

Metropolitan Localized Data in Greater Belo Horizonte, Brazil: A Participatory Guide to Better Governance

April 2019



TR**NDS**
Thematic Research Network
on Data and Statistics

Local Data Action Solutions Initiative 2018-2019 Microgrant Program

ACKNOWLEDGMENTS

Written by Cid Blanco Jr., architect and urban planner in collaboration with Claudia Pires, architect and urban planner, and Marcelo Amaral, civil engineer. Editing by Sandra Ruckstuhl, Jessica Espey, and Jay Neuner. Design by Micha Dugan, Ryan Swaney, and Jay Neuner.

Project Logo



Project Team



ABOUT

The Local Data Action Solutions Initiative (LDA-SI) was established as a joint effort between the Sustainable Development Solutions Network's Thematic Research Network on Data and Statistics (SDSN TReNDS) and the U.S.A. Sustainable Cities Initiative as a program with one primary objective: to identify and promote replicable methods for sub-national Sustainable Development Goal (SDG) monitoring that facilitate local action in support of the “leave no one behind” principle. A growing number of subnational actors are attempting to implement the SDGs locally and are confronting specific questions related to data collection and monitoring. With this has grown the need for real, practical lessons and guidance that can be applied to different contexts worldwide.

For this reason, LDA-SI launched a microgrant initiative to support learning from existing subnational SDG data initiatives, harnessing this tacit local knowledge and informing a learning exchange. In 2018, five grantees were chosen both for their proven ability to support SDG implementation in a specified location and for their model's relevance and potential benefit for other sub-national SDG initiatives in the world. Each grantee has prepared a guidance brief that describes SDG localization challenges in the place where they are operating and the data solutions they have designed to support efforts toward SDG achievement.

Learn more at sdstrends.org/ldasigrants.

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ABSTRACT

In Brazil, like many other Latin American countries, more than 80 percent of the population is concentrated in urban areas characterized not by individual cities, but by metropolitan areas. Metropolitan planning and management¹ became an important issue in Brazil after the approval of the Metropolitan Statute (Federal Law 13,089) in 2015. The experience of the Metropolitan Area of Belo Horizonte (RMBH) is considered a national reference for metropolitan planning and governance. Despite this vaulted status, Greater Belo Horizonte's management structure lacks an official metropolitan-level monitoring system to track its policies and investments and help planning and decision-making procedures. Brazil has turned to the United Nations' Agenda 2030—also known as the 17 Sustainable Development Goals (SDGs)—for guidance. For RMBH, SDG 11 (“make cities and human settlements inclusive, safe, resilient, and sustainable”) is particularly relevant. This brief describes how the RMBH's SDG in Action project, a partnership between Metropolitan SDG Observatory (METRODS), University Newton Paiva, and Movimento Nossa BH, developed and tested an indicator framework to monitor the achievement of SDG 11 targets.

PROBLEM

Brazil lacks a significant amount of official data relevant to sustainable development at local and metropolitan levels; for example, the most recent national census data are outdated, as the census was last published in 2010. Brazil also experienced an economic and political crisis in the wake of President Dilma Rousseff's impeachment in August 2016. This event hindered national government-civil society interaction and Agenda 2030

planning in the country. Further, due to the economic downturn the development context has grown increasingly challenged. For example, although the UN removed Brazil from its World Food Programme (WFP) Hunger Map² in 2014, WFP General Director José Graziano³ reports that current conditions of crisis may trigger its reinstatement.

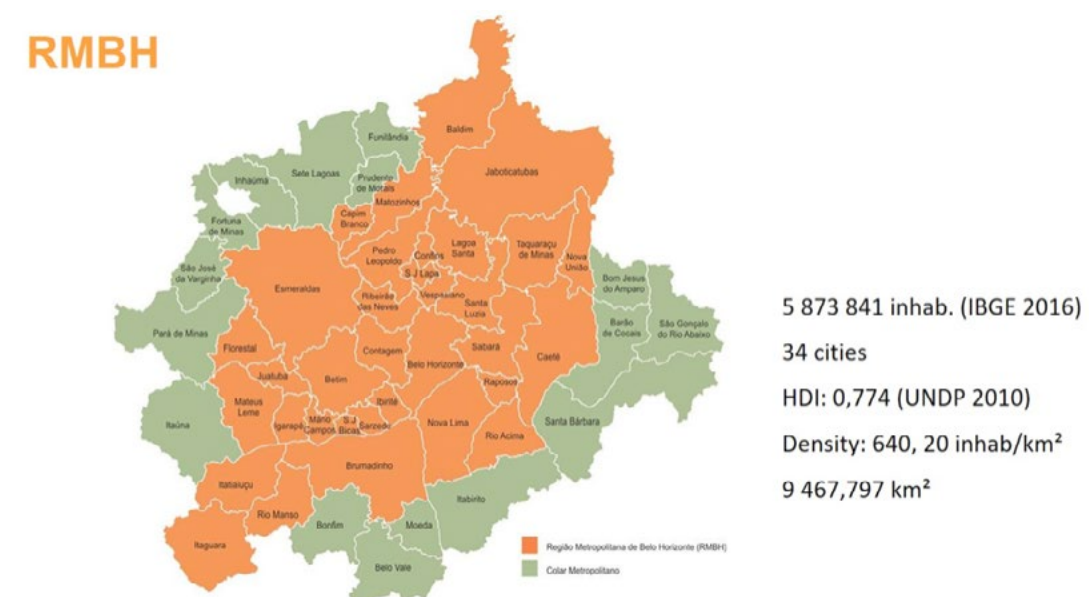
Consequently, the Brazilian Commission on Sustainable Development Goals⁴ has not yet established an official national SDG indicator framework or a set of national goals to be pursued in the follow-up to Agenda 2030. While Brazil was still able to present voluntary national reviews (VNRs) to the High-Level Political Forum (HLPF) based on existing data, this data did not express the real impact of the concurrent economic crisis on the goals.

In order for policymakers to respond effectively to these evolving circumstances and to ultimately meet development goals, Brazilian authorities need to update public data before the next scheduled census in 2020. The 10-year gap between censuses hinders smart policy and investment that can yield equitable development outcomes in Brazil and across the metropolitan areas, including Greater Belo Horizonte⁵.

The absence of needed data led civil society organizations to produce their own versions of indicators for the country. In the last two years, the Brazilian Civil Society Working Group for the 2030 Agenda developed “Spotlight Reports” in opposition to the Brazilian VNRs. In addition, in May 2017, a group of institutions and organizations from civil society, the public and private sectors, and academia founded the Metropolitan SDG Observatory (METRODS) to identify, disseminate, and monitor indicators related to SDG 11 in metropolitan areas of Brazil⁶.

Greater Belo Horizonte is one of the country's most important metropolitan areas⁷. The RMBH Development Agency is a technical organization founded in 2009 that is in charge of promoting the joint management of public policies of common interest, such as public inter-municipal transportation, land use, and basic sanitation in the Metropolitan Area of Belo Horizonte. It is responsible for coordinating the implementation of the Integrated Development Plan of the RMBH (2011), encompassing the 34 cities under RMBH jurisdiction⁸. Originally, the agency planned to establish a monitoring and evaluation observatory to guide and inform planning and decision-making processes in the metropolitan area, but to date it has not done so. Current investment discussions under the Metropolitan Plan are missing critical, real-time data on the situation in the metropolitan area. Additionally, funding for the implementation of the Metropolitan Plan faces barriers because most of the cities within the metropolitan region are not contributing to the Metropolitan Development Fund⁹ due to the economic crisis, diminishing its investment capacity.

Figure 1. Map of RMBH



Box 1. About Belo Horizonte

The Metropolitan Area of Belo Horizonte (Figure 1) has 6 million inhabitants with 34 cities within its administrative boundaries and territory covering 9,500,000 km². It is the political, financial, commercial, educational, and cultural center of the state of Minas Gerais, representing around 40 percent of the economy and 25 percent of the population of Minas Gerais. Its GDP in 2018 is estimated at USD 4.5 billion, of which more than 40 percent belongs to the city of Belo Horizonte, which covers 3.5 percent of the territory of the metropolitan area. Its economy is significant and active, and it is based on industry, finance, services, commerce, mining, tourism, and construction.

The benefits of the region's significant economic activity are not equally distributed in the 34 cities across the metropolitan area, indicating a spatial inequality that has become a primary challenge to achieving equitable development across the region. For instance, the City of Belo Horizonte and two other cities account for 60 percent of the population in 9 percent of the territory, and 77 percent of the GDP of the entire metropolitan area. Meanwhile, 22 cities with a population smaller than 50,000 inhabitants occupy 60 percent of the territory and contribute to only 7.5 percent of the GDP.

Box 2. About the SDG in Action partners

University Newton Paiva has teachers and researchers from different areas of expertise who share their knowledge and collaborate to address the multidimensional realities of sustainable development in metropolitan areas. For SDG in Action, students¹⁰ tutored by teachers¹¹ worked as a field team,

Box 2 continued

helping local governments with data collection and participating in data analysis activities that were conducted by their professors.

Movimento Nossa BH coordinates the Mobility Observatory, a partnership between the municipality of Belo Horizonte and civil society. Their data production and analysis expertise were utilized when reviewing data that were collected in the cities from the RMBH during the SDG in Action project.

METRODS network developed a framework of 80 indicators¹², most of them based on SDG 11, to establish a long-term, practical tool to help political decision-making and investment in the development of metropolitan areas based on SDG 11's aims. As a network of institutions and organizations, METRODS mobilized its affiliates—more than 40 national and international institutions—in order to disseminate the results and stimulate debate around the facts and figures that came up from work developed by the SDG in Action project.

The RMBH Development Agency acted as the link between local governments and the university/nongovernmental organization (NGO) team. It was initially slated to be the host for capacity-building activities and workshops and the place where all SDG 11 indicator data would be collated and shared. Due to concurrent elections in Brazil, SDG in Action coordinators reevaluated the situation and decided to conduct all activities inside the University Newton Paiva facilities.

SOLUTION

The SDG in Action project was launched in 2017 by METRODS in partnership with Movimento Nossa BH¹³, University Newton Paiva, and civil society organizations working on housing and urban development issues in the region¹⁴. One of the initial partners was the RMBH Development Agency, which initiated the approach of engaging with local institutions and supporting METRODS in piloting its participatory monitoring and evaluation methodology and SDG 11 indicators framework for metropolitan areas. They aimed to create a “temporary Metropolitan Observatory” that would coordinate, monitor, and evaluate these activities at the metropolitan level for a six-month pilot period.

METRODS and University Newton Paiva¹⁵ designed and managed the project. Movimento Nossa BH provided data analysis and administrative activities¹⁶, and the Metropolitan Agency¹⁷ helped to connect the project team with the 34 local governments. The RMBH Development Agency also provided institutional support to the project. The combination of a well-organized metropolitan governance system and a dedicated group of local and regional stakeholders that were committed to Agenda 2030 made the Metropolitan Area of Belo Horizonte an ideal location for this initiative. This work was conducted during the LDA-SI grant period in 2018.

The project utilized METRODS’ guidelines, which promoted a robust participatory approach both in the process of institutional design as well as in indicator development and data decision-making activities. The guidelines also highlighted the need for interaction among different areas of expertise in order to capture the multidimensional realities of sustainable

development in metropolitan areas in Brazil. With the expertise of each of the partners, the project aimed to establish the foundation for a long-term Metropolitan Observatory. By incorporating local government, university counterparts, and civil society, the coalition provided capacity, legitimacy, and community perspective to this end.

BUILDING PROCESS

The SDG in Action project initially pursued three activities: (i) awareness and mobilization; (ii) data collection; and (iii) data analysis. The beginning of the data collection activities revealed a disconnect between the original METRODS SDG 11 indicators framework and the reality of the Metropolitan Area of Belo Horizonte. Consequently, the coordination team added an activity into the work plan: (iv) METRODS SDG 11 indicators review.

Due to time constraints, the team worked concurrently on these activities. The project was also implemented during an election period, which created challenges and prolonged its implementation.

The project leaders based the SDG in Action project on sourcing local data to underpin the SDG 11 indicators. They invited mayors and technicians from the RMBH cities to join the project and nominate focal points who could provide the field team with the necessary data from their governments, allowing the SDG in Action team to calculate the indicators and build the proposed SDG 11 metropolitan profile. Without the appointment of focal points and subsequent access to local data, none of the planned activities of the project would have been possible.

1 Awareness and Mobilization

In May 2018, the project team initiated activity (i) at a Metropolitan Council meeting, having determined this large convening presented a good opportunity to share the SDG in Action project. However, this attempt to sensitize and mobilize the city representatives failed; as the meeting took place during an intense national and local electoral campaign, the attendees wrongly believed that the project was a partisan effort.

The project team then launched a second attempt to engage with the cities. University Newton Paiva students emailed an official letter—signed by the project’s coordinators and presenting the project proposal, its near-term objectives, its long-term goals, and the roles of each of the partner—to the 34 mayors. After that, the 34 mayors and their teams were invited to attend an informational and training meeting at the University Newton Paiva in Belo Horizonte in June 2018. Though 16 of the 34 cities confirmed attendance, only three attended the meeting.

Not to be deterred, the team personally recruited the remaining mayors by visiting each of their offices to provide further information on the project, address concerns, and request the nomination of a focal point. This technique was a marked success. In fact, in some cases, when the team arrived they found the mayor of a given city was aware of the project and had identified a focal point.

In the end, the team secured the participation of the 34 cities representatives to collaborate on the project.

2 METRODS SDG 11 Indicator Review

While mobilizing the city representatives, the team also initiated a review of the list of SDG 11 indicators compiled by METRODS, as it became evident that some of the original indicators were not compatible with the realities of the RMBH.

The original METRODS SDG 11 Indicator Framework (see Annex A) was developed with input and guidance from technical experts in the monitoring and evaluation procedures of different partners of the initiative. This original framework is composed of 80 indicators that use official national census data, as well as local data from local and state governments.

This framework was developed as a tool to create “SDG 11 profiles” for metropolitan areas without depending exclusively on official statistics. It is important to mention that most of the METRODS partners live in capital cities of metropolitan areas, such as São Paulo, Rio de Janeiro, and Belo Horizonte—the urban centers that generally offer the best quality of life and public services in Brazil. The standards proposed for the indicators were closer to these capital cities’ realities and did not consider the diverse conditions that exist across cities in a single metropolitan area. The standards included features considered “normal standards” for Belo Horizonte (as a large capital city), but not necessarily typical for the region’s smaller peripheral cities (such as Ribeirão das Neves, Raposos, and Baldim).

For example, the framework listed indicators measuring the presence of public transportation but did not count regional public transportation

linkages. For the peripheral cities, a linkage indicator would have been a better way understand the quality of the service offered in the RMBH. In another example, it called out the presence of exclusive bus lanes, such as the ones used for Bus Rapid Transportation (BRT) systems, when some of the peripheral cities are too small to have this service.

To refine the original list of 80 indicators, the project coordinators conducted weekly meetings with the field team during July and August 2018. The review focused on the indicators' relevance to the RMBH, the presence in the peripheral cities of the public service to be measured, and the ability to obtain timely data. In the end, the project team and local authorities approved a revised list of 55 localized indicators customized for the Metropolitan Area of Belo Horizonte. Titled "RMBH SDG 11 Indicators," the list included housing, transportation, public spaces, climate change, and urban development (Annex B). The team did not use national census or other official data because it was outdated. Instead, they drew on data provided by the local governments.

3 Data Collection

Parallel with the indicator review, the project team developed two online questionnaires: a Knowledge Survey (Annex C) with questions about the Millennium Development Goals or MDGs (the precursors to the SDGs) and the SDGs, and an SDG 11 Survey (Annex D) that called for data on the RMBH SDG11 Framework. The purpose of the first survey was to measure how much city officials knew about each of the MDG and SDG initiatives and if they had designated any structure or person to work on the 2030 Agenda¹⁸. The purpose of the second survey was to produce baseline

metropolitan profiles for each city to be used to track progress. Out of 34 cities in the metropolitan area, 22 cities completed the Knowledge Questionnaire. Nine cities completed the SDG 11 Indicators Questionnaire.

In September 2018, an evaluation workshop was conducted to evaluate the project to assess and document its outcomes. It involved professors, local government representatives, social movements, nongovernmental organizations and students. They determined that the low response rate on the SDG 11 Indicators Questionnaire was due to the lack of knowledge of Agenda 2030. They also concluded that the presence of seven targets for SDG 11 may have been confusing, causing the cities to fail to answer if the respondent's knowledge focused on a particular public service sector.

Consequently, the group decided to personally contact representatives in unresponsive cities to collect the missing data. They wrote to each local government and followed up with phone calls. During this new round of field visits, the project team delivered a hard-copy form of the SDG 11 Indicator Questionnaire and succeeded in getting responses from ten cities.

4 SDG 11 Data Analysis

The last phase of the SDG in Action project consisted of an analysis of the data collected in both questionnaires. Representatives from Movimento Nossa BH and University Newton Paiva, under supervision of the project coordinators, undertook this task. The results of the Knowledge Questionnaire confirmed that governments across the Metropolitan Area of Belo Horizonte lacked understanding of both the MDGs and the SDGs. They also did a more detailed analysis that cross-tabulated the data with population and proximity to the capital, among other variables. They used

this information for the introduction to the metropolitan profiles for the 34 cities. Unfortunately, the low response rate on the SDG 11 Questionnaire prevented completion of the metropolitan profiles. However, the project team used data from city websites that have assembled partial profiles, covering the councils and legislation (e.g. housing and environment councils, historical patrimony, and environment legislation).

The results of the analysis were presented during a public workshop at the end of November 2018 (Annex E). The audience of students, professors, representatives from social movements, and local and state government representatives had the opportunity to see the project's primary results and hear about the challenges and lessons learned.

The 22 municipalities that answered the Knowledge Questionnaire represent 65 percent of the total 4,571,165 inhabitants (87 percent of the total population), 6,744 km² (71 percent of the total of the RMBH), and 87 percent of the GDP of the RMBH. The 17 municipalities that responded to the SDG 11 Questionnaire represent 50 percent of the total 3,690,596 inhabitants (70 percent of the total population), 4,961 km² (52 percent of the total area), and 70 percent of the GDP of the RMBH.

Regarding the results of the Knowledge Questionnaire, 59 percent of the cities know what the MDGs mean, but only 27 percent of the 22 municipalities have done any follow-up on the MDGs. With regards to the SDGs, 73 percent know what they mean, 45 percent have developed a Plan of Goals (2017-2020) incorporating the Agenda 2030 concepts, and 41 percent have any kind of monitoring of Agenda 2030 through the SDGs. Considering

that 87 percent of the population lives in those cities, the numbers are better than expected; almost half are developing actions regarding financial planning and monitoring using SDGs.

Table 1. Results of the SDG 11 Questionnaire

SDG 11 Goals		Goal (Average)	Effort
11.1	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	38.7%	Low
11.2	By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older	38.7%	Low
11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	48.7%	Low
11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	74.3%	High
11.5	By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	57.6%	Medium
11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	48%	Low
11.7	By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	69.1%	Medium
11.a	Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	51%	Medium
11.b	By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels	5.9%	Very Low

“VERY LOW” effort was considered when the percent of respondents responding positively was below 30 percent, “LOW” when between 30 and 50 percent, “MEDIUM” when between 50 and 70 percent, and “HIGH” when above 70 percent.

The results of the SDG 11 Questionnaire (Table 1) provided a basic profile of RMBH's status in regard to SDG 11 and its goals, informing the creation of related, local-level indicators. The vast majority represent the existence of structures and instruments identified as adhering to the goals, but their effectiveness and quality cannot be evaluated through these indicators. However, other questions may give clues about these qualities, which was considered in the analysis.

STRENGTHS AND WEAKNESSES

Theory versus practice: general methodologies need to be customized for local reality. When the METRODS team developed its indicator framework, it intended to use the framework in all of Brazil's metropolitan areas. After testing it in the SDG in Action project, however, they discovered the need to customize the indicators to the local situation. They demonstrated how to localize an indicator framework in the Belo Horizonte Metropolitan Area, producing the RMBH SDG Indicator Framework. *Lesson: Local coalitions must adapt indicators to the local context.*

Politics are always “on.” Support from metropolitan or regional government agencies is essential to connect the data collection team with local government representatives, particularly in the peripheral cities. The SDG in Action project revealed that without careful planning, local authorities can misperceive the work as a political initiative. For example, the initiation of the SDG in Action project at the same time as the presidential and gubernatorial electoral campaigns led to its association as a partisan effort. Consequently, additional time and resources were required for the project

team to explain the work and recruit focal points. *Lesson: An evaluation of the political situation in the metropolitan area, even in the absence of an election, can help project implementers establish metropolitan and regional government agency support for and participation in the project in a prudent way, keeping in mind the need to reduce risk to project goals.*

The use of secondary local data saves time and resources. The leaders of the SDG in Action project discovered that local governments provide important data online that can be used to construct a “minimum profile” for cities that fail to respond to questionnaires seeking information or that supplements the data submitted by compliant cities. *Lesson: The use of opensource, localized data from public websites helps save time and resources and fills data gaps across the metropolitan area.*

Capacity-building activities are essential when collecting data in small and peripheral cities. Results from the Knowledge Questionnaire revealed that local government employees in the Belo Horizonte Metropolitan Area had little knowledge of the Millennium and Sustainable Development Goals. During the SDG in Action project, only one capacity-building workshop was conducted, aiming to educate local government officials on the project implementation activities. *Lesson: The concept of sustainable development and Agenda 2030 is still unknown by public servants from small and peripheral cities of metropolitan areas. When resources and time allow, more extensive education and training on the 2030 Agenda and the SDGs should be added to the work plan.*

Universities are helpful to the implementation of Agenda 2030.

As demonstrated by the SDG in Action project, the partnership with University Newton Paiva made the project feasible. Professors and students contributed time and expertise to the SDG 11 indicator review, the data collection process, and project evaluation discussions. Achieving the SDGs will require partnerships from different levels of the government, civil society, and academia. *Lesson: Universities and other partners are essential players in training local governments about sustainable development concepts and monitoring SDG projects.*

ADDITIONAL RESOURCES

The resources below provide further information about the mentioned experiences in this document and other Brazilian experiences regarding SDG implementation in metropolitan areas:

- [Spotlight Synthesis Report: the 2030 sustainable development agenda in Brazil 2017](#)
- [Spotlight Synthesis Report: the 2030 sustainable development agenda in Brazil 2018](#) (em português)
- [Book of Experiences of Localization, Monitoring and Advocacy for Sustainable Development Goals](#)¹⁹
- [METRODS methodologies and SDG 11 indicators framework creation process](#)
- [Belo Horizonte Millennium Observatory](#) (em português)
- [Mobility Observatory of Belo Horizonte](#) (em português)

Annex A. Original METRODS SDG 11 Framework

TARGET 11.1. By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
1	Housing Deficits	Annual	National Household Sampling Survey (PNAD), Demographic Census	FUNDAÇÃO JOÃO PINHEIRO. CENTRO DE ESTATÍSTICA E INFORMAÇÕES. Déficit habitacional no Brasil 2011-2012. Belo Horizonte, 2015	Total number of people without adequate housing in a given region	Situation of domicile (urban or rural area); Geographical regions; Cities; Metropolitan regions; Family income ranges in minimum wages.	SDG 1, 10	UNDP, PCS
2	Proportion of the population living in subnormal settlements and in other urban areas	Decennial	Demographic Census	Demographic Census 2010 Aglomerados subnormais: Informações territoriais	“Subnormal settlements set consisting of 51 or more housing units characterized by absence of ownership and at least one of the characteristics below: - irregularity of lanes and the size and shape of lots and / or - lack of essential public services (such as garbage collection, sewerage, water network, electricity and public lighting).”	Great regions; States; Metropolitan regions; Municipalities; Districts and census tracts; Specific territorial aspects (urban / rural, topography, urban patterns, density and site characteristics)	SDG 1, 10	UNDP, PCS
3	Percentage of Housing Expenditure in total family budget	2002-2003 and 2008-2009	Household Budget Survey (POF)	IBGE. Pesquisa de orçamentos familiares 2008-2009: despesas, rendimentos e condição de vida. Rio de Janeiro, 2010	Percentage of expenditure on housing in total family budget.	All geographic and socioeconomic strata	SDG 10	UNDP
4	Dwellings with connection to the official water supply network	Annual	PNAD	PNAD Contínua: Rendimentos e características gerais dos moradores e dos domicílios 2012-2016 Previsão de divulgação: Outubro 2017	Percentage of dwellings with official connection to the water supply network over the total number of dwellings in the city.	Situation of dwelling (urban or rural area); Geographical regions; Cities; Metropolitan regions; Family income ranges in minimum wages.	SDG 3, 6, 10	METRODS
5	Dwellings with connection to the official sewage collection network	Annual	PNAD	PNAD Contínua: Rendimentos e características gerais dos moradores e dos domicílios 2012-2016 Previsão de divulgação: Outubro 2017	Percentage of dwellings with official connection to the sewage collection network over the total number of dwellings in the city.	Situation of dwelling (urban or rural area); Geographical regions; Cities; Metropolitan regions; Family income ranges in minimum wages.	SDG 3, 6, 10	METRODS
6	Existence or effectiveness of programs or actions for urban and land regularization	Annual	State and Municipal Governments	State and Municipal Secretariats of Urban Development and Housing	Percentage of dwellings benefiting from urbanization and land tenure regularization actions	City	SDG 1, 10	METRODS
7	Empty dwellings in urban and rural areas	Decennial	Demographic Census	Demographic Census 2010	Percentage of dwellings under construction, to rent or sell, and abandoned	Situation of dwelling (urban or rural area); Geographical regions; Cities; Metropolitan regions; Family income ranges in minimum wages.	SDG 1, 10	METRODS

TARGET 11.2. By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
1	Average time spent from home to work	Annual	PNAD	IPEA. Tempo de deslocamento casa-trabalho no Brasil (1992-2009): diferenças entre regiões metropolitanas, níveis de renda e sexo. Texto para discussão. Brasília; Rio de Janeiro	Average time spent on commuting between the home and the work-place, in minutes.	Cities; Metropolitan regions; Income level; Sex; Other economic variables	SDG 1, 10	UNDP, PCS
2	Annual Cost of Traffic Accidents	Annual, since 2003	IPEA, DENATRAN	"IPEA. DENATRAN. Impactos sociais e econômicos dos acidentes de trânsito nas rodovias brasileiras - relatório	"Subnormal settlements set consisting of 51 or more housing units characterized by absence of ownership and at least one of the characteristics below: - irregularity of lanes and the size and shape of lots and / or - lack of essential public services (such as garbage collection, sewerage, water network, electricity and public lighting)."	Great regions; States; Metropolitan regions; Municipalities; Districts and census tracts; Specific territorial aspects (urban / rural, topography, urban patterns, density and site characteristics)	SDG 1, 10	UNDP, PCS
3	Deaths in transport accidents	Annual, since 1980	DATASUS	Mapa da violência 2014: os jovens do Brasil. Brasília, 2014	Number of deaths in traffic accidents	Regions; UFs and municipality; Age; Sex; Color / Race	SDG 3	UNDP
4	Existence of cycle lanes and exclusive cycle paths	Annual	Local Governments	Transportation Secretariats	Total percentage of the extension of cycle paths and permanent cycle lengths (km) on the total length of roads in the city (km).	City	SDG 3,13	PCS
5	Existence of a system or action to monitor congestion	Annual	Local Governments	Transportation Secretariats	Existence of congestion monitoring system, monitored kilometers and annual congestion index in the city.	City	SDG 13	PCS
6	Existence of exclusive bus corridors	Annual	Local Governments	Transportation Secretariats	Percentage of kilometers (km) of the network of exclusive bus corridors over the total length of the city's streets.	City	SDG 13	PCS

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
7	Existence of a bus fleet with accessibility for people with disabilities	Annual	Local Governments	Transportation Secretariats	Percentage of the bus fleet with accessibility, lowered floor and elevator for people with disabilities, over the total bus fleet.	City	SDG 3	PCS
8	Total transport budget for public transport	Annual	Local Governments	Secretarias de Finanças/Planejamento	Percentage of the city budget destined to public transport on the total budget of the transport area.	City	SDG 1, 10	PCS
9	Weight of the public transport fare in the monthly budget	Annual	PNAD	PNAD Contínua: Rendimentos e características gerais dos moradores e dos domicílios 2012-2016 Previsão de divulgação: Outubro 2017)	Percentage of monthly average income spent on public transportation over average monthly income.	City	SDG 1, 10	PCS
10	Proximity to public transport	Annual	Local Governments	Departments of Urban Development / Planning	Percentage of population living within a radius of up to 300 meters from a public transport station over the total population of the city.	City	SDG 10,13	PCS
11	Access to school transportation	Annual	School Censuses	Secretariats of Education / Transportation	Percentage of children enrolled in schools with access to school transportation free of charge	City	SDG 4,10	PLAN
12	Number of intercity public transport lines	Annual	State Governments	Transportation Secretariats	Total intercity bus lines	City	SDG 10	METRODS
13	Existence of sound signals for crossing pedestrians	Annual	Local Governments	Transportation Secretariats	Total sound crossing signals over the total number of crossing signals Existence of a program or preventive action against harassment in public transportation and of recording occurrences	City	SDG 10	METRODS
14	Existence of effective preventive programs or actions against harassment in public transport	Annual	State and Municipal Governments	Transportation Secretariats		City	SDG 5, 10	METRODS

TARGET 11.3. By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
1	Local Governments with Agenda 21 according to the stage of implementation	Annual	Local Governments	Planning / Government Secretariats	Adoption of Agenda 21 by local governments and implementation stage	City	SDG 17	UNDP
2	Existence and effectiveness of a Participatory Master Plan	Annual	Local Governments	Planning / Government Secretariats	Existence of a Master Plan, in which year it was elaborated, if the revision was made, in which year the revision was made and what participatory mechanisms were used.	City	SDG 17	PCS
3	Existence and effectiveness of a Participatory Integrated Urban Development Plan	Annual	State Governments	Planning / Government Secretariats	Existence of PDUI, in which year it was elaborated and which participatory mechanisms were used.	Metropolitan regions	SDG 17	METRODS
4	Existence and effectiveness of a specific instance or group of integrated planning for SDG monitoring	Annual	State and Municipal Governments	Planning / Government Secretariats	Existence and effectiveness of a specific instance or specific group of integrated planning for SDG monitoring and which participatory mechanisms exist	City	SDG 17	METRODS
5	Existence of public transport by bus with sustainable energy	Annual	Local Governments	Transportation Secretariats	Percentage of collective buses that use sustainable energy systems (electric, hybrid and clean and renewable fuels), over the total collective buses of the municipality.	City	SDG 3,13	PCS
6	Existence and effectiveness of legal instruments of urban policy	Annual	Local Governments	Secretariats of Urban Development and Housing	Existence and effectiveness of the following legal instruments: Code of Works, Urban Perimeter, Zoning, Land Installment, and Code of Municipal Postures	City	SDG 17	METRODS
7	Existence and effectiveness of legal instruments of the Statute of Cities	Annual	Local Governments	Secretariats of Urban Development and Housing	Existence and effectiveness of the following legal instruments provided by the City Statute: Improvement Contribution, Progressive Tax (PTU), Onerous Concession of the Right to Build, Consortium Urban Transactions, Transfer of the Right to Build, Concession of the Real Right of Use, Special Zoning of Social Interest, Special Zoning of Cultural Interest, Special Zoning of Environmental Interest, Installment, Edif. or Compulsory Use, Disappropriation with Payment in Securities, Right of Preemption, and Neighborhood Impact Assessment	City	SDG 17	METRODS
8	Existence and effectiveness of forums for debate (public councils and public hearings) linked to urban policy	Annual	State and Municipal Governments	Secretariats of Urban Development and Housing	Existence and effectiveness of forums for debate (councils, public hearings) linked to urban policy, periodicity of meetings and participatory mechanisms	City	SDG 17	METRODS

TARGET 11.4. Strengthen efforts to protect and safeguard the world's cultural and natural heritage

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
1	Percentage state and local governments with approved legislation and heritage policy in relation to the total of states and cities	Annual (available data for 2012 and to be released for 2013)	"IBGE. Perfil dos estados dos municípios. Rio de Janeiro, 2015	Planning / Government Secretariats	Adoption of Agenda 21 by local governments and implementation stage	City	SDG 17	UNDP
2	Local Governments, total and with specific legislation to address the environmental issue	2001-2014	Local Governments	"IBGE. Perfil dos estados dos municípios. Rio de Janeiro, 2015	Existence of a Master Plan, in which year it was elaborated, if the revision was made, in which year the revision was made and what participatory mechanisms were used.	City	SDG 17	PCS
3	Percentage of public resources for culture	Annual	Courts of Accounts	National, State and Municipal Governments	Percentage of total budget allocated to culture in the three spheres of government	States and cities	SDG 17	METRODS
4	Percentage of public elementary schools with the discipline of Art in the regular school curriculum with emphasis on Brazilian culture, artistic languages and cultural heritage	Annual (available data for 2012 and to be released for 2013)	"IBGE. Perfil dos estados dos municípios. Rio de Janeiro, 2016	UNDP, PCS	Existence and effectiveness of a specific instance or specific group of integrated planning for SDG monitoring and which participatory mechanisms exist	City	SDG 17	METRODS
5	Existence and effectiveness of actions for the preservation, valuation and diffusion of material and immaterial heritage	Annual	State and Municipal Governments	Culture Secretariats	Existence and effectiveness in local government of actions of preservation, valorization and diffusion of the material and immaterial heritage	City	SDG 17	PCS
6	Existence and effectiveness of municipal council of culture and historical heritage	Annual	Local Governments	Culture / Government Secretariats	Existence of specific municipal council of culture and historical patrimony, activities and mechanisms of participation	City	SDG 17	PCS
7	Existence of active public cultural equipment	Annual	State and Municipal Governments	Education / Government Secretariats	Existence of public cultural equipment in operation (theaters, cultural centers, cinemas, museums, arenas, libraries) and number of visits	City	SDG 17	PLAN
8	Existence of actions or affirmative programs of cultural diversity	Annual	State and Municipal Governments	Education / Government Secretariats	Existence and effectiveness of affirmative public actions or programs of cultural diversity (language, dance, clothing, religion, among others)	City	SDG 17	METRODS

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
9	Existence and effectiveness of municipal environmental council	Annual	Local Governments	Environment / Government Secretariats MMA/CNUC. IBGE. Perfil dos estados e dos municípios brasileiros. Rio de Janeiro, 2015	Existence of specific municipal council of environment, activities and mechanisms of participation	City	SDG 6, 13, 14, 15	METRODS
10	New municipal conservation units in the National Register of Conservation Units (CNUC)	Annual	State and Municipal Governments	Environment / Government Secretariats	Percentage of creation of new conservation units in the CNUC	City	SDG 6, 13, 14, 15	METRODS
11	Existence of Municipal Plans for the Conservation and Recovery of the Atlantic Forest (PMMA, Federal Law No. 11.428 / 2006) or another Biome	Annual	State and Municipal Governments	Environment Ministry/Environment Secretariats/ National, State and Municipal Governments	Existence of Municipal Plans for the Conservation and Recovery of the Atlantic Forest (PMMA, Federal Law No. 11.428 / 2006) in the case of cities that fit or for other Brazilian Biomes (Amazon Forest, Cerrado, Caatinga, Mato Grosso Pantanal and Coastal Zone).	City and Biome	SDG 6, 13, 14, 15	METRODS

TARGET 11.5. By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situation

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
1	Deaths due to environmental accidents recorded by Ibama	Annual	Administrative Record	Relatório de Acidentes Ambientais Registrados pelo Ibama em 2014	Number of deaths caused by social and environmental disasters in the city	Risk class; Day period; States	SDG 3, 6, 13, 15	UNDP, PCS
2	Human and material impacts of extreme weather events	Periodically since 1940*	Civil Defense	State Governments	Describe what were the financial and material impacts on the city how many injured and how many dead were recorded.	Kind of event; Day period; State; Type of impact (human or material)	SDG 13, 15	UNDP, PCS
3	Percentage of cities with actions and / or risk management instruments	Período de 2001-2014	Munic	IBGE. Perfil dos estados e dos municípios brasileiros. Rio de Janeiro, 2015	Existence in the city of actions and / or instruments of risk management.	States and cities	SDG 13	UNDP, PCS
4	Hospital admissions for diseases related to inadequate environmental sanitation per 100 thousand inhabitants	Indicadores de Desenvolvimento Sustentável 2013, 2014, 2015 e 2016, 2012-2010-2008-2004	Sihsus	IBGE. Indicadores do desenvolvimento sustentável 2015. Rio de Janeiro, 2015		Disease category; Great Regions; States	SDG 3, 6, 15	UNDP
5	Existence of dwellings in risk areas	Annual	State and Municipal Governments	Housing Secretariats	Percentage of dwellings in risk areas over total dwellings.	City	SDG 13	PCS
6	Municipal Risk Reduction Plan	Annual	Local Governments	Housing Secretariats	Existence and effectiveness in the municipality of risk reduction plan and which participatory mechanisms were used.	City	SDG 13, 17	METRODS
7	Civil Defense	Annual	State and Municipal Governments	Housing/ Government Secretariats	Existence of municipal, regional or state staff in the cities of the Metropolitan Region	City	SDG 13	METRODS

* Depending on the variable.

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
8	Existence and effectiveness of risk prevention actions or programs	Annual	State and Municipal Governments	Housing/ Government Secretariats	Existence and effectiveness of risk prevention actions or programs and participation mechanisms	City	SDG 13, 17	METRODS
9	Existence and effectiveness of early warning system	Annual	State and Municipal Governments	Housing/ Government Secretariats	Existence and effectiveness of early warning system in risk areas in the city	City	SDG 13, 17	METRODS
10	Number of occurrences and disasters due to disasters (without deaths)	Annual	State and Municipal Governments	Housing/ Government Secretariats	Percentage of occurrences and disasters due to catastrophes (without deaths) over the total number of occurrences and disasters	City	SDG 13, 17	METRODS

TARGET 11.6. By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
1	Per capita collection of household solid waste (RDO)	2010-2013	PNIA - Painel Nacional de Indicadores Ambientais	PNIA 2012 – Referência teórico, composição e síntese dos indicadores da versão piloto. Brasília, 2014	Per capita collection of household solid waste (RDO)	NA	SDG 6, 12, 15	UNDP
2	Consumption of ozone-depleting substances (MDGs)	2010-2013	PNIA - Painel Nacional de Indicadores Ambientais	PNIA 2012 – Referência teórico, composição e síntese dos indicadores da versão piloto. Brasília, 2015	Consumption of ozone-depleting substances (MDGs)	NA	SDG 3, 6, 7, 12, 13, 15	UNDP
3	Existence and effectiveness of selective collection service	Annual	State and Municipal Governments	Secretarias de Meio Ambiente/ Governo	Existence, effectiveness, points of collection and scope of the municipal service of selective collection of solid waste	City	SDG 12, 15	METRODS
4	Existence and effectiveness of adequate disposal of solid waste	Annual	State and Municipal Governments	Secretarias de Meio Ambiente/ Governo	Existence of adequate disposal site for solid waste and % of collected waste	City	SDG 12, 15	METRODS
5	Existence and effectiveness of air quality measurement points	Annual	Local Governments	Secretarias de Meio Ambiente/ Governo	Existence, coverage and effectiveness of air quality measurement points	City	SDG 12, 15	METRODS
6	Percentage of deaths from respiratory diseases	Annual	DATASUS	Indicadores e Dados Básicos - Brasil - 2012	Percentage of deaths from respiratory diseases	City	SDG 12, 15	METRODS
7	Existence and effectiveness of recycling plants	Annual	Local Governments	Secretarias de Meio Ambiente/ Governo	Existence of recycling plants and percentage of recycled garbage over total garbage collected	City	SDG 12, 15	METRODS
8	Effectiveness of an Integrated Solid Waste Management Plan, under the terms established in the National Policy on Solid Waste	Annual	Local Governments	Secretarias de Meio Ambiente/ Governo	Existence and effectiveness of an integrated solid waste management plan under the terms established in the National Solid Waste Policy	City	SDG 6, 12, 15	UNDP, PCS

TARGET 11.7. By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
1	Percentage of people who were the victims of robbery or theft in the reference period	2009	"PNAD	PNIA 2012 – Referência teórico, composição e síntese dos indicadores da versão piloto. Brasília, 2014 WASELFISZ, JJ. Mapa da Violência 2014: Homicídios e juventude no Brasil - Atualização 15 a 29 anos. Rio de Janeiro: FLACSO, 2013	Per capita collection of household solid waste (RDO)	NA	SDG 6, 12, 15	UNDP
2	Homicide rate	Annual (since 1980)	Datasus	Secretarias de Desenvolvimento Urbano/Meio Ambiente	Number of people killed and per capita mortality rate (per 100,000 population)	Regions; States and cities; Age; Sex, color / race	SDG 1, 3, 5, 16	PNUD
3	Green area in the urban area	Annual	Local Governments	Secretarias de Desenvolvimento Urbano/Meio Ambiente	Total square meters of public green area per inhabitant and percentage of the population living in a radius of up to 300m of green areas.	City	SDG 10, 15	PCS
4	Existence of reference center or similar for elderly population	Annual	Local Governments	Secretarias de Assistência Social	Existence and effectiveness of reference center or similar for elderly population and number of visits	City	SDG 10	METRODS
5	Existence and Effectiveness of Council of Elderly	Annual	Local Governments	Secretarias de Assistência Social	Existence of specific municipal council of elderly, activities and mechanisms of participation	City	SDG 10	METRODS
6	Accessible side-walks	Annual	Local Governments	Secretarias de Desenvolvimento Urbano/Obras	Percentage of kilometers of sidewalks accessible over the full stretch in kilometers of city sidewalks.	City	SDG 10	PCS
7	Accessibility in public buildings	Annual	Local Governments	Secretarias de Assistência Social	Percentage of public buildings with accessibility	City	SDG 10	METRODS
8	Percentage of squares and parks in urban area	Annual	Local Governments	Secretarias de Desenvolvimento Urbano/Meio Ambiente	Area of squares and parks in m ² in relation to the total area of public green spaces	City	SDG 10, 15	METRODS
9	Existence of free internet access in public spaces	Annual	Local Governments	Secretarias de Administração/ Governo	Percentage of public spaces with free internet over the total of public spaces	City	SDG 9, 10	METRODS

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
10	Underreporting of robbery and theft rate	Annual	State Governments	Secretarias de Segurança Pública	Percentage of underreporting of robberies and thefts	City	SDG 1, 3, 5, 16	METRODS
11	Percentage of victims of rape in public spaces	Annual	State Governments	Secretarias de Segurança Pública	Percentage of victims of rape in public spaces	States and metropolitan regions; Sex / race-color; Social groups; Type of site; Age	SDG 1, 3, 5, 16	METRODS
12	Percentage of children who are victims of violence in schools	Annual	State Governments	"Pesquisa Nacional de Saúde Escolar	Existence and effectiveness of reference center or similar for elderly population and number of visits	City	SDG 10	METRODS

TARGET 11.a. Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
1	Existence of public consortium, partnership agreement, support of the private sector or active communities in the areas of urban development, employment / work, education, health, culture, tourism and environment.	Annual	Local Governments	Government Secretariats	"Percentage of cities with public consortium, partnership agreement, private sector or community support in urban areas, employment / work, education, health, culture, tourism and	NA	SDG 6, 12, 15	UNDP
2	Existence of Metropolitan Governance as established by the Metropolis Statute	Annual	State Governments	Government Secretariats	partnership agreement, support from the private sector or active communities in the areas of urban development, employment / labor, education, health, culture, tourism and the environment."	Metropolitan regions	SDG 10, 17	METRODS
3	Existence and effectiveness of State and Municipal Controllership	Annual	State and local Governments	Government Secretariats	Existence and effectiveness of state and municipal controllership, means of interaction and mechanisms of transparency	State and cities	SDG 17	METRODS

TARGET 11.b. By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

#	Indicator	Periodicity	Database	Source	Description	Disaggregation	Synergies	Source
1	Local Governments with Municipal Environmental Departments	Annual	Local Governments	Environment Secretariats	Existence of Municipal Environmental Departments or similar	City	SDG 15, 16	UNDP
2	Local Governments with Environmental Councils	Annual	Local Governments	Environment Secretariats	Existence and effectiveness of municipal Environmental Council, activities and mechanisms of participation	City	SDG 15, 16	UNDP
3	Number of cities involved in the initial process of implementing Local Agenda 21	"2002, 2009	State and local Governments	Government Secretariats	Existence and effectiveness of state and municipal controllership, means of interaction and mechanisms of transparency	State and cities	SDG 17	METRODS
4	Number of cities with effective plan, program or policy to combat climate change	Annual	Governos Municipais	Environment Secretariats	Percentage of cities with an effective plan, program or policy to combat climate change over the total number of cities of the metropolitan region	City	SDG 13	METRODS
5	Number of cities with effective resilience plan, program or policy	Annual	Governos Municipais	Environment Secretariats	Percentage of cities with effective resilience plan, program or policy over the total number of cities of the metropolitan region	City	SDG 13	METRODS

Annex B. RMBH SDG 11 Indicators

#	Goal	Indicator	Periodicity	Database	Description	RMBH (% of cities)	YES	NO	TOTAL	RMBH (average)	Goal (average)
1	11.1	Existence of programs or actions for urban and land regularization	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	58.30%	7	5	12		38.70%
2	11.1	Number of repossessions in public or private properties unaccompanied of housing solution over total repossessions	Annual	State and Local Governments	Percentage of repossessions in public or private properties unaccompanied of housing solution over total repossessions	11.80%	2	15	17		
3	11.1	Existence of participatory Social Interest Housing Local Plan	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	41.20%	7	10	17		
4	11.1	Existence of participatory Local Housing Council	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	47.10%	8	9	17		
5	11.1	Existence of participatory Local Housing Fund	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	35.30%	6	11	17		
#	Goal	Indicator	Periodicity	Database	Description	RMBH (% of cities)	YES	NO	TOTAL	RMBH (average)	Goal (average)
1	11.2	Existence of cycle lanes and exclusive cycle paths	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	17.60%	3	14	17		38.70%
2	11.2	Existence of a system or action to monitor congestion	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	17.60%	3	14	17		
3	11.2	Existence of a bus fleet with accessibility for people with disabilities	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	52.90%	9	8	17		
4	11.2	Total local transport budget for public transportation	Annual	Local Governments	Percentage of the budget of the municipality destined to public transport over the total budget of the transport area					1.26%	
5	11.2	Number of intercity public transport lines	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	94.10%	16	1	17		
6	11.2	Existence of effective preventive programs or actions against harassment in public transportation	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	17.60%	3	14	17		
7	11.2	Existence of participatory Mobility Local Plan	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	17.60%	3	14	17		
8	11.2	Existence of tariff integration in intermunicipal public transport	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	52.90%	9	8	17		

#	Goal	Indicator	Periodicity	Database	Description	RMBH (% of cities)	YES	NO	TOTAL	RMBH (average)	Goal (average)
1	11.3	Local Governments with Agenda 21 according to the stage of implantation	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	29.40%	5	12	17		48.70%
2	11.3	Existence and effectiveness of a Participatory Master Plan	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	94.10%	16	1	17		
3	11.3	Existence of a Participatory Integrated Urban Development Plan	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed					YES	
4	11.3	Existence of a specific instance or group of integrated planning for SDG monitoring	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	17.60%	3	14	17		
5	11.3	Existence of public transportation by bus with sustainable energy	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	0.00%	0	17	17		
6	11.3	Existence of legal instruments of urban policy	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	100.00%	17	0	17		
		Land Use and Occupancy Law				70.60%	12	5	17		
		Building Code				41.20%	7	10	17		
		City Code/Posture Code				58.80%	10	7	17		
7	11.3	Existence of legal instruments of the Statute of Cities	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	82.40%	14	3	17		
		Onerous Grant of the Right to Build				35.30%	6	11	17		
		Progressive Property Tax				29.40%	5	12	17		
		Consortium Urban Operation				11.80%	2	15	17		
		Transfer of Building Right				23.50%	4	13	17		
		Concession of the Real Right of Use				35.30%	6	11	17		
		Special Zone of Social Interest				41.20%	7	10	17		
		Right of Preemption				29.40%	5	12	17		
		Neighborhood Impact Study				29.40%	5	12	17		
8	11.3	Existence of local forums for debate (public councils and public hearings) linked to urban policy	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	17.60%	3	14	17		

#	Goal	Indicator	Period-icity	Database	Description	RMBH (% of cities)	YES	NO	TOTAL	RMBH (average)	Goal (average)
1	11.4	Existence in the city of specific legislation to deal with the environmental issue.	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	100.00%	17	0	17		74.30%
2	11.4	Existence in state and local governments of specific legislation to deal with the heritage issue	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	82.40%	14	3	17		
3	11.4	Existence of municipal council of culture and historical patrimony	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	88.20%	15	2	17		
4	11.4	Existence of public cultural equipment in operation (theaters, cultural centers, cinemas, museums, arenas, libraries)	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	88.20%	15	2	17		
5	11.4	Existence of actions or affirmative programs of cultural diversity	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	94.10%	16	1	17		
6	11.4	Existence of municipal environmental council	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	94.10%	16	1	17		
7	11.4	New municipal conservation units in the National Register of Conservation Units (CNUC)	Annual	State and Local Governments	Percentage of creation of new conservation units in the CNUC	35.30%	6	11	17		
8	11.4	Existence of Municipal Plans for the Conservation and Recovery of the Atlantic Forest (PIMMA, Federal Law No. 11.428 / 2006) or another Biome	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	11.80%	2	15	17		

#	Goal	Indicator	Period-icity	Database	Description	RMBH			Goal (average)	
						(% of cities)	YES	NO		TOTAL
1	11.5	Existence of dwellings in risk areas	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	76.50%	13	4	17	57.60%
2	11.5	Existence of Local Risk Reduction Plan	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	41.20%	7	10	17	
3	11.5	Existence of Civil Defense	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	76.50%	13	4	17	
4	11.5	Existence of risk prevention actions or programs	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	58.80%	10	7	17	
5	11.5	Existence of early warning system	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	35.30%	6	11	17	
6	11.5	Number of occurrences and disasters due to disasters (without deaths)	Annual	State and Local Governments	Percentual de ocorrências e desastres decorrentes de catástrofes (sem óbitos) sob o total de ocorrências e desastres ocorridos		0	0	294.9166 667	0.7
#	Goal	Indicator	Period-icity	Database	Description	RMBH			Goal (average)	
						(% of cities)	YES	NO	TOTAL	(average)
1	11.6	Existence of selective collection service	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	100.00%	17	0	17	48.00%
2	11.6	Existence of adequate disposal of solid waste	Annual	State and Local Governments	Number of cities with yes response on total number of cities surveyed	47.10%	8	9	17	
3	11.6	Existence of air quality measurement points	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	11.80%	2	15	17	
4	11.6	Existence of recycling plants	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	41.20%	7	10	17	
5	11.6	Existence of an Integrated Solid Waste Management Plan, under the terms established in the National Policy on Solid Waste	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	47.10%	8	9	17	
6	11.6	Existence of programs or actions aimed at waste pickers	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	41.20%	7	10	17	

#	Goal	Indicator	Period-icity	Database	Description	RMBH (% of cities)	YES	NO	TOTAL	RMBH (average)	Goal (average)
1	11.7	Existence of green area in the urban area	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	94.10%	16	1	17		69.10%
2	11.7	Existence of reference center or similar for elderly population	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	82.40%	14	3	17		
3	11.7	Existence of Council of Elderly	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	64.70%	11	6	17		
4	11.7	Existence of accessible sidewalks	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	52.90%	9	8	17		
5	11.7	Existence of accessibility in public buildings	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	70.60%	12	5	17		
6	11.7	Percentage of squares and parks in urban area	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	#DIV/0!	0	0	1,152,287		
7	11.7	Existence of free internet access in public spaces	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	35.30%	6	11	17		
8	11.7	Existence of squares in urban areas	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	100.00%	17	0	17		
9	11.7	Existence of public parks in urban areas	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	52.90%	9	8	17		

#	Goal	Indicator	Period-icity	Database	Description	RMBH (% of cities)	YES	NO	TOTAL	RMBH (average)	Goal (average)
1	11.a	Existence of public consortium, partnership agreement, support of the private sector or active communities in the areas of urban development, employment / work, education, health, culture, tourism and environment.	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	88.20%	15	2	17		51.00%
2	11.a	Knowledge of the existence of Metropolitan Governance as established by the Metropolis Statute	Annual	Local Governments	Number of cities with yes response on total number of cities surveyed	64.70%	11	6	17		
3	11.a	Existence of State and Municipal Control-lership	Annual	Governos Estaduais e Municipais	Number of cities with yes response on total number of cities surveyed	0.00%	0	5	5		

#	Goal	Indicator	Period-icity	Database	Description	RMBH (% of cities)	YES	NO	TOTAL	RMBH (average)	Goal (average)
1	11.b	Percentage of cities with effective plan, program or policy to combat climate change	Annual	Local Governments	Percentage of cities with effective plan, program or policy to combat climate change	11.80%	2	15	17		5.90%
2	11.b	Percentage of cities with effective resilience plan, program or policy	Annual	Local Governments	Percentage of cities with effective resilience plan, program or policy	0.00%	0	1	1		

Annex C. Knowledge Questionnaire

Translated from the original Portuguese

SURVEY in the MUNICIPALITIES: SDG Sustainable Development Goals

(Agenda 2030)

This research is an action of the Scientific Initiation Project of the Newton Paiva Academic Center, a project called: sources of measurement for the uses of the Sustainable Development Goals in the metropolitan areas of Minas Gerais.

This survey aims at understanding the level of knowledge of the municipality and the community about the 2015 Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs).

Although some personal data is required (only to ensure the reliability and security of the responses), this survey will not display or provide any information of users who respond to the questions.

It is intended:

- To verify the level of knowledge on the topic.
- To verify the level of engagement with the Agenda 2030.

Thank you for the attention and if you have difficulties filling out, do not hesitate to send us an e-mail: propicnewtonods11@gmail.com, addressed to Vinícius Turquete. Contact phone number: +55 31 99917-6542.

***Required**

1. Name of municipality:

Profile of the respondent in the municipality: (We want to know a little about you)

2. What is your position in your municipality?

3. Gender *

Mark only one oval.

Male

Female

Other:

4. Age *

Mark only one oval.

- Up to 17 years old
- 18-24 years old
- 25-31 years old
- 32-40 years old
- 41-50 years old
- 51-60 years old
- Over 61 years old

5. Adding your income to the income of the people who live with you, how much is, approximately, your monthly household income? *

Mark only one oval.

- Up to 1 minimum wage (up to R\$ 954,00)
- From 1 to 3 times the minimum wage (from R\$ 954,01 to R\$ 2.862,00)
- From 3 to 6 times the minimum wage (from R\$ 2.862,01 to R\$ 5.724,00)
- From 6 to 9 times the minimum wage (from R\$ 5.724,01 to R\$ 8.586,00)
- From 9 to 12 times the minimum wage (from R\$ 8.586,01 to R\$ 11.448,00)
- From 12 to 15 times the minimum wage (from R\$ 11.448,01 to R\$ 14.310,00)
- More than 15 times the minimum wage (more than R\$ 14.310,01)

6. In which (CITY) do you currently live? *

7. Neighborhood? *

8. And in which street? (with house and apartment/unit numbers) *

Municipal Structure (We want to know the governmental structure of

your municipality)

9. Environment? *

Mark only one oval.

Yes

No

10. If it does not exist, which governmental agency/department substitutes it?

11. Transportation? *

Mark only one oval.

Yes

No

12. If it does not exist, which governmental agency/department substitutes it?

13. Cultural heritage? *

Mark only one oval.

Yes

No

14. If it does not exist, which governmental agency/department substitutes it?

15. Housing and urban development? *

Mark only one oval.

Yes

No

16. If it does not exist, which governmental agency/department

substitutes it?

17. Civil defense? *

Mark only one oval.

Yes

No

18. If it does not exist, which governmental agency/department substitutes it?

Level of knowledge about the MDGs and the SDGs (We want to know a little more of your knowledge about sustainable development)

19. Do you consider yourselves part of the metropolitan area?

Mark only one oval.

Yes

No

Little

I do not know how to respond

20. What public function of common interest is part of your relationship with the metropolitan area?

21. Does your municipality participate in the Metropolitan Council?

Mark only one oval.

Yes

No

Yes, and holds a chair in the Council

22. Does your municipality participate in the GRANBEL (Association of the Municipalities of the Metropolitan Area of Belo Horizonte)?

Mark only one oval.

- Yes
- No
- Yes, and holds a chair
- I do not know
- Other:

23. Does your municipality participate in any Drainage Basin Committee?

Mark only one oval.

- Yes
- No
- I do not know

24. Which one?

25. Do you know what MDG (Millennium Development Goals) means? *

Mark only one oval.

- Yes
- No

26. Do you know what SDG (Sustainable Development Goals) means? *

Mark only one oval.

- Yes
- No

Follow-up on the MDGs: (We want to know about the process of implementation of the MDGs)

27. Has your municipality done any kind of follow-up to the Millennium Development Goals? *

Mark only one oval.

- Yes –Go to question 28.
- No –Go to question 30.

Actions taken to implement the SDGs (We want to know if your municipality has followed the SDGs since its inception)

28. What is/are this/these action(s)? *

29. Which sector is responsible for the action(s)? *

Interaction of the municipality in the SDGs (We want to know about the application of the SDGs in the management investments for this government)

30. Has your municipality elaborated a plan of goals and targets for the 2017-2020 term, incorporating the Agenda 2030 and the SDGs? *

Mark only one oval.

- Yes
- No

31. Does your municipality do any kind of monitoring of the Agenda 2030 through the Sustainable Development Goals? *

Mark only one oval.

- Yes – Go to question 32.
- No – Go to question 34.

Details of the actions for the implementation of the SDGs (Describe at least one action developed by the municipality)

32. What are these actions? *

33. Which sector and who are responsible for the coordination of the action(s)? *

Stop filling out this form.

Implementation of the SDGs/Agenda 2030 (We want to know the level of engagement of your municipality with the Agenda 2030 and the SDGs)

34. Please list the reason why you do not monitor the Agenda 2030: *

Mark only one oval.

- Unfamiliarity with the Agenda 2030 and the SDGs;
- Lack of qualified staff to monitor the Agenda 2030;
- Lack of interest;
- Lack of resources;
- None of the above;
- Other:

Based on the explanation of the importance of the SDGs...(We want to know about the mobilization of your municipality regarding the monitoring of the Agenda 2030 and the SDGs)

35. Is your municipality interested in following and using the SDGs in the planning and monitoring of its actions, goals and indicators? *

Mark only one oval.

- Yes
- No

36. Is your municipality interested in starting to implement the Agenda 2030?

Mark only one oval.

- Yes
- No

Annex D. Municipalities Survey

Translated from the original Portuguese

Municipalities Survey: Indicators of the SDGs for the municipalities of metropolitan areas

This is a research to quantify and qualify the current stage of the SDG's 11th goal in the scope of the research and scientific initiation project "Sources for measuring the goals of sustainable development in the metropolitan areas of Belo Horizonte and Vale do Aço," carried out by the Newton Paiva University Center, in partnership with the Metropolitan Observatory ODS-METRODS, and the 'Nossa BH' Movement (Our BHMovement), with financial support from SDSN.

Additional information on the research: Professor Cláudia Pires -+ 55 31 99917-6542/ propicnewtonods@gmail.com

***Required**

- 1. Email address ***
- 2. Name ***
- 3. Phone number ***
- 4. Municipality***

TARGET 11.1

TARGET 11.1. by 2030, ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums

1. Number of households in the municipality: *

2. Is there a slum in your municipality? *

Mark only one oval

Yes

No

I do not know

2.1. If yes, how many?

3. What is its housing shortage rate? *

4. Is there a PLHIS (Local Plan of Social Interest Housing) in your municipality? *

Mark only one oval

Yes

No

Under review

4.1. If yes, what is the date of approval of the PLHIS?

5. Is there a Municipal Housing Council in your municipality? *

Mark only one oval

Yes

No

In progress

5.1. If yes, is it active?

Mark only one oval

Yes

No

5.1.1 How often does it meet?

5.1.2. What is the date of its last meeting?

6. Is there a Municipal Housing Fund? *

Mark only one oval

- Yes
- No

6.1. Is there a board of directors of the Municipal Housing Fund? *

Mark only one oval

- Yes
- No
- In progress

6.1.2. If yes, the board is:

Mark only one oval

- Advisory
- Deliberative
- Regulatory

6.1.3. Does the housing fund receive municipal funds?

Mark only one oval

- Yes
- No

7. Are there programs, actions or plans for regularization of urban planning and land tenure in your municipality? *

Mark only one oval

- Yes
- No
- In progress or under review

8. Has there been repossession of private property (forcible removal) since the beginning of this government management? *

Mark only one oval

Yes

No

8.1. If yes, how many?

8.2. Of this amount, how many were not accompanied by housing solutions?

9. Has there been repossession of public property with no housing solution (forcible removal)? *

Mark only one oval

Yes

No

9.1. If yes, how many?

9.2. Of this amount, how many were not accompanied by housing solutions?

TARGET 11.2

TARGET 11.2. by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

1. Is there a Municipal Mobility Plan? *

Mark only one oval

Yes

No

1.1. If yes, when was the plan elaborated?

2. Are there cycle tracks and/or exclusive cycle paths in your municipality?*

Total percentage of the extension of cycle paths and permanent cycle tracks (km) on the total length of roads in the municipality (km)

Mark only one oval

Yes

No

2.1. If yes, how many kilometers?

3. Is there traffic congestion in your municipality?

Mark only one oval

Yes

No

4. Is there any kind of action to monitor traffic congestion in your municipality? *

Existence of a traffic congestion monitoring system, monitored kilometers and annual traffic congestion index in the municipality

5. Is there a metropolitan transportation line in your municipality? *

Mark only one oval

Yes

No

5.1. Does the metropolitan transportation have fare integration?

Mark only one oval

Yes

No

There is partial integration

6. Is there a bus-only lane in your municipality? *

Mark only one oval

- Yes
- No
- Under construction

7. Is there an accessible bus fleet (low floor and lift) in your municipality? *

Mark only one oval

- Yes
- No

7.1. If yes, how many fleet vehicles are accessible?

Percentage of fleet buses with accessibility, low floor and lift for people with disabilities on the bus fleet

8. What is the total municipal transport budget (%) for public transport? *

Percentage of the budget of the municipality destined to public transport on the total budget of the transport area

9. Are there audible signals for pedestrians crossing? *

Total audible pedestrian crossing signals on the total number of pedestrian crossing signals

Mark only one oval

- Yes
- No

10. Are there sustainable energy buses in the municipal public transport network? *

Mark only one oval

- Yes
- No

11. Are there effective preventive programs or actions against harassment in public transport in your municipality? *

Existence of a program or preventive action against harassment in public transportation and of occurrence recording

Mark only one oval

- Yes
- No

TARGET 11.3

TARGET 11.3. by 2030 enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries

1. Has the municipality adhered to Agenda 21? *

Adoption of a sustainable development agenda in the municipality?

Mark only one oval

- Yes
- No
- In progress

1.1. If yes:

Mark only one oval

- There are actions still in progress.
- There are not actions in progress.

2. Is there a participatory Master Plan in your municipality? *

Existence of a Master Plan, in which year it was elaborated, if a revision was made, in which year the revision was made, and which participatory mechanisms have been used

Mark only one oval

- Yes
- No
- Under review

3. If yes, what is its date of approval?

4. Is there a specific body or group of integrated planning for monitoring the SDGs in your municipality? *

Existence and effectiveness of a specific body or group of integrated planning for SDG monitoring and what participatory mechanisms exist

Mark only one oval

- Yes
- No
- In progress

5. Does the municipality have the following legal instruments of urban policy in line with its Master Plan? *

Mark only one oval

- Building Law
- Land Use and Occupancy Law
- Municipal Code

6. The Master Plan includes: *

Mark only one oval

- Onerous grant of the right to build
- Progressive IPTU (municipal property tax)
- Urban Operation Consortium
- Transfer of Development Rights
- Grant for Real Right of Use

- Special Zones of Social Interest (ZEISs)
- Right of Pre-emption
- Neighborhood Impact Study (EIV)

7. Does it have an Urban Policy Council? *

Existence and effectiveness of forums for debate (councils, public hearings)
connected to urban policy

Mark only one oval

- Yes
- No

7.1. If yes, how often does the council meet?

7.2. What is the date of its last meeting?

7.3. The council is:

Existence and effectiveness of forums for debate (councils, public hearings)
connected to urban policy

Mark only one oval

- Advisory
- Deliberative
- Regulatory

TARGET 11.4

TARGET 11.4 strengthen efforts to protect and safeguard the world's
cultural and natural heritage

**1. Does the municipality have specific legislation on cultural heritage
approved? ***

Mark only one oval

- Yes
- No

2. Does it have a Cultural Heritage Council or similar body? *

Mark only one oval

Yes

No

2.1. If yes, how often does the council meet?

2.2. What is the date of its last meeting?

3. Is there an inventory of cultural heritage? *

Mark only one oval

Yes

No

4. Is there a Culture Council?*

Mark only one oval

Yes

No

4.1. If yes, how often does the council meet?

4.2. What is the date of its last meeting?

5. Is there a Municipal Fund for Culture? *

Mark only one oval

Yes

No

5.1. Is there a board of directors of the Municipal Fund for Culture? *

Mark only one oval

Yes

No

5.1.2. If yes, the council is:

Existence and effectiveness of forums for debate (councils, public hearings)

connected to urban policy

Mark only one oval

- Advisory
- Deliberative
- Regulatory

5.1.3. Does the fund for culture receive municipal funding?

Mark only one oval

- Yes
- No

6. Are there actions for preservation of places listed as cultural heritage? *

Mark only one oval

- Yes
- No

7. Does it have active municipal public cultural places? *

Existence of public cultural equipment in operation (theaters, cultural centers, cinemas, museums, arenas, libraries) and number of visits

Mark only one oval

- Yes
- No

7.1. If yes, how many municipal public cultural places are in operation? *

Existence of public cultural equipment in operation (theaters, cultural centers, cinemas, museums, arenas, libraries) and number of visits

Mark only one oval

- Yes
- No

8. Do you have actions or affirmative action programs for cultural diversity? What are they?*

Check all that apply

- Language
- Dance
- Clothing
- Religion
- Other:

9. Does the municipality have specific environmental legislation approved? *

Mark only one oval

- Yes
- No

10. Does it have an Environment Council? *

Existence of specific municipal council of environment, activities and mechanisms of participation

Mark only one oval

- Yes
- No

10.1. How often does the council meet?

10.2. What is the date of its last meeting?

11. Does it have Municipal Conservation Units (protected territories) listed in the National Register of Conservation Units (CNUC)? *

Mark only one oval

- Yes
- No
- In progress

11.1. If yes, how many have been created since 2015? *

12. Does it have green spaces in the urban area? *

Total square meters of public green area per inhabitant and percentage of the population living in a radius of up to 300m of green spaces

Mark only one oval

Yes

No

12.1. What is the total in square meters? *

13. Does it have squares in the urban area? *

Mark only one oval

Yes

No

13.1. If yes, what is their area in square kilometers? *

14. Does it have parks in the urban area? *

Area of squares and parks in square meters in relation to the total area of public green spaces.

Mark only one oval

Yes

No

14.1. If yes, what is their area in square kilometers? *

TARGET 11.5

TARGET 11.5. By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

1. Are there Municipal Conservation and Recovery Plans for the Atlantic Forest (PMMA, Federal Law 11.428 / 2006) or for another biome in your municipality? *

Existence of Municipal Plans for the Conservation and Recovery of the Atlantic Forest (PMMA, Federal Law 11.428 / 2006) in the case of municipalities that have other Brazilian biomes (Amazon Forest, Cerrado, Caatinga, Mato Grosso Pantanal and Coastal Zone).

Mark only one oval

- Yes
- No

1.1. If yes, what is its date of approval?

2. Are there risk management actions and / or instruments? *

Mark only one oval

- Yes
- No

3. Are there households in high-risk areas? *

Mark only one oval

- Yes
- No

4. Is there a municipal Risk Reduction Plan? *

Existence and effectiveness of a risk reduction plan in the municipality and the mechanisms of participation employed

Mark only one oval

- Yes
- No

4.1. If yes, what is its date of approval?

5. Is there a Civil Defense team in the municipality? *

Existence of municipal, regional or state staff in the municipalities of the metropolitan area

Mark only one oval

Yes

No

6. Does the municipality have risk prevention actions and programs? *

Mark only one oval

Yes

No

7. Does the municipality have an early warning system? *

Mark only one oval

Yes

No

8. What is the number of occurrences and disasters due to catastrophes (without deaths) since 2015? *

Percentage of occurrences and disasters due to catastrophes (without deaths) under the total number of occurrences and disasters - If not stated, "not applicable" will be the answer

9. What was the number of deaths in disasters due to catastrophes since 2015? *

Percentage of occurrences and disasters due to catastrophes under the total number of occurrences and disasters - If not stated, "not applicable" will be the answer

TARGET 11.6.

TARGET 11.6. by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management

1. Is there a solid waste collection service in the municipality? *

Existence, effectiveness, points of collection and scope of the municipal service of selective collection of solid waste

Mark only one oval

Yes

No

Other:

1.1. If yes, what is the frequency of this collection?

1.2. What is the average (monthly) volume collected?

2. Is there a selective waste collection service in the municipality? *

Existence, effectiveness, points of collection and scope of the municipal service of selective collection of solid waste

Mark only one oval

Yes

No

Other:

2.1. If yes, what is the frequency of this collection? *

2.2. What is the average (monthly) volume collected? *

3. Are there recycling plants or similar in the municipality? *

Existence of recycling plants and percentage of recycled garbage over total garbage collected

Mark only one oval

Yes

No

4. Are there programs or actions aimed at informal garbage collectors in the municipality? *

Existence and effectiveness of programs or actions aimed at collectors, including number of visits

Mark only one oval

Yes

No

5. Does the municipality have any arrangements to dispose of solid waste? *

Mark only one oval

Yes

No

5.1. What type of solid waste disposal does the municipality have? *

Mark only one oval

Open dump

Sanitary landfill

Controlled landfill

Other:

6. Does the municipality have an Integrated Solid Waste Management Plan, in accordance with what is established in the National Solid Waste Policy? *

Existence and effectiveness of an integrated solid waste management plan under what is established in the National Solid Waste Policy

Mark only one oval

Yes

No

In progress

6.1. If yes, what is its date of approval?

7. Are there air quality measurement points in the municipality? *

Existence, coverage and effectiveness of air quality measurement points

Mark only one oval

Yes

No

TARGET 11.7.

TARGET 11.7. by 2030, provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities

1. Is there a reference center or similar for the elderly population in the municipality? *

Existence and effectiveness of a reference center or similar for the elderly population and number of visits

Mark only one oval

Yes

No

2. Is there a Council of Elders in the municipality? *

Existence and effectiveness of the Council of Elders, periodicity of meetings and participation mechanisms

Mark only one oval

Yes

No

2.1. How often does the council meet?

2.2. What is the date of its last meeting?

3. Does the municipality have accessible sidewalks? *

Percentage of kilometers of accessible sidewalks over the full extension in kilometers of city sidewalks

Mark only one oval

Yes

No

3.1. If yes, what is the total extension of accessible sidewalks? *

Percentage of kilometers of accessible sidewalks over the full extension in kilometers of city sidewalks

4. Are municipal public buildings accessible? *

Percentage of accessible public buildings

Mark only one oval

Yes

No

4.1. What types of accessibility do they have? *

(This question allows more than one answer)

Mark only one oval

Ramp

Lift

Tactile paving

Braille signs

Adapted toilets

Other:

5. Is there free internet access in public spaces? *

Mark only one oval

Yes

No

5.1. If yes, identify the location: *

Percentage of public spaces with free internet on the total of public spaces

Mark all that apply

Square

Park

Other:

TARGET 11.a

TARGET 11.a. support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

1. Does the municipality have public consortium, partnership agreement, support of the private sector or active communities in the areas of urban development, employment / work, education, health, culture, tourism and the environment? *

Public consortium, partnership agreement, private sector or community support in the areas of urban development, employment / labor, education, health, culture, tourism and the environment

Mark only one oval

Yes

No

2. Are you aware of the Metropolitan Governance body as established by the Metropolis Statute? *

Existence of effective metropolitan governance composed of State and Municipal Governments, as well as representatives of civil society and participation mechanisms

Mark only one oval

- Aware
- Not aware

3. Is there a State Controllership Department in the municipality? *

Existence and effectiveness of state and municipal controllership, means of interaction and mechanisms of transparency

Mark only one oval

- Yes
- No

4. Is there a Municipal Controllership Department? *

Existence and effectiveness of state and municipal controllership, means of interaction and mechanisms of transparency

Mark only one oval

- Yes
- No

TARGET 11.b.

TARGET 11.b. By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line

with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

1. Does the municipality have an effective plan, program or policy against climate change? *

Effective plan, program or policy against climate change

Mark only one oval


Yes

No

1.1. If it is a plan, when was it established? *

Effective plan, program or policy against climate change

Annex E. Presentation: SDG in Action Project Results




Research Project SDG IN ACTION

Preliminary Results
November 2018

Prof. Claudia Pires

ABLE DEVELOPMENT
NS NETWORK
FOR THE UNITED NATIONS



METRODS
OBSERVATÓRIO METROPOLITANO ODS

Newton
Quem se prepara, não para.

NossaBH

AGENCIA DE DESENVOLVIMENTO
DA REGIÃO METROPOLITANA
DE BELLO HORIZONTE

MGI
Ministério do Planejamento e Gestão

Governo do Estado de Minas



2030 Agenda for Sustainable Development

1 Agenda **5** Areas **17** Objectives **169** Goals **240** Indicators

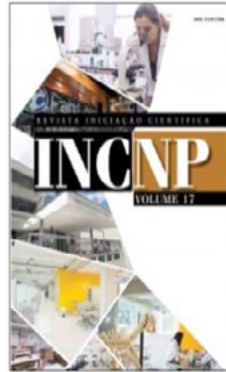
1 NO POVERTY 	2 NO HUNGER 	3 GOOD HEALTH 	4 QUALITY EDUCATION 	5 GENDER EQUALITY 	6 CLEAN WATER AND SANITATION 
7 RENEWABLE ENERGY 	8 GOOD JOBS AND ECONOMIC GROWTH 	9 INNOVATION AND INFRASTRUCTURE 	10 REDUCED INEQUALITIES 	11 SUSTAINABLE CITIES AND COMMUNITIES 	12 RESPONSIBLE CONSUMPTION 
13 CLIMATE ACTION 	14 LIFE BELOW WATER 	15 LIFE ON LAND 	16 PEACE AND JUSTICE 	17 PARTNERSHIPS FOR THE GOALS 	 THE GLOBAL GOALS For Sustainable Development

Connecting the New Urban Agenda and the SDGs: (re)thinking UN-Habitat's role **UN-HABITAT** FOR A BETTER URBAN FUTURE

University Newton Paiva

Courses: Architecture and Urbanism, Civil Engineering, Psychology, Sociology, Geography, Health and Communication Sciences

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PROJECT OBJECTIVE



The main objective of the proposed research project is to measure the level of commitment of municipalities from the **Metropolitan Area of Belo Horizonte (RMBH)** to the **Sustainable Development Goal #11 - Sustainable Cities and Communities**, through the use of **METRODS** methodologies and set of indicators.

RMBH



5 873 841 inhab. (IBGE 2016)
34 cities
HDI: 0,774 (UNDP 2010)
Density: 640, 20 inhab/km²
9 467,797 km²



METRODS

METROPOLITAN SDG OBSERVATORY

To influence public policies and actions by civil society which accelerate multi-sector implementation of SDG 11 in metropolitan regions in Brazil, by developing a robust network that develops, monitors and evaluates localized indicators, and provides a platform for the exchange of knowledge among its members.

PROJECT ACTIVITIES



1. Sensitization and mobilization
2. METRODS SDG #11 indicators review
3. Questionnaires and SDG #11 data collection
4. SDG #11 data analysis.

SENSITIZATION AND MOBILIZATION MATERIALS

ODS EM AÇÃO CIDADES SUSTENTÁVEIS

I ENCONTRO PÚBLICO DO PROJETO DE PESQUISA

Fontes de aferição dos níveis das metas de Desenvolvimento Sustentável nas Regiões Metropolitanas de Minas Gerais

LOCAL: SALA 203 - NEWTON PAIVA CAMPUS BURTIS I RUA: JOSÉ PAULO REZENDE, 420. ESTORIL HORÁRIO: 15h às 18h DIA: 14/04/2018

Newton
Quanto melhor, mais perto

METRO ODS
OBSERVATÓRIO DE INDICADORES DO ODS

INFORMAÇÕES
projeto@metroods.org.br
telefone: 011-3003-6542
@metroods

ODS EM AÇÃO CIDADES SUSTENTÁVEIS

Fontes de aferição dos níveis das metas de Desenvolvimento Sustentável nas Regiões Metropolitanas de Minas Gerais

II ENCONTRO PÚBLICO PESQUISA ODS NOS MUNICÍPIOS DA RMBH

Proposição: Avaliação dos Níveis das Metas do ODS 11 nas Regiões Metropolitanas de Minas Gerais
Objetivo: Apresentação dos Resultados e Discussão com os Municipios
Modo: Sistema de trabalho com municípios locais de pesquisa Metropolitanas de Minas Gerais

Local de Inscrição: Sala 203 - Newton Paiva - Campus Burtis I - Rua José Paulo Rezende, 420 - Estoril - Belo Horizonte - Minas Gerais

Informações: projeto@metroods.org.br / www.metroods.org.br

Local: Auditório Newton Paiva - Rua José Paulo Rezende, 420 - Estoril - Belo Horizonte - Minas Gerais

Resistência: **Newton METRO ODS**

Néscia D'Alva

ARQUS
ARQUITETURA CONSULTORIA E PROJETOS

ODS EM AÇÃO CIDADES SUSTENTÁVEIS

PARTICIPE DESSA INICIATIVA SUSTENTÁVEL

Estimamos que você seja uma pessoa com ideias novas e paixão por fazer a diferença. Queremos que você participe da Pesquisa sobre o ODS 11. Compartilhe de sua participação. Pesquisa sobre o ODS 11

Newton Paiva
Néscia D'Alva
ARQUS

Newton METRO ODS

Néscia D'Alva

ARQUS
ARQUITETURA CONSULTORIA E PROJETOS

MEETINGS



QUESTIONNAIRES

ODS-PRELIMINAR-MUNICIPIOS

PESQUISA nos MUNICÍPIOS: ODS Objetivos do Desenvolvimento Sustentável- (Agenda 2030)

Tudo associado a uma ação do Projeto de Iniciação Científica do Centro Acadêmico Newton Paiva, projeto de Desenvolvimento Sustentável. Fontes de aferição dos níveis das metas de Desenvolvimento Sustentável nas Regiões Metropolitanas de Minas Gerais.

Este projeto tem por finalidade entender o grau de conhecimento dos municípios e da comunidade acerca dos ODS 2011 e Objetivos do Desenvolvimento Sustentável.

Apesar de solicitado alguns dados pessoais (igreja com o título de garantia e confiabilidade e segurança nas respostas), a pesquisa possui um sistema de formatação que garante a privacidade dos usuários que responderem sua pesquisa.

Plataforma: www.metroods.org.br

Pesquisa ODS para os municípios

Pesquisa Municípios: Indicadores dos ODS

Esta é uma pesquisa para quantificar e qualificar o estágio atual das metas do ODS 11 no âmbito do projeto de

Endereço de e-mail *

Endereço de e-mail válido

Este formulário contém informações de e-mail: atendimento@metroods.org.br

Informações

Endereço de e-mail *



FIELD VISITS

QUESTIONNAIRES: DIFFICULTIES

APPLICATION OF 2 QUESTIONNAIRES

Support of the RMBH Development Agency

Questionnaire #1: Knowledge Survey - 22 of 38 answers

Visits by researchers: 3

Questionnaire #2: SDG #11 focused - 17 of 34 responses

Visits by researchers: 3

DIFFICULTIES

- Difficulty of contact with the Municipal Director;
- Absence of readability of the local administrative structure contacted and visited;
- Lack of knowledge of the subject;
- No continuity of follow-up MDG/SDG; 53.8% know what MDG is and 65% SDG/ 65.4% do not follow Agenda 2030 and 30% do not know about it;
- Political moment (June to September- electoral scenario).

	Município	Q1	Q2	População 2016	Área (km ²)	PIB 2013 (milhões R\$)
1	Baldim	s	s	8.061	556,3	73,5
2	Belo Horizonte	s	s	2.513.451	331,4	81.426,70
3	Betim	s	s	422.354	343,7	22.493,70
4	Brunadinho	s	s	38.373	630,4	2.974,60
5	Caeté	s	s	44.066	542,6	530,2
6	Capim Branco	s	s	9.609	95,3	87,4
7	Confins	s	s	6.545	47,4	955,2
8	Contagem	s	s	653.800	195,3	24.239,50
9	Esmeraldas	s	s	60.133	909,5	482,8
10	Florestal	s	s	7.778	191,4	75,6
11	Ibirité	s	s	175.721	72,6	1.679,10
12	Igarapé	s	s	40.460	110,3	1.096,30
13	Itaguara	s	s	13.253	410,5	179,6
14	Itatim	s	s	10.882	295,1	1.683,60
15	Jaboticatubas	s	s	19.305	1.115,00	152,8
16	Juatuba	s	s	25.490	99,5	909
17	Lagoa Santa	s	s	60.787	229,3	1.440,30
18	Mário Campos	s	s	14.811	35,2	126
19	Mateus Leme	s	s	30.423	302,7	567,2
20	Matãozinhos	s	s	37.040	252,3	888,4
21	Nova Lima	s	s	91.089	4,9	9.551,70
22	Nova União	s	s	5.792	171,5	51,2
23	Pedro Leopoldo	s	s	63.406	292,9	1.582,30
24	Raposo	s	s	16.312	72,2	127,5
25	Ribeirão das Neves	s	s	325.846	155,5	2.871,30
26	Rio Acima	s	s	10.026	229,8	204,3
27	Rio Manso	s	s	5.730	231,5	61,8
28	Salvador	s	s	135.196	307,7	1.987,40
29	Santa Luzia	s	s	217.610	235,3	3.160,30
30	São Joaquim de Bicas	s	s	29.674	71,6	539,3
31	São José da Lapa	s	s	22.592	47,9	448,3
32	Sarzedo	s	s	30.478	62,1	794,8
33	Taquaraçu de Minas	s	s	4.053	329,2	42
34	Vespasiano	s	s	120.510	71,2	2.331,20
	RMBH			5.278.144	9.471,70	4.876,76

QUESTIONNAIRES

The **22 municipalities** that answered the **Knowledge Questionnaire** represent 65% of the total, 4,571,165 inhabitants (87% of the total population), 6,744 km² (71% of the total of the RMBH) and 87% of the GDP of the RMBH. The **17 municipalities** that responded to the **SDG #11 Questionnaire** represent 50% of the total, 3,690,596 inhabitants (70% of the total population), 4,961 km² (52% of the total area) and 70% of the GDP of the RMBH.

KNOWLEDGE QUESTIONNAIRE: MAIN RESULTS

Do you know what the MDGs mean?	Do you know what the SDGs mean?	Has your municipality done any follow-up on the MDGs?	Has your municipality developed a Plan of Goals (2017-2020) incorporating Agenda 2030/SDGs?	Does your municipality do any kind of monitoring of the Agenda 2030 through SDGs?
59%	73%	27%	45%	41%

SDG #11 QUESTIONNAIRE: MAIN RESULTS

SDG #11 Goals		Goal (average)	Effort
11.1	By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	38,70%	LOW
11.2	By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older	38,70%	LOW
11.3	By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	48,70%	LOW
11.4	Strengthen efforts to protect and safeguard the world's cultural and natural heritage	74,30%	HIGH
11.5	By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	57,60%	MEDIUM
11.6	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	48,00%	LOW
11.7	By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	69,10%	MEDIUM
11.a	Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	51,00%	MEDIUM
11.b	By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels	5,90%	VERY LOW

Annex F. SDG in Action Project Datasheet

UNIVERSITY NEWTON PAIVA

Dean: João Paulo Barros Beldi

Research and Extension Coordinator: Prof. Leonardo F. C.R. Santos

Coordinator of Scientific Initiation: Prof. Cinthia Pacheco

Architecture Course Coordinator: Prof. Rodrigo Figueiredo Reis

Civil Engineering Course Coordinator: Urias Eduardo Bistene Cordeiro

Project Coordinator: Prof. Cláudia Teresa Pereira Pires

Smart Campus Coordinator: Prof. Andrea Abrahão Santanna

Collaboration: Prof. Fernando Pacheco

Students: Alice Medeiros, Ana Eliza Araújo Moura, César Gugkielmi, Francisco Gabriel Macedo Araújo, Guilherme Eduardo C. Matoso, Guilherme Tell, Gustavo Caravelli, Jessica Rick, Maria Luiza Maia Araújo, Scarlet Karem, Vinícius Franklin Custódio and Vinícius Turquete.

Graphic Designers: Ana Eliza Araújo Moura and Francisco Gabriel Macedo Araújo

METRODS

Project Coordinator: Cid Blanco Jr

NOSSA BH MOVEMENT

Administrative Coordinator: Guilherme Tampieri

Data Analysis: Marcelo Amaral

Researchers: Ana Eliza Araújo Moura, Guilherme Tell, Jessica Rick, Kaode Biague and Vinícius Turquete

RMBH DEVELOPMENT AGENCY (Institutional Support)

General-Director: Flavia Mourão

Assistant: Nísio Miranda

ARCHITECTURE AND URBAN PLANNING COUNCIL (Institutional and Financial Support)

National Council President: Antonio Luciano de Lima Guimarães

Special Commission on Urban Planning and Environment Coordinator:

Wilson Fernando Vargas de Andrade

Minas Gerais Council President: Danilo Silva Batista

PROJECT PARTNERS (Representatives from Social Movements)

Alma Livre, Associação Comunitária Habitacional Popular, Associação Comunitária Social Cultural Desportiva, Associação dos Moradores do Bairro Coração Eucarístico e Região, Associação dos Usuários do Transporte Coletivo da RMBH, Associação Milan Galo Social, Associação Morada de Minas Gerais, Associação Nossa Cidade, Associação Pro Moradia Nova Cachoeirinha, Centro de Documentação Eloy Ferreira da Silva, Convenção Batista Mineira, Médicos de Cristo Belo Horizonte, Movimento das Associações de Moradores de Belo Horizonte, Movimento Lagoinha Viva, Movimento Nacional de Luta pela Moradia, Movimento Sou Luziense, Núcleo Habitacional Central do Estado de Minas Gerais, Projeto Com-Paixão. Projeto Oficial Criança Bom de Bola Bom na Escola, Sindicato das Empresas de Transportes de Carga do Estado de Minas Gerais, and Um Pé de Biblioteca.

ENDNOTES

1. There are no metropolitan governments in Brazil. At the metropolitan level in the country, there's only a governance system (councils) to debate planning and investments. Governors and mayors are still the authority of their own territories.
2. The UN World Food Programme Hunger Map features countries that have more than 5 percent of the population ingesting fewer calories than recommended. The list of countries is updated based on the previous year's official data provided by the UN countries.
3. <https://www.conversaafiada.com.br/brasil/jb-risco-de-o-brasil-voltar-para-o-mapa-da-fome-e-enorme>.
4. Established in May 2017, before the UN High Level Political Forum, the National Commission on Sustainable Development Goals (CNODS in Portuguese) is a joint collegial body of advisory nature. Its purpose is to monitor, internalize and disseminate the process of implementing the 2030 Agenda. CNODS is composed by representatives from civil society—specialists in sustainable development dimensions and with a recognized contribution to the cause—local and state governments associations, and national government representatives.
5. Among the 34 cities of RMBH, only Belo Horizonte has a local [Observatory](#) in its government structure that monitors and evaluates public policies regarding the City of Belo Horizonte and the SDG targets that it has established.

6. For further information about METRODS, see: "[Metropolitan Planning and Governance in Brazil: how the use of SDG data can help to deliver better results in public administration.](#)"

7. RMBH has historically been the most organized metropolitan area in Brazil. Therefore, the Statue of the Metropolis, approved in 2015, was based on work developed there. Since then RMBH's legislation, governance, and plan have also inspired the reformulation of most of the main Brazilian metropolitan areas.

8. The Integrated Development Master Plan (PDDI in Portuguese), also known as the Greater Belo Horizonte Metropolitan Plan, is a long-term plan for promoting sustainable development in the RMBH, reconciling economic growth, social equity, and environmental sustainability with an emphasis on territorial reordering capable of reducing socio-spatial inequalities. The time horizon considered was 2023.

9. The Metropolitan Development Fund (FDM in Portuguese) aims to finance the implementation of structural programs and projects and the realization of investments related to public policies of common interest in the RMBH, according to guidelines established by the Metropolitan Plan.

10. Alice Medeiros, Ana Eliza Araújo Moura, César Gugkielmi, Francisco Gabriel Macedo Araújo, Guilherme Eduardo C. Matoso, Guilherme Tell, Gustavo Caravelli, Jessica Rick, Maria Luiza Maia Araújo, Scarlat Karem, Vinícius Franklin Custódio, and Vinícius Turquete.

11. Professors Claudia Teresa Pereira Pires (project coordinator), Rodrigo Figueiredo Reis (architecture course coordinator), Fernando Pacheco, and Andréa Santana (Smart Campus coordinator).

12. See METRODS' SDG 11 Indicators Framework in Annex A.

13. Movimento Nossa BH integrates the international network of civil society initiatives that monitor and evaluate public services to force transparency and better use of public resources.

14. Alma Livre, Associação Comunitária Habitacional Popular, Associação Comunitária Social Cultural Desportiva, Associação dos Moradores do Bairro Coração Eucarístico e Região, Associação dos Usuários do Transporte Coletivo da RMBH, Associação Milan Galo Social, Associação Morada de Minas Gerais, Associação Nossa Cidade, Associação Pro Moradia Nova Cachoeirinha, Centro de Documentação Eloy Ferreira da Silva, Convenção Batista Mineira, Médicos de Cristo Belo Horizonte, Movimento das Associações de Moradores de Belo Horizonte, Movimento Lagoinha Viva, Movimento Nacional de Luta pela Moradia, Movimento Sou Luziense, Núcleo Habitacional Central do Estado de Minas Gerais, Projeto Com-Paixão. Projeto Oficial Criança Bom de Bola Bom na Escola, Sindicato das Empresas de Transportes de Carga do Estado de Minas Gerais, and Um Pé de Biblioteca.

15. Cid Blanco, Jr. (METRODS) and Professor Claudia Teresa Pereira Pires (University Newton Paiva) coordinated the SDG in Action project.

16. Movimento Nossa BH team involved in the project: Guilherme Tampieri, Marcelo Amaral, and Kaode Biague.

17. Metropolitan Agency team involved in project: Flavia Mourão (General-Director) and her assistant Nísio Miranda.

18. Translated versions of the questionnaires can be found in Annexes C and D.

