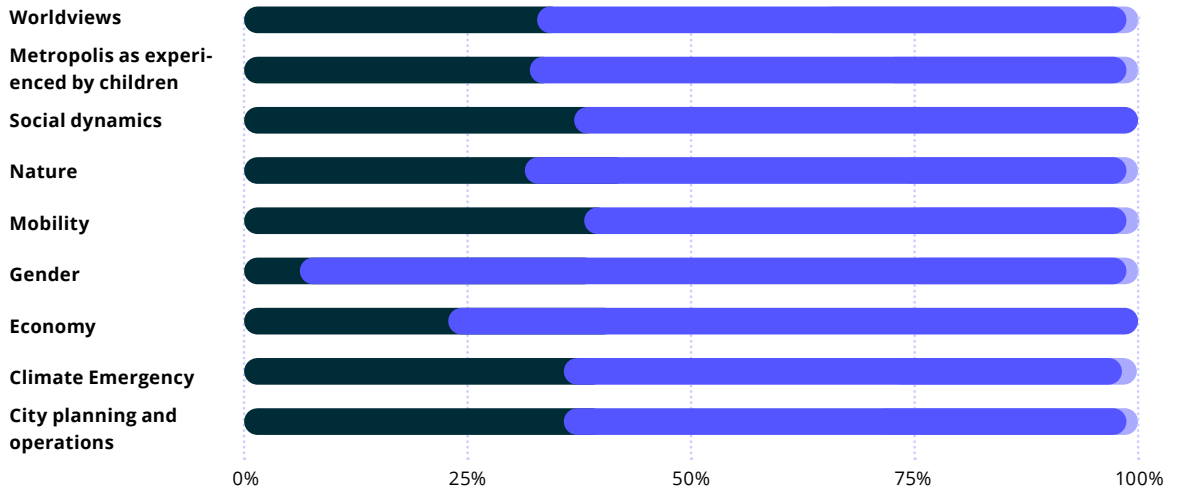
Chart A-2. Clusters by age group

● 5-8 ● 9-11 ● 12-14



**Chart A-3. Clusters by gender**

● Boys as % of all genders ● Girls as % of all genders ● Other as % of all genders



## Appendix B

# Policy sandbox

While there were a number of shared themes and recommendations among the nearly 1,200 drawings submitted through the drawing contest, there was not always enough data to support the broad application of specific recommendations. This happened both when one or a few children made a specific policy recommendation and when a larger number of children raised an issue but it required significant extrapolation to connect it to a policy recommendation.

Recognising that these insights may be pertinent to consider for some policy-makers, just as they were pertinent for some children to share, they have been included here in a policy sandbox. The content of the sandbox is not intended as a set of recommendations, but rather as a springboard for further reflection and dialogue with children.



## 1. The metropolis as experienced by children

### 1.1 How can children's participation be continuous?

Consider:

- Developing participation methods that seek to incorporate children's needs and voices by tending to children's perceptions of the present, including all of its challenges (e.g., crime, air pollution, the Covid-19 pandemic, etc), not just their aspirations for the future (e.g., a safe, healthy city).
- Ensuring that the local or regional government's most important planning documents and tools, namely its master plan, take into account children's and teenager's needs and has been submitted to their attention for feedback.

### 1.2 How can municipalities support children's play?

Consider:

- Choosing street furniture and public installations for their play value, for their comfort by users of different sizes and abilities and for various socialisation scenarios (groups, families, pairs and singles).
- Providing play training, particularly for those caring for children during their leisure time such as in day camps or municipal leisure programs.

### 1.3 How can municipalities promote family-friendly, affordable housing?

Consider:

- Modifying existing or implementing new legislation to favour family-friendly elements such as a minimum number of bedrooms, soundproofing, child-friendly common spaces, balconies, bicycle and other storage, and direct access to green and outdoor playable spaces.
- Promoting housing affordability, be it through investment in social housing, housing cooperatives, or the acquisition of private land for affordable housing or through policies and programs such as rent controls and financial assistance for first time home-buyers who are caregivers.

#### 1.4 How can municipalities support caregivers and care work?

Consider:

- Allowing grandparents or other caregivers to access services or housing that are ordinarily reserved for nuclear families when they assume the role of primary caregiver.
- Including provisions for care work in emergency planning and services.
- Promoting shared care models.
- Providing care services to single-parent families.



## 2. City planning and operations

#### 2.2 How can city planning protect nature?

Consider:

- Promoting local planning and development frameworks that protect nature (from the tree canopy to wetlands) from land redevelopment.
- Regulating tree-cutting for purposes such as home renovations and the installation of private amenities such as pools and parking.

#### 2.3 How can city planning respond to the climate emergency?

Consider:

- Integrating life cycle analyses in public projects and infrastructure to choose less harmful materials and processes.
- Planning and investing in rainwater harvesting, such as water squares and dry rivers in public spaces.
- Attributing greater resources to emergency and rescue services in areas that are adversely affected by the climate emergency and natural disasters.
- Reevaluating land use in flood plains and planning for current and predicted realities.



## 3. Nature

#### 3.1 Can urban agriculture contribute to an urban nature connection?

Consider:

- Offering meaningful means of participating in urban agriculture as a social practice such as community gardens and group planting, building deep relationships with nature for those who participate regularly.
- Providing or protecting zoning that allows for agricultural land use within proximity of the metropolis, allowing food to be produced locally and a larger number of residents to participate periodically in significant cultural events in connection with nature and the seasons.



## 4. Mobility

#### 4.1 How can the footprint of motor vehicles be reduced?

Consider:

- Removing and reducing on-street parking to make room for traffic calming measures (e.g., curb extensions), bicycle parking, street furniture, playable features, etc.
- Closing streets to through traffic so inhabitants can use the space for social and resilient activities.

## 4.2 How can mobility support the needs of girls and caregivers?

Consider:

- Knowing and applying the best practices for gender-fair active mobility into metropolitan planning, including for example, bike paths wide enough to cycle side by side.
- Ensuring the public transportation network (including fares, routes and schedules) correspond to care-centred needs as much as production-centred ones. This can mean waiving transit fare for children, modifying bus routes to link up to key generators of “caring” movements and increasing service during the day and weekends.
- Creating specific mobility services for women and girls, such as “between two stops,” to increase perceptions of safety and to decrease barriers to the right to the city.



## 5. Social dynamics

### 5.1 How can all children feel safe in the metropolis?

Consider:

- Building on gender mainstreaming to seek a fuller representation of children in the metropolis, namely across the diversity of ages, ethnicities, neighbourhoods, resident statuses and so on, when seeking input.
- Ensuring that all metropolitan actions against racial profiling include a child-centric lens to minimise the impact of racial profiling on children’s ability to enjoy public space.
- Supporting efforts to reduce the number of firearms available.



## 6. Worldviews

### 6.1 How can feelings of connection and empathy be fostered at the metropolitan level?

Consider:

- Implementing programs that promote social belonging, empowerment and employment opportunities for youth and caregivers.



## 7. Gender

### 7.1 How are girls invited to take their place in the metropolis?

Consider:

- Ensuring access to services for the specific realities of girls and women, such as daycares, women’s clinics, women’s shelters and trauma-informed emergency services.
- Promoting gender parity in public participation initiatives and public service positions, providing concrete examples of societal roles for women and girls outside of domestic care work.
- Submitting all play funding and projects to a gender mainstreaming lens to ensure that the specific and often overlooked socialisation and safety needs of girls are met in public space.





## 8. Climate Emergency

**8.1 Can metropolises play a role in influencing personal choices in the face of a climate emergency?**

Consider:

- Supporting personal transitions to zero-waste or reduced-waste choices.
- Promoting programs that incentivize reducing individual carbon footprints.



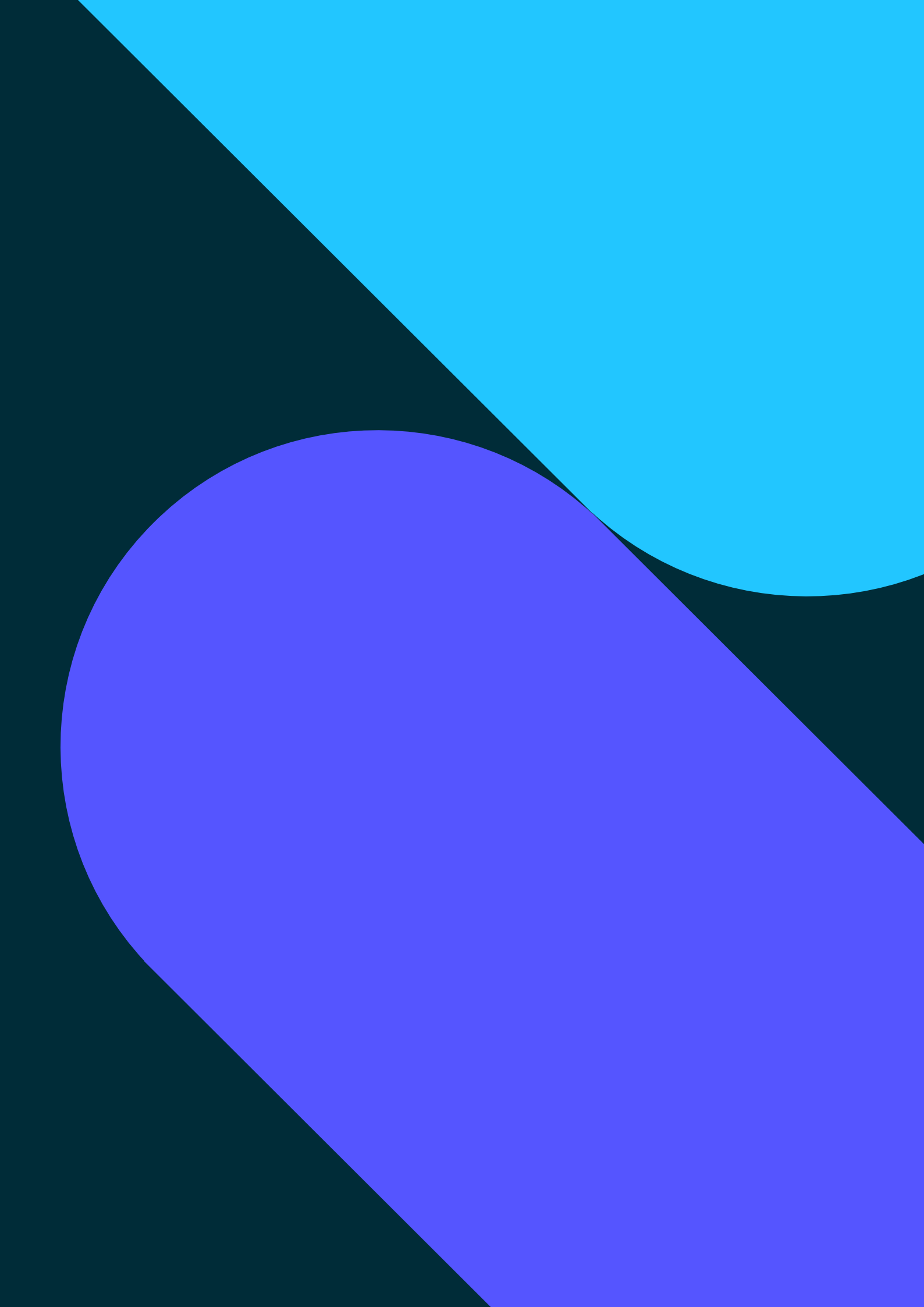
## 9. Economy

**9.1 How can the economy account for its environmental impact?**

Consider:

- Requiring external contractors and service providers submit full cost accounting of their environmental impact and consider it in the choice of municipal partners.





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