#### UNEP GEF PIR Fiscal Year 2022

Reporting from 1 July 2021 to 30 June 2022

# **1. PROJECT IDENTIFICATION**

# 1.1. Project details

Identification Table		GEF ID: 9142	Umoja no.: S1-32GFL-000613, P1-33GFL-001332, P1-33GFL- 001337, P1-33GFL-001364. Project structure number SB- 009923.	
Project Title		Promoting Sustainable Cities in Brazil through integrated		
Duration	Planned	48 months		
months		Until October 2023		
Division(s) Impler project	menting the	Climate Change Mitigation Unit, Energy and Climate Branch, Economy Division		
Executing Agency	(ies)	Ministry of Science, Tech in cooperation with UNE	hnology and Innovations (MCTI), P Brazil Office	
Names of Other Project Partners		Digital Port Management Center – NGPD / ARIES Centre for Strategic Studies and Management - CGEE Sustainable Cities Programme - SCP Environment Secretary of the Federal District of Brasilia – SEMA/EDG		
Project Type		Full Size Project		
Project Scope		National		
Region		Latin America and Caribbean		
Countries		Brazil		
Programme of Work		Programme of Work 2022-2023, climate action subprogramme		
GEF Focal Area(s)		GEF-6 IAP Sustainable Cities		
UNSDCF / UNDAF linkages		UNDAF Brazil 2017-2021, Outcome 3: Strengthened institutional capacity to promote and implement coherent public policies for the sustainable management of natural resources and ecosystem services, and for combating climate change and its adverse effects.		
Link to relevant SDG target(s) and SDG indicator(s)		SDG goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable. 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 11.2.1: Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities. 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 11.6.1: Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated by cities.	
GEF financing amo	unt	US\$ 22,635,780	
Co-financing amou	nt	US\$ 195,650,658	
Date of CEO Endors	sement	January 6, 2017	
Start of Implementation		April 2018	
Date of first disburs	ement	April 2018	
Total disbursement as of 30 June 2022		15,765,342	
Total expenditure as of 30 June 2022		12,855,025	
Mid-Term Review Date		December 2020 - March 2021	
Completion Date	Planned	April 2022	
	Revised	October 2023	
Expected Terminal Evaluation Date		October 2023	
Expected Financial Closure Date		October 2024	

#### 1.2. Project description

The project aims to develop innovative technical solutions and offer methodologies and tools for integrated urban planning to support public officials, foster citizen participation and promote more just and sustainable cities. It is built upon three components:

#### Component 1: Integrated Urban Planning

Knowledge building and tools for integrated administration of public policies and social participation towards sustainable cities in Brazil, piloted by Brasilia and Recife. Promoting innovative systems accessible to public officers and citizens, to support, facilitate and strengthen local governance. In Brasilia, the component strengthens the environmental Information System (SISDIA), the local environmental and climate regulations and public participation. In Recife, it supports integrated and participatory long-term plans – Recife 500 years, plans for housing and climate sectors and develops an integrated management system (IMS) for the local government.

#### Component 2: Investments in innovative technologies

Test pilot projects in Brasilia and Recife to face historical challenges of the population and the public administration in the fields of water, solid waste, energy, climate change and mobility. The results will provide a blueprint to be replicated on a large scale around the country. In Brasilia, best practices for spring's preservation and land restoration are being implemented, as well as the development and dissemination of models of photovoltaic energy. In Recife, the urban interventions tackle active mobility and the sustainable use of public space, including a filtering garden.

#### Component 3: Platform for sustainable cities

Virtual spaces to support and promote integrated and sustainable public administration. There are two platforms being built at a national level. The Sustainable City Innovation Observatory (SCIO) and the new Platform of the Sustainable Cities Program (PCS). The cooperation between these platforms aims to build competences, generate, and register knowledge, and mobilize local decision makers towards sustainable and integrated urban planning solutions.

#### 1.3. History of project revisions

Version	Date	Main changes introduced in this revision
Rev0 (CEO ED)		
RevA (CEO ED)	30 January 2019	Changes to CGEE SCIO deliverables of output 3.5

# 2. OVERVIEW OF PROJECT STATUS

2.1. UNEP Subprogramme(s)	
Programme of work 2020-2021, sub-programme	Specify the relevant Expected
1: climate change.	Accomplishment(s) & Indicator(s) (b) Countries increasingly adopt and/or implement low greenhouse gas emission development strategies and invest in clean
	(i) The number of countries supported by
	UNEP that make progress in adopting and/or
	implementing low greenhouse gas emission
	development plans, strategies and/or policies
Through this project Brazil has made progress in investi	ng in clean technologies in Posife and Brasilia

Through this project Brazil has made progress in investing in clean technologies in Recife and Brasilia. Brasilia has advanced in piloting phytoremediation techniques to rehabilitate contaminated soils of the Estrutural rubbish dump (once the largest open landfill in Latin America) and mechanized agro-forestry in its drinking water catchments. Recife has advanced on preparing pilots for urbanizing the banks of the Capibaribe river and developing a filtering garden. Both aim to promote the river as a low-emission form of transport.

Through the work of Sustainable Cities Programme (PSC) in Sao Paulo and the Centre for Management and Strategic Studies (CGEE) in Brasilia, the project is supporting Brazilian municipalities to strengthen capacity for developing, adopting, and implementing low greenhouse gas emission development plans, strategies and policies. Concretely, PCS is encouraging municipalities to incorporate the sustainability aspects into their political agendas for city development. Currently there are 247 signatory cities, including some of the biggest cities in Brazil: Sao Paulo, Rio de Janeiro, Salvador, Recife, Curitiba, Campinas, and Belem. CGEE has worked to develop an online pilot of the project's sustainable city innovation observatory (SCIO), which now has 257 solutions and 355 case studies mapped considering the following themes: urban mobility; energy; constructed environment; water; solid waste; and nature-based solutions.

#### 2.2. GEF Core Indicators (for all GEF 6 and later projects):

GEF Core Indicators	Indicat	tive expected Results

Moderate progress was made towards these indicators. On biodiversity, implementation of plantations to recover Permanent Protection Areas (PPA) and spring water aquifer areas took place in 70 hectares in rural areas, in addition to the actions of 10 hectares in ecological parks that took place previously. Furthermore, there was the implementation of good practices on 20 hectares of land due to communal work related to mechanized agro-forestry for the Brasilia water-catchments. On GHG reductions, in this period the project executing agencies focused on designing their interventions and contracting agents for implementing them. Substantive progress on these indicators is expected for the project's fifth year.

Indicator	Project targets
Improved management of landscapes and seascapes	415 hectares
120 million hectares under sustainable land management	80 hectares
750 million tons of CO2e mitigated (include both direct	3,802,710 metric
and indirect)	tons

#### 2.3. Implementation status and risk

	FY 2019	FY 2020	FY 2021	FY 2022
PIR #	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
Rating towards				
outcomes (section	S	S	MS	MS
3.1)				
Rating towards outputs (section 3.2)	MS	MS	MS	MS
<b>Risk</b> rating (section 3.3)	М	М	М	М

The project advanced moderately satisfactorily towards the outcome indicators during the reporting period. <u>Rating towards outcomes:</u>

**For outcome 1**, actions of the SEMA and of ARIES are involving stakeholders and public managers and are satisfactory rated. The District Environmental Information System (SISDIA) has been accessed by more than 23 local agencies and its data was used to set recommendations for the local master plan for land use and urban development (PDOT) regulations. Cooperation agreements with legislative and executive government institutions are being established to guarantee the usability and sustainability of the system. Currently sectoral strategies are under development to impact public policies. Through the Decree 43,413, from June 2022, establishing the Neutral Carbon Plan of the Federal District, and the District Determined Contribution (CDD), the local government strengthens the institutional arrangement necessary for the insertion of the Federal District in the Framework of the Paris Agreement, and assumes the commitment to reduce greenhouse gas emissions. The FDG adaptation and mitigation plans, including an emission reduction target developed by the project were the basis for the Decree signed. The last local pluri-annual plan (PPA) was not influenced by the adaptation and mitigation plans, since they were finalized recently, but SEMA is working to have next pluri-annual plan influenced be the project's actions and studies.

In Recife, advances were registered regarding the development of the Integrated Management System (IMS) and its functionalities, but the use of the system by the Municipality of Recife is restricted to the Executive Secretariat of Parque Capibaribe, at the Secretariat of Economic Development, Science, Technology, and Innovation (SDECTI). The Technical, Economic and Environmental Feasibility Study (EVTEA) for social housing was developed with a close participation of local public managers and is already being used by the municipal government, as the basis for a social rental housing public-private partnership (PPP). The involvement of representatives of the Municipality of Recife in every deliverable of the CITinova contributed to ensure government's political support for and policy alignment with project activities.

**For the outcome 2**, related to the pilot projects, the progress was rated as marginally satisfactory. Mobilization actions were carried out in the basins of the Paranoá and Descoberto rivers, with signatures of the Sustainability Pacts, but lacking the expected territorial coverage. The actions in the landfill are showing an overall reduction of 59% ton/day of waste disposal, and 18% of reduction from last report, from 4.352 ton/day (2021) to 3.584 ton/day.

In Recife, the governance structure of the project with the current city administration is organized and the Recife Municipality is involved in the deliveries of the project. However, high costs and complexity that led to delays and to a shorter time for monitoring the results jeopardize the replicability of the pilots. A new proposal for active mobility – pedestrian and bicycle bridges over Capibaribe River, Travessias – was submitted and approved, following identification that the proposed solar boat pilots would be unfeasible. The city has issued a letter of commitment to build the two bridges. The filtering garden construction has started and the contract for implementation of the riverbank urbanization areas are to be signed, however, extremely heavy rains in the city are causing negative impact on construction.

**On outcome 3**, PCS is partnering with municipality associations at several levels (national, state, and regional) as a new strategy, with great success, to disseminate the platform. With 246 signatory cities, 171 additional to the 75 previously reported, 67 cities have a diagnose based on the indicators and 183 cities were trained to work with the tools and methodologies available at the integrated urban planning module. PCS also trained technicians from 69 cities on tools and methodologies on integrated urban planning available at the platform and offered 12 courses on sustainable development related topics. Actions of the project towards

influencing federal public policies and local managers were rated as marginally satisfactory. SCIO is a functional and populated platform, but as it is, information may not be useful to city managers and some functionalities, especially the interactive map, unfriendly to users. A review of content process is underway along with improvements of the system, before the implementation of a outreach strategy to cities managers.

Rating towards outputs (implementation progress):

#### **Component 1**

The overall progress of Component 1 is rated as marginally satisfactory. Both Brasilia and Recife are advancing reasonably well in the delivery of some activities, but delays and difficulties are still compromising the achievement of results within the proposed deadline, even with the extension granted of 8 months for Brasilia and 12 months for ARIES.

Brasilia launched phase 2 of SISDIA which involves the development of 3 specialized modules. The status of implementation, considering the deadline, is still a point of concern since the company hired was unable to fulfil the contract and a new company will have to be hired. Trainings to use SISDIA were held, with 132 people trained during the reporting period. The Technical Chamber of Climate held meetings for implementation of climate strategies and SEMA also mobilized citizens towards implementation of public environmental policies through a series of events. Adaptation and mitigation studies were delivered, however studies related to sectoral emissions and to the implementation of financial mechanisms and economic instruments for environmental services and carbon market in DF has not started yet.

The Recife 500 Years Plan is updated and delivered with significant social participation. The Panel of Indicators for Recife 500 Year is lacking a content review. ARIES is advancing to deliver of the Sectoral Adaptation Plan accordingly, and the micro stations to monitor water and air conditions are delayed due to importation of parts. The Technical, Economic and Environmental Feasibility Study (EVTEA) for social housing is finished, to be published, and already with a very positive impact on municipal strategies for social housing planning.

#### Component 2

In general, the progress of this component is rated as marginally satisfactory.

For Brasilia, component 2 overcame pandemic difficulties and the progress is considered marginally satisfactory. SEMA completed the remediation project of the "Lixão da Estrutural" dumpsite, started the creation of CSA (Community Supported Agriculture) networks and continued the maintenance and monitoring of the restoration areas with native vegetation. A change request to install the photovoltaic panels in parks instead of schools, with a governance and management arrangements that would attend public buildings, was approved, however, execution is delayed due to slow procurement process at CGEE.

In Recife, the implementation progress is marginally satisfactory. The studies about the solar boat that indicated its unfeasibility were delivered and the project implementation early concluded. A new project - Travessias was approved and started, with the active involvement of municipal agencies for its development. The urbanization of Capibaribe riverbanks suffered delays due to adjustments required by the premature conclusion of the solar boat project, however, construction is about to be hired. The construction of the filtering garden started, but extremely heavy rains and excessive garbage found on the filtering gardens soil are impacting the constructions work.

#### **Component 3**

The progress of component 3 of the project is rated as marginally satisfactory.

PCS progress is satisfactory. The platform of PCS was maintained and improved. The modules and guides to private sector partnership and academic collaboration and the module of events were launched. The remaining modules and guides are completed, under final testing. PCS started a data collection to run a second round of the Cities Sustainable Development Index including all the 5.570 Brazilian municipalities. PCS also developed capacity building workshops and training courses that involved more than 180 cities. Direct actions successfully mobilized mayors and politicians. PCS offered courses for mayors at the National Academy of Public Administration which also resulted in new accessions. SCIO is promoted at the main page of PCS and at its best practice module. To each best practice at PCS, user can access related solutions at SCIO. At SCIO, at each solution related best practices at PCS are linked.

For the SCIO, implementation in the last period was marginally unsatisfactory. The focus of SCIO in the reporting period was to plan and start the platform dissemination, especially for municipal users. Processes at CGEE were delayed, impacting project deliverables. CGEE and the coordination of SCIO went through managerial changes, which also brought some delays on the execution of the project. A search interface to

find solutions by type was improved and the content of case studies and solutions available at the platform are under review regarding the quality of the information and adherence to the themes. As it is, the content and the system itself are not ready to be shared with the cities. PCS and SCIO developed and implemented a joined action plan to disseminate the platforms.

#### Risk rating:

The overall risk of the project was identified as moderate.

#### Management and political risks

Federal and state elections with changes in political leadership may weakens project support or leads to changed priorities affecting relationship with other Ministries, particularly with the Ministry of Regional Development, in considering the project knowledge development to improve urban public policy. At the local level of the project, SEMA is more sensitive to changes resulting from the elections. Recommendation is to ensure a transition with meetings and projects data and information availability.

#### Brasilia risks

To face the risk regarding the Sustainable Pact target, SEMA should prepare and carry out an action plan focusing on the related component 2 indicator. To implement and assess results of the photovoltaic energy pilot by the end of the project, SEMA will review this activity workplan and budget, while implementing some routine follow up within CGEEs administrative work.

In order to ensure full delivery of planned activities, a budget revision is needed to consider unforeseen expenditures with tax. SEMA will identify and prepare a strategy to minimize possible negative impact of project budget shortage on project's results. SEMA will also make efforts that SISDIA and other project's actions are maintained by a new government, if a political change occurs, with transition meetings and availability of data and information.

#### **Recife risks**

The decision of the Municipality of Recife on the use of ArcGIS tool led to weak involvement of the municipality in the development of IMS and to a system that may not be useful or sustainable to the city. ARIES will deliver the system to the Capibaribe Secretariat and plan an engagement and mobilization strategy to show the final system in action, to other municipal secretariats. To encourage the use of IMS data, IMS and ArcGIS will exchange information through API.

Recife is facing extreme high rains, which affected the undergoing construction of the filtering garden. Garbage found at earthmoving negatively impacted the structural solution of the filters. To ensure the delivery of a functional filtering garden, ARIES will present a report on the damages, potential solutions and impact on budget and timeline of the project. Environmental study about the garbage and possible soil and water contamination will be provided. The revision of project's workplan and budget will ensure that monitoring of field actions is properly provided with dissemination of its results. It is expected that the Municipality of Recife will monitor and share data of pilot projects after project ends.

#### SCIO risks

The SCIO was developed to serve, mainly, public managers in search for technological solutions for urban challenges. Two university institutions were hired to improve data of solutions and case studies in the platform. To present a more useful tool to the cities, CGEE will establish a consultative group to assist SCIO's effective delivery, with monthly meetings and the outreach for city managers will occur after incorporation of changes.

The complexity of the typology map and technical language also represents an obstacle for SCIO usage by city managers. The map tool, language, and terminologies will be revised.

In order to ensure full delivery of planned activities, a budget revision is needed. Like SEMA, SCIO needs to consider unforeseen expenditures with tax, identifying and preparing a strategy to minimize possible negative impact of project budget shortage on project's results.

Delays in advancing of SCIO development and lack of sustainability plan complicates its incorporation into SIS+CGEE will prepare a strategy for sustainability of SCIO after project ends and another strategy for facilitating the migration of SCIO do SIS+, including the identification of actions and costs.

#### 2.4. Co-financing

Planned Co-finance Total: 195.650.658	Brasília, Recife and PCS applied more than the planned co-finance amount
Total. 195,050,058	with actions regarding the construction of an integrated recycling complex at

	the landfill in Brasilia, sanitation infrastructure at the Capibaribe River in Recife
Actual to date	and continuous improvements of PCS. MCTI has invested on cutting edge
\$ 254,081,307, 130% of	research through its partner agencies.
total	

Stakeholder	The four partners held meetings, workshops, and seminars with the aim of
engagement	The four patients field meetings, workshops, and seminats with the affit of greater engagement of public bodies, institutions, and project beneficiaries. SEMA carried out thematic activities, during the Cerrado Week (2021), in different locations in Brasilia with the participation of more than 3 thousand people. A significant participation was also registered on the Water Week and The Environment Week, in 2022, with more than one thousand people among students, civil society and public managers. Also focusing on students, the implementation of a pilot project on rainwater harvesting system in a school was discussed with the Secretary of Education. SEMA attended 40 meetings on climate change with the Brazilian Association of Environmental State Entities (Abema) and held two training courses for rural producers on CSA and plantation maintenance, in addition to organizing five meetings of the CITinova Local Committee. SISDIA maintained its ability to articulate with the signature of technical cooperation agreements and availability of data from the databases coming from more than 18 governmental organizations. In Recife, Aries main stakeholders were involved on the elaboration of the Strategic Plan for Medium and Long Term for Recife with special discussions on a vision for the future. The organizations, about the pandemic impact on cities. Tools for implementing the social housing policy focusing on gender and other vulnerable groups were made available and the housing policy was discussed in alignment meetings with third sector organizations working on the housing issue. Recife municipality was involved in the departments of Planning and Management, Housing and Environment. Two MCTI-UNEP institutional missions (Oct. 2021 and Feb. 2022) were held in the period, which helped keeping public actors involved and aware of the project's development.
	The Sustainable Cities Program adopted new mobilization strategies that resulted in significant advances, such as an increase in the number of signatory cities, partnerships with inducing agents such as state governments, regional municipal entities, and Courts of Auditors. A new mobilization campaign was launched in the period to publicize the Sustainable Development Index of Cities to attract new cities to the PCS. In September, PCS formalized a partnership with the Paraná State Government, Paraná Municipality Association (AMP), and other institutions, for the implementation of the SDGs in the 399 municipalities of the State, through the platform. A partnership with Maranhão State and the Court of Auditors is to be signed, and other partnerships with states of Rondônia, São Paulo, Alagoas, Ceará and Pernambuco are under negotiation. The PCS formalized a cooperation with the National Front of Mayors (a municipal entity that brings together more than 450 medium and large cities), to encourage Brazilian municipalities to use the PCS Platform and the Sustainable Cities Development Index (IDSC) as tools for implementing the 2030 Agenda and the SDGs, in addition to improving public management, with an emphasis on integrated urban planning. A new partnership with the Brazilian Association of Municipalities, for regional mobilization and training actions, also contributed for the rise on use of the platform. The SCIO is engaged in disseminating its tools and achieving greater visibility with the project's target audience. To this end, in addition to being present with the Sustainable Cities Program (PCS) in events in the states of Paraná (PR), Pernambuco (PE) and Santa Catarina (SC) to present its tools and content, the SCIO visited the cities of Campinas (SP), Belo Horizonte (MG), Serra (ES) and Curitiba (PR). Together with the Urban Bio Connection Alliance (Fundação o Boticário, Global Compact Network Brazil, ILCLEI, WRI Brazil Brazilian Platform for Biodiversity and Ecosystem Services - BPBES and The Nature Conser

#### 2.5. Stakeholder engagement

International Seminar on SbN with the presence of the Ministry of Regional
Development (MDR) and the National Confederation of Municipalities (CNM) as
speakers. In particular, the SCIO began its dissemination strategy in partnership
with ICLEI (Local Governments for Sustainability) to promote training and
awareness activities for managers in the use of the SCIO platform.

#### 2.6. Gender

Gender mainstreaming	Gender responsive measures have been adopted by CITinova partners in surveys, field actions, events, indicators definition, and in contractual clauses that value gender parity adopted by ARIES. ARIES also adopted the practice of approaching a higher percentage of women in the various opinion polls on the impacts of the pandemic and measures for the future, to better assess issues that directly impact the lives of families. The location and environmental criteria for the development of the social housing tools were fundamental to define the five location arrangements for the development of operational and legal institutional models. Women's vulnerability such as dangerous access, lack of public lighting, among others were considered. SEMA-GDF offered six virtual and one face-to-face workshops on gender and water. Aimed mainly at the residents of the Descoberto and Paranoá basins impacted by CITinova actions, these workshops focused on water resources protection policies in the Federal District and were attended by 127 people from that region and other states. The participation of women was also prioritized in the 2 community-supported agriculture - CSA courses, with 25 women out of the 33 participants. The two CSA networks supported by the project are led by women.
	The PCS highlights its work with municipal governments for the creation of the Municipal Commission for SDGs and the Target Plan, one of the commitments assumed by the signatory mayors of the PCS. Recommendations are for this commission to be consultative and assure equal participation of public authorities, civil society, and with gender equality. On the mobilization of female politicians PCS organized a webinar on global agendas and sustainable cities for approximately 60 mayors of the PSDB and the first meeting with approximately 20 female mayors of the National Front of Mayors. Woman in politics is a front of action of PCS with Instituto Alziras. A permanent dialogue is kept with political parties, especially with those that have a letter of commitment with the PCS, on that issue. The SCIO, in addition to address the issue of gender through its thematic indicators, considers gender parity in all events organized. In the period of the report, a highlight must be given to the panel "Women and Nature-Based Solutions", at the SbN International Seminar, that had female speakers to talk about their experiences, projects, and women's mobilization in sustainability area.

#### 2.7. Environmental and social safeguards management

Environmental and social safeguards management	Actions that promote positive social and environmental impacts in Recife, were related to the presentation of the Technical, Economic and Environmental Feasibility Study (EVTEA) for social housing to social movements active on the social housing thematic. The study aims to help reducing 20% of the housing deficit. As a compensation measure related to the urbanization delivery of the project, more trees will be planted at Caiara Park. Finally, during the construction of the filtering garden, soil with garbage was identified in the excavations. The project is hiring complementary environmental studies about the soil and the potential of waste pollution to deliver to Recife municipal government.
	In Brasilia, the project promotes food security for families on the implementation of mechanized agroforestry systems, with tools adapted for female use, and on the support of two community-supported agriculture networks (CSA). The condition of work for the waste-pickers was improved with the closure of the "Lixão da Estrutural" (landfill) and the installation of garbage sorting shed as projects co-financing action. Additionally, SCIO provides geographic and statistical information in an Information System and on Panels that allow users and partners of the project to consult information that can serve as inputs for the

monitoring of urban density, CO2 emissions, climate zones, areas subject to
flooding, among others.

#### 2.8. Knowledge management

Knowledge activities	In March, the project promoted a workshop with co-executing partners, on the
and products	In March, the project promoted a workshop with co-executing partners, on the synergy of the platforms. Two integration workshops were carried out in February and May 2022, with the objective of exchanging information and experiences seeking to disseminate, among partners, the knowledge generated in the CITinova Project. SEMA prepared the Knowledge Management Plan, with goals for the systematization of pilots, lessons learned and governance arrangements. The implementation of the plan involved the systematization of four pilot initiatives, three public policies and three governance arrangements related to actions supported by the project. The Recife Agency for Innovation and Strategy (ARIES) used, for knowledge management, the space of the national platform – Observatory of Innovations for Sustainable Cities (SCIO), where the lessons learned in the execution of deliveries are being systematized, in addition to the production of content for communication about the deliveries of the CITinova Recife Project. Through alignment meetings with CITinova partners about the development and functionality of the different platforms, ARIES identified possible exchanges between the IMS and the other platforms under development. Another important articulation was the presentation of CITinova products to INSPER (Education and Research Institute) to identify the possibility of another institution.
	or contributions to the institution. Between July 2021 and June 2022, the Sustainable Cities Program, under the CITinova Project, finished production and launched three modules: Partnerships with the Private Sector, Academic Collaborations and Events. Two thematic guides were also launched alongside the modules on private sector partnerships and academic collaborations. Brazil is the only country that will monitor the 2030 Agenda implementation for all its municipalities (5.571) through the Sustainable Development Index of Cities (IDSC-BR). During the period, activities were carried out to select indicators, collect data, calculate the index and update the website. The launch of the 2022 edition of IDSC-BR is scheduled for the beginning of July 2022. In this period, PCS also delivered integrated urban planning workshops to managers and technicians from 183 municipalities, which allows them to work with the tools and methodologies available in the SCP's Integrated Urban Planning modules. The trainings ensured the expansion of the number of cities that advanced with their diagnoses based on the indicators, from 20 to 67 cities, with emphasis on the capitals Rio de Janeiro (72%), Salvador (135%), São Paulo (55%) , Curitiba (136%), Teresina/PI (40%), Rio Branco/AC (34%) and the cities: Abaetetuba/PA (369%), Santos/SP (213%), Campinas/SP (159%) , Born Despacho/MG (216%), Maringá/PR (132%), Mundo Novo/MS (178%), Serra Talhada (70%) and Caruaru/PE (82%). The percentages are related to the number of indicators being used by the cities, based on a minimum of indicators required by PCS, according to its inhabitants. Around 20 new best practices were identified and included in the PCS database.
	To finalize, the SCIO made available a series of indicators, typologies and Geo biophysical data collected by its geographic information system (SigWeb), in interactive panels, aiming to facilitate access and monitoring of users through graphs and tables. The Typology Map Usage Guide was updated to a simpler and more accessible language and is available next to the Map, as well as the new functionalities, such as the display of metadata, export and import of data and the inclusion of an automated bot that helps the user in the search for solutions through the Map. During this period, the SCIO also produced information for the local scale of the project's pilot cities: Brasília and Recife, aiming to support the pilot cities in monitoring information. SCIO also held webinars to disseminate its platform and started a round of events with municipalities to collect recommendations for improving the environment. In the period in question, SCIO made available ten executive summaries related to the mapped topics. The solutions at the platform are undergoing content review and the estimate is that the inclusion of new content will take place on the second half of 2022.

#### 2.9. Stories to be shared

Stories to be shared	At SEMA, the actions of the CITinova Project for the climate agenda subsidized the guidelines of the Brazilian Association of State Environment Entities (Abema), in the structuring of actions to face climate change, so that other Brazilian states can, from these experiences, structure their climate policies. The work in Brasília contributed to projections, inventory, mitigation and adaptation plans, becoming an example to be followed by other subnational entities. Brasília also established the Neutral Carbon Plan of the Federal District, and the District Determined Contribution (CDD) through Decree 43,413, signed in June 2022. The GDF assumes a commitment to reduce greenhouse gas emissions below 2013 emissions levels of 20% by 2025 and 37,4% by 2030. From 2030, the law further establishes revisions of CDD, every five years, upscaling the ambition and aiming to reach zero net emissions during the second half of the century. In the of Recife, managers of the city requested the Technical, Economic and Environmental Feasibility Study (EVTEA) developed by the project, in order to include it to the process of contracting a social housing rental PPP, carried out with Caixa Econômica Federal bank. The EVTEA represents a set of technical analysis that includes several stages prior to the executive project of an enterprise. It proposes social inclusion through decent housing, legal innovations, sustainable architectural solutions, and adaptable and replicable models. Therefore, this request from the Recife managers is quite relevant, both in terms of strengthening the relationship with public management itself, and in the progent of the order and the order protect developed and the diameter.
	the recognition of relevance of the products developed and the alignment with the city's housing policy. As for the Sustainable Cities Program (PCS), it is worth highlighting the experience of the city of Santos (SP), which has been a signatory to the program since 2012. Based on the renewal of the commitments signed by the current Mayor, an amendment to the Organic Law of the Municipality was approved to include mandatory and permanent public policies until 2030, which represented a great advance for the city, since it transforms the challenges and the implementation of the sustainable development agenda into mandatory public policies. Caruaru (PE) also stood out by integrating all its policies based on the integrated planning methodology created by PCS. Currently, the city has legislation that obliges the elected or re-elected mayor to present sustainability goals in a participatory way and to build the Inequality Map of the municipality. Finally, the Observatory of Innovations for Sustainable Cities (SCIO), of the Centre for Management and Strategic Studies (CGEE), presented new functionalities in its geographic information system (SigWeb), with the objective of facilitating access to the results available online. Improvements in the tool include metadata associated with indicators, typologies and Geo biophysical data, new possibilities for search filters, and consultation of solutions and locations, among others.

# 3. PROJECT PERFORMANCE AND RISK

#### 3.1 Rating of progress towards achieving the project outcomes

Project objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2022	Progress rating
<b>Objective:</b> To promote sustainability in Brazilian Cities through integrated urban planning and innovative technologies	# of cities that join the Sustainable Cities Programme and adopt an enhanced goal plan with SDG indicators	0	N/A	EPT:300	<ul> <li>As of 30 June 2022: 247</li> <li>PCS has established partnerships with inducing agents to expand the number of signatory cities. The actions in progress have the potential to expand to 465 municipalities. Currently PCS has: <ul> <li><u>247 signatory cities</u> - including 15 capital cities (among them, São Paulo, Rio de Janeiro, Belém, Curitiba, Maceió, Recife, Salvador, João Pessoa, Teresina and. Florianópolis).</li> <li>20 new municipalities have passed SDG target laws, including the capital of Paraná, Curitiba, totaling 82 municipalities with such laws passed.</li> </ul> </li> <li>PCS is offering a tool for all Brazilian cities to overcome the challenges of implementing the 2030 Agenda, by the launch of the Sustainable Cities Development Index – IDSC-BR. Brazil is the first country to make data of all municipalities (5.570) available, related to the SDG and its goals aiming to monitor the 2030 Agenda implementation</li> </ul>	HS

Project objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2022	Progress rating
Outcome 1B: A comprehensive evidence-based integrated and sustainable planning approach is adopted by Brasilia	# of secretaries out of the 10 that use SISDIA for at least 50% of their planning or zoning decisions	0	N/A	EPT:5	<ul> <li>As of 30 June 2022: 23</li> <li>SISDIA was used by more than 23 local agencies, in addition to 10 federal and district social organizations such as CREA (regional engineering and agronomy council), Fape (farming federation in DF) and Fibra (industry federation in DF):</li> <li>Information from SISDIA served as basis for the elaboration of a technical note from the Undersecretariat of Environmental and Territorial Management on the review of the Plano Diretor de Ordenamento Territorial - PDOT/GDF (Federal District master urban plan) with recommendations.</li> <li>To make SISDIA's data available and support the decisions of government agencies, contracts such as Technical Cooperation Agreements (ACT) and Ordinances were and are being formalized:</li> <li>3 formalized ACTs (TJDFT, DF Legal and University of Brasilia).</li> <li>6 contracts under analysis (Adasa, Caesb, Department of Highways of the Federal District - DER, Brasília Environmental Institut - IBRAM, Secretariat of Economic Development - SDE, Secretariat of Urban Development and Housing - Seduh, Undersecretary of Information and Communication Technology - Sutic)</li> <li>A special ACT with the Federal Court of Auditors and Legislative Chamber for the "E-normas" – an expert module of SISDIA about laws and regulations, was negotiated and is about to be signed.</li> </ul>	HS

Project objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2022	Progress rating
	Mitigation and adaptation plans and regulation of Climate Bill elaborated and approved with the incorporation of a revised target reduction of emissions.	0	N/A	EPT:1	As of 30 June 2022: 1 The Adaptation Plan and Mitigation Plan have been completed, including an emission reduction target. The Climate Change Policy, District Law No. 4,797/2012, which establishes principles, guidelines, objectives, goals and strategies for the Federal District to face climate change was improved by the <u>Decree 43,413</u> , signed in June 2022 which strengthens the institutional arrangement necessary for the insertion of the Federal District Determined Contribution (CDD), the GDF assumes a commitment to reduce greenhouse gas emissions to society and reaffirms the relevance of the theme as a guiding line of sustainable development in the Federal District. The Decree establishes the reduction of greenhouse gas emissions below 2013 emissions levels of 20% by 2025 and 37,4% by 2030. From 2030, the decree further establishes revisions of CDD, every five years, upscaling the ambition and aiming to reach zero net emissions during the second half of the century. It sets new responsibilities for Sema and the DF Environment Council, which are strengthened to coordinate the review and approval of government planning instruments on the subject.	HS
					Sectoral articulation to implement a strategy for the adoption of climate plans recommendations involves other GDF secretariats and was initiated during the reporting period. This articulation takes place in the Technical Chamber of Climate Change, using participatory processes with main sectors identified. The dialogue with these sectors will serve as the basis for the implementation of the Federal District's Climate Change Policy and the need for additional instruments can be considered, if identified.	

Project objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2022	Progress rating
	% of the 2020-2024 Pluri-	0	N/A	EPT: 30%	As of 30 June 2022: 0%	MS
	Annual Plan - PPA (in R\$) impacted by the adaptation and mitigation				The target of the indicator is unfeasible because climate studies started after the deadline for preparation of PPA 2020-2024.	
	plans				This indicator was intended to ensure that adaptation and mitigation plans were incorporated as government actions with resources in the PPA. The plans were delivered in 2021 and SEMA was not able to direct resources to this end during PPA elaboration, in 2019, or mobilize other partner institutions to do so. Once the Pluri-Annual Plan is prepared, goals can be adjusted, which was done, reflecting strengthened articulations from 2021 onwards with the Technical Climate Chamber. However, due to budgetary limitations, it was not possible to ensure financial resources. Ten new targets related to climate plans were included in the PPA 2020-2024 in mid-2021. The GEF project is financing studies that will technically support the preparation of the PPA 2024-2027, such as the diagnosis of	
					climate issues, and the strategy for transport and mobility.	
Outcome 1R:	% of decisions taken by	0	MPT: 5%	EPT: 30%	As of 30 June 2022: 0%	MU
A comprehensive evidence-based integrated and sustainable planning approach is adopted by Recife				The IMS is not yet operational. During the reporting period the following progress was registered, towards this project outcome: Identification and survey of data to be integrated to IMS, research with city managers on user experience, alignment of functionalities and integration requirements with other tools used by the city and definition of the municipality focal point to monitor the development of the system.		
					As a strategy to deliver the IMS and to enhance its adoption by SDECTI (Secretariat of Economic Development, Science, Technology, and Innovation), its Executive Secretariat of the Parque Capibaribe is participating actively in the identification of functionalities necessary for finalizing the platform and the analysis of data for decision making.	

Project objective and Outcomes	Indicator Baseline I	Indicator	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2022	Progress rating
The city uses the Housing Resilient	development plan Presults of the Policy and ce Strategy	he city development plan ses the results of the ousing Policy and esilience Strategy	N/A	EPT: 100%	<ul> <li>As of 30 June 2022: 80%</li> <li>The Municipal Government of Recife is involved in the entire process of elaboration of the housing (Housing Department) and climate studies (Environment Department) of the project, in order to promote debate and facilitate the city's adoption of the instruments developed. The housing studies are almost finished, but the climate studies are delayed. Some highlights are:</li> <li>Recife Sectoral Adaptation Plan (PASR) presentation at three meetings of GECLIMA/CONCLIMA (instances of management and coordination of climate actions between municipal institutions) in July and October 2021, and February 2022.</li> <li>Meetings for the development of the PASR involving municipal, state and third sector public actors as follows: 10 meetings with secretariats or institutions linked to City Hall; 03 State Government organization; URBANA PE, Digital Port, totaling the participation of 23 representatives of important bodies in sectorial meetings.</li> <li>Feasibility Study for Social Housing for Recife (EVTEA) presentation to other departments to enhance the study (Planning Department and ICPS – Instituto da Cidade Pelópidas da Silveira).</li> </ul>	S

Project objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2022	Progress rating
Outcome 2B: Cities investments demonstrate the benefits resulting from integrated and sustainable planning in Brasilia	% of the 179,660 hectares of the Descoberto and Paranoá watershed under the Sustainability Pact	% of the 179,660 hectares 0 N/A EP of the Descoberto and Paranoá watershed under the Sustainability Pact	EPT: 80%	As of 30 June 2022: N/A During project execution it was discovered that the achievement of this indicator, although desirable, is beyond what can be achieved through the project. This is due, in part, to a disconnect between the GEF-financed project activities and this indicator and its target – the project activities don't lead to possible achievement of this indicator Furthermore, the area defined by the indicator refers to the entire Descoberto and Paranoá basins, including urbanized areas (i.e. residential, commercial and industrial zones, as well as transport infrastructure, which would not easily join a pact - or legally could not be required to). That said, the project partners have continued to maintain the indicator as an aspirational target, as it aligns with GDF broader objectives to conserve the watersheds.	MU	
					As result of the project 100 hectares are under Sustainability Pact, meaning that 80 ha of Permanent Preservation Areas (APPs) of springs, watercourses, and recharge areas in the Descoberto and Paranoá Basins are being restored with native vegetation and mechanized agro-forestry system was adopted in 20 ha of productive area. A diagnosis for the identification of areas to be restored was developed for 91 thousand hectares. The study in the two river basins (Paranoá and Descoberto) aimed at selecting the 80 ha	
					to be restored by the project. Furthermore, the diagnosis was made available as basis for future governmental restoration actions and can help on the definition of public policy at GDF. During the reports period, the actions to mobilize society were expanded, with the realization of the following activities:	
					<ul> <li>Cerrado Week carried out with a focus on the climate agenda with activities related to water conservation, covering more than 15 activities, with the participation of around 2,000 people in face-to-face actions and with the virtual programming (still due to COVID-19 restrictions) accessed by around 30,000 people, with more than 144,400 accounts accessed virtually.</li> <li>Water Week in March 2022 focused on recovery of springs.</li> </ul>	
					<ul> <li>including webinars and planting of cerrado seedlings in Águas Claras Park, with the participation of about 200 people.</li> <li>Activities at the AgroBrasilia Fair and CSA course with 284 Sustainability Pact signed.</li> <li>New actions to involve society with the Sustainability Pact are planned for the following project year.</li> </ul>	

Project objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2022	Progress rating
	% of decrease in dumpsite activities	6,200 – 8,700 ton/day (2010 and includes residential, commercial, construction waste)	n/a	EPT:75%	As of 30 June 2022: 59%. According to the SLU report, from October 2021 to March 2022 the dumpsite "Lixão da Estrutural" received 645,149 tons, with a daily average is 3,584 ton/day in the period. The annual volume of recycling is 119.916 tons.	MS
	# a legal framework to promote PV distributed power generation in public buildings ready for adoption	0	n/a	EPT: 1	As of 30 June 2022: 1 Law 6,274/19 of the Federal District was drafted and published in January/2019. It has guidelines for the Incentive Policy for the Generation of Solar, Wind and Biomass Energy and Cogeneration, with provisions for the installation of photovoltaic systems in public buildings (art. 4°).	S
Outcome 2R: Cities investments demonstrate the benefits resulting from integrated and sustainable planning in Recife	If the pilots prove successful, the city agrees to replicate them	0	n/a	Letter of intent covering any or all of the successful pilots (in addition to the ones funded by the project): 2 docking areas; 2 bike stations; 5 resting areas; landscaping of 3.8 ha; repair of 180m of cycle paths and 1,200m of pedestrian paths.	As of 30 June 2022: 1 The Government of the City of Recife has submitted a letter of intention where they recognize the investments and actions of GEF in the city and commit to build the pedestrian and bicycle bridges whose studies will be developed by the project. They share the understanding of the potential of this action to promote the expansion of the cycling network and promote active mobility in the city. The letter of intent is built upon the following pilot progress: The solar boat pilot (2.1.R) was considered unfeasible. ARIES developed a new proposal that promotes active mobility (Travessias, 2.5R), in articulation with the Municipal Government of Recife, approved in December 2021. Monitoring of the progress of urbanization actions (2.2.R) by Recife Municipality (Executive Secretariat of Parque Capibaribe - SDECTI and SEPLAGTD) and alignment with city managers to include the urbanized areas of CITinova in the future concession of public parks (PPP). Operation and maintenance of the filtering gardens (2.3.R) aligned with Recife municipality. Launch of the construction work of the filtering gardens with public engagement of the mayor João Campos showing interest on the technology and on the possibilities that it brings to the City of Recife. Active involvement of Recife Municipality and Capibaribe Park in the preparation of the Travessias (2.5R) architecture competition for bike and pedestrian.	MS

Project objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2022	Progress rating
Outcome 3: The tested integrated and sustainable planning solutions are promoted by the National Platform for Sustainable Cities to up	# of city policy recommendations found relevant by Federal Ministries	0	NA	EPT:5	As of 30 June 2022: 0 CGEE held events with the participation of the Ministry of Regional Development (MDR) and is articulating the next steps to work in synergy with the products developed by the ANDUS project. One of the strategies is to align the solutions mapped by the SCIO with the Urban Development Goals (ODUS) developed by MDR.	U
to 300 Brazilian cities as the reference for integrated urban planning.	# of solutions identified by Sustainable City Innovation Observatory (SCIO), applied by Brasilia and Recife	0	NA	EPT:4	<ul> <li>As of 30 June 2022: 2</li> <li>The pilot projects developed by Brasilia were planned before SCIO was available – dumpsite remediation, watershed restoration, implementation of best practices. For the latest projects designed – photovoltaic energy and rainwater harvesting in a school – the SCIO was consulted. However, SEMA did not identify solutions that attended the particularities of CITinova in Brasilia.</li> <li>Experiences and information shared by SCIO inspired the CITInova Project in Recife as follows:</li> <li>Implementation of the filtering garden considering experiences of nature-based solutions (NbS). The SCIO presents several examples of nature-based solutions for urban problems, such as sewage treatment. The filtering garden to be implemented in Recife studied NbS solutions to identify the best technology to be implemented.</li> <li>Use of sustainable materials in the urbanization areas of Parque Capibaribe. The case studies presented in SCIO show the importance of using sustainable materials, to contribute to the reduction of heat islands, for example. Another recommendation contained in the case studies presented by the SCIO is the construction of multifunctional parks, adding uses that allow integration with nature.</li> </ul>	MS

Project objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2022	Progress rating
	# of cities looking in SCIO and National Platform for	0	N/A	EPT: 100 cities find and	As of 30 June 2022: 67	MU
	solutions to their planning and investment related problems			apply solutions to their planning or investment	In the reporting period, managers of 183 cities were trained in Integrated Geo-Referenced Urban Planning, which enables them to work with the tools and methodologies available at the SCP Integrated Urban Planning (IUP) modules.	
				problems	After the training, 67 cities have made their diagnoses based on the indicators database, among them, 6 capital cities.	
					87 cities are on schedule with filling out the platform, 67 cities are in the initial filling stage and 92 cities have not yet started because they have recently registered but are within the established period of 120 days. It is also worth noting that of the 246 signatory cities, 119 have already indicated their focal points for indicators, integrated urban planning, and GIS.	
					Another relevant data is that from July to December 2021, PCS registered 441 access to the IUP Module, and from January to the mid of June, 2.670 access were registered.	
					Through the targeted activities carried out, the SCIO has been presented to a group of 44 municipalities to date. Highlight to face-to-face presentations to managers of the metropolitan region of Campinas (12/16/21), Belo Horizonte (12/15/21), and Curitiba (11/26/21), to the participation of the SCIO in events promoted by the PCS for about 20 municipalities, to a workshop at the Regional Meeting of ICLEI, in Minas Gerais bringing together a group representing 5 cities, and to a mini course on strategies for urban development, bringing together representatives from 15 cities. In the period in question, the SCIO received 5,995 users in its platform and a total of 11 thousand pages were viewed (sessions opened by users). The cities with the highest number of users accessing the SCIO were São Paulo Brasilia and Rio de Janeiro.	

#### 3.2 Rating of progress implementation towards delivery of outputs

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating⁴
COMPONENT 1: Integrated Planning Plannn	ilots				
Output 1.1B: Environmental Information System (SISDIA) including EEZ guidelines and data is completed, online and available for FDG sustainable planning and public access	Jun/2022	60%	80%	<ul> <li>Launch of SISDIAS's Phase 2 (1.1.1), is behind schedule because of the cancelation of the current contract and the need to hire a new company to develop the specialist modules specifically in definition of the score matrix and sustainability of projects, with the following advances: <ul> <li>Initial Studies Report; Project Startup; Software Specification; Project Plan; Kickoff</li> <li>Definition of the Conceptual Basis to be used in the Scoring and Prioritization Matrix (MPP)</li> <li>Analysis and distribution of Ecosystem Services for Subzones of ZEE-DF, with a view to the Scoring and Prioritization Matrix (MPP)*</li> <li>Hardware and Macro Software Specification</li> <li>Preliminary Definition of Indicators present in the Scoring and Prioritization Matrix</li> <li>Availability of data infrastructure data in the National Directory of Spatial Data - INDE portal – a national catalog of geospatial data.</li> </ul> </li> <li>Elaboration of the Conceptual Basis of the Situation Room (1.1.2). The implementation of the situation room is behind schedule because it depends on the delivery of specialist modules.</li> <li>132 people were trained to use SISDIA (1.1.3), including collaborators from Brasília Ambiental (IBRAM), Botanical Garden of Brasilia - JBB, TJDFT and Faculty of Architecture of UnB.</li> <li>Access to the Portal: 270 Brazilian municipalities; 36 countries; 420,993 to Geoservices; 317,431 to the spatial data repository. Strong support of public managers from the Secretary of State for Urban Development and Housing - Seduh. The entities of the environmental system and water resources are among the institutions with the highest number of accesses.</li> </ul>	S

 <sup>&</sup>lt;sup>1</sup> Outputs and activities (or deliverables) as described in the project logframe (and workplan) or in any updated project revision.
 <sup>2</sup> The completion dates should be as per latest workplan (latest project revision).
 <sup>3</sup> As much as possible, describe in terms of immediate gains to target groups, e.g. access to project deliverables, participation in receiving services; gains in knowledge, etc.
 <sup>4</sup> To be provided by the UNEP Task Manager

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
Output 1.2B: New data and studies to populate SISDIA are collected, developed, and included in SISDIA.	Dec/2022	60%	70%	<ul> <li><u>Climate Projections for DF and Ride</u> (1.2.1) published on the Sema-DF website.</li> <li><u>Inventory of GHG emissions update</u> (1.2.2) published on the Sema-DF website. Preparation for the permanent monitoring system of GHG emissions of the Federal District.</li> <li><u>Mitigation plan for the reduction of GHG emissions in the Federal District</u> and <u>Adaptation Plan for the Federal District</u> with special focus on water resources and extreme temperatures (1.2.3) published on the Sema-DF website. Actions taken to start studies related to sectoral emission, for transport and land use.</li> <li>Activities to support the dumpsite closure plan (1.2.4) carried out:</li> <li><u>Diagnosis and pilot projects of remediation of the Estrutural Dumpsite</u> published on the website of Sema-DF.</li> <li>Second Workshop of the "Lixão da Estrutural" (Oct, 2021), focused on the internal alignment of governmental institutions to face the challenges of remediation of the "Lixão da Estrutural". Participants were SLU, Adasa, Brasília Ambiental, Sepe, CEB.</li> <li>Gaps for complementary studies to the Lixão da Estrutural identified –TR minutes prepared to fulfill the requirements of the Contaminated Areas Management Plan required by Brasília Ambiental.</li> </ul>	S
Output 1.3B: Climate risk assessment and scenarios are completed and 'climate bill' is drafted.	Nov/2022	60%	70%	<ul> <li>Under the Climate Act Regulation (1.3.1) the inventory and the mitigation and adaptation plans supported the publication of a decree stablishing the Federal District Neutral Carbon Plan with Districtally Determined Contribution to the Paris Agreement. A legal framework for the climate agenda will be developed.</li> <li>SEMA developed the following actions for the internalization of climate scenarios to evaluate public investments (1.3.2):</li> <li>A monitoring system for urban vegetation cover and land use in the Federal District is under development (action included in REV3), with the identification of areas for carbon sink.</li> <li>Sectoral articulation with the Secretariat of Mobility and the Agriculture Section (on land use), to discuss the focus of actions on transport and mobility and land use and their contributions to meet emission targets.</li> <li>Identification of gaps and demands for a feasibility study and executive projects for the implementation of green solutions aimed at promoting carbon reduction.</li> </ul>	HS

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
Output 1.4B: Citizens' are engaged in FDG public policy making	Nov/2022	40%	60%	<ul> <li>Regarding social participation processes for public environmental policies (1.4.1) the actions developed were:</li> <li>Holding five (5) meetings of the Technical Chamber of Climate for the process of internalization and implementation of climate strategies in the various governmental and non-governmental sectors of the Federal District (totaling 11 meetings in 2021).</li> <li>The Cerrado Week in 2021 with several activities such as: hiking - a group of hikers, mobilized about 579 people to participate in trails in the parks of Brasilia aiming to raise awareness for the protection of natural resources in basins; seedling planting with 60 students of Escola Classe 1 School of Lake Paranoá; two virtual workshops on the climate agenda in DF; a photo contest for students; an exhibition in Águas Claras Park with 10 maps / banners about SISDIA Portal, with the objective of mobilizing the general population the use of SISDIA.</li> <li>Discussions on indicators and monitoring data for policy making (1.4.2) were at:</li> <li>A workshop to present and discuss the specialist modules of SISDIA, with 90 participants.</li> <li>02 Meetings of CITinova's local committee (Aug/2021 and May/2022) with 65 participants from governmental representatives and NGOs, to discuss the strategy for the pilot project of photovoltaic energy, SISDIA's scoring and prioritization matrix, basin sustainability index and project advances.</li> <li>The CITinova has contributed to greater institutionalization of the climate change agenda in the GDF. The meetings of the Technical Chamber on Climate Change have helped identify actions and partners for the implementation of policies and measures, especially in the areas of adaptation to the adverse effects of climate change and the mitigation of emissions in the urban transport sector and in the agricultural sector.</li> </ul>	S

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
Output 1.5B: Lessons learned are collected and structured to feed the local and national platforms	Dec/2022	30%	70%	Knowledge Management Plan prepared and under implementation. The reports under development are based on SCIO template and information will be available at SCIO platform :	MS
				<ul> <li>Systematization of deliveries (1.5.1): (i) structuring of the climate policy model: GHG Emissions Inventory, Climate Change Adaptation Plan and Climate Change Mitigation Plan; implementation and performance of the Technical Chamber of Climate within and social participation in the Climate Agenda;</li> <li>For the sustainability of the actions, the governance arrangements (1.5.2) were concluded: Governance arrangements for the climate agenda - GHG emissions inventory, climate change adaptation plan and climate change mitigation cloth.</li> <li>The positive and negative aspects of project implementation (1.5.3) are foreseen in the SCIO template for all deliverables and activities to be reported.</li> </ul>	

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
Output 1.1R: Integrated and resilient plans for Recife through enhanced popular participation, more evidence and live and open data	July/2022	63%	85%	<ul> <li>Publication of the 2<sup>nd</sup> edition of the <u>Recife 500 Years Plan</u> (1.1.1), which involved the following relevant actions:</li> <li>Dissemination of the Plan's actions to civil society through digital and traditional media.</li> <li>Further development diagnosis and review of content on social matters in the city.</li> <li>Update of Scenarios, Future Vision, and Recife's development strategy.</li> <li>Workshop and opinion poll seeking to expand social participation.</li> <li>Realization of the international seminar Cities in Transition: Pandemics.</li> <li>Improvement of the <u>Recife 500 Years Indicator Panel</u> (1.1.2), with the following actions carried out: <ul> <li>Increase and adjustments in the indicators panel.</li> <li>Formatting of functionalities to be developed to increase the impact of the Indicator Panel.</li> </ul> </li> <li>The air and water data collection to support evidence based urban planning (1.1.3) is delayed because manufacturer of the sensors faced scarcity of raw material to timely deliver the equipment. Sensors faced scarcity of raw material to timely deliver the equipment. Sensors faced scarcity of the micro stations is also under development.</li> <li>The sectoral adaptation plan (1.1.4) is delayed due to problems with the consulting company and is planned to be delivered in November 2022. The following activities were developed:</li> <li>Development of the Stakeholder Engagement Plan.</li> <li>Strategic assessment of existing instruments.</li> <li>Assessment of sectoral risks.</li> <li>Finalization of the tools for implementation of the social housing policy (1.1.5) faced small delays because the validation of products process involved several actors, including Recife Municipality. The following activities were conducted:</li> <li>Development of an inventory of existing conditions.</li> <li>Elaboration of urban plans</li> <li>Definition of operational modeling</li> <li>Development of the social participation process</li> <li>Availability of the studies to the municipal government</li></ul>	S

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
Output 1.2R: Geo-referenced Integrated Management System (IMS) is tested	Apr/2022	60%	90%	<ul> <li>The development of IMS (1.2.1) suffered delays as a result of the difficulty of articulating within the Municipal Government of Recife to identify the secretariats to be involved in the development and use of the tool. The following activities were conducted:</li> <li>Revision of the IMS governance</li> <li>Data about Parque Capibaribe collected and processed</li> <li>Data about other products of CITinova, to integrate IMS, collected and processed</li> <li>Survey of requirements for the Conecta Recife's portal for integration of IMS</li> <li>ARIES started to develop the IMS while trying to involve municipal managers beforehand in the development of the IMS. The strategy did not work, since the city decided to adopt the Arcgis tool to manage the municipal integrated and georeferenced planning. ARIES is developing the IMS with Parque Capibaribe Secretariat and is ensuring communication between both tools through API. A plan to engage actors at municipal government of Recife will be developed after delivery of IMS to Parque Capibaribe, to present the features and advantages of using the tool, seeking to increase the number of secretariats that use the tool as well as the amount of data to be available. The developed and tested IMS will be delivered but it will not have the intended reach (it will not reach the indicator) and the testing phase may be compromised due to delays.</li> </ul>	U
<b>Output 1.3R:</b> Lessons learned collected and structured to serve as input to the national platform	Apr/2023	71%	78%	<ul> <li>The SCIO Platform was fed (1.3.1) with the following experiences, but they are not online:</li> <li>General lessons learned by the co-executor during project execution.</li> <li>Development of the Recife 500 Years Indicators Panel.</li> <li>Project communication area.</li> </ul>	MS

Outputs/Activities <sup>1</sup> co da	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
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Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
COMPONENT 2: Integrated Investment	Pilots				-
<b>Output 2.1B:</b> Springs preservation completed, best practices implemented, and open dumpsite monitored towards decommissioning	Dec/2022	65%	78%	Pilot tests for remediation of the "Lixão de Brasilia" dumpsite was completed. They showed that the impact of contamination is not significant at rivers and the underground contamination did not affect the watershed in the National Park of Brasilia. (2.1.1).	S
				<ul> <li>For the pilot projects at Descoberto and Paranoá River basins (2.1.2) the following activities were developed:</li> <li>Maintenance and monitoring of the restoration areas with native vegetation in Permanent Preservation Areas (APPs) of springs, watercourses, and recharge areas in the Descoberto and Paranoá Basins in progress.</li> <li>A proposal for improvement of water governance was hired.</li> <li>Articulation with the Department of Education of the Federal District to develop a pilot project for the use of rainwater in a school. Definition of the school Gisno Educational Center for the pilot.</li> </ul>	
				As best practices implementation in the pilot area (2.1.3) the creation of two CSA (Community Supported Agriculture) networks has started. Thirty-three rural producers in CSA – who signed the Sustainability Pact – were trained.	
				<ul> <li>Mobilization plan to expand the Sustainability Pact actions (enrollment of the population on watershed recovery 2.1.4) was prepared by SEMA, with internal workshops. Some activities developed:</li> <li>"Water, Gender and Belonging to the Descoberto and Paranoá River Basins" workpshops face-to-face meeting in September with the participation of 16 producers from the basins.</li> <li>Articulation with the Department of Education of the Federal District to develop a pilot project for the use of rainwater in a school. Definition of the school Gisno Educational Center for the pilot.</li> <li>Actions in the week of water with the participation of 200 people and at Agrobrasília, to increasing the agreement's membership. About 243 farmers joined.</li> </ul>	
				Actions were carried out during the environment week with two high schools, totaling 640 people involved, with 283 people joining the pact for sustainability.	

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
<b>Output 2.2B:</b> Solar energy pilots and promotion are completed	Oct/2022	20%	30%	Under the solar energy pilot (2.2.1), the design of the photovoltaic system (solar power plant) to be implemented by the Project was prepared and the request by Sema of project amendment was approved by MCTI and UNEP. Procurement process for implantation of the Solar Power Plant is undergoing at CGEE. A technical visit was held with UNEP, MCTI and projects stakeholders to the site of implementation of the main system in Águas Claras park.	MS
Output 2.3B: Lessons learned are collected and structured to feed the local and national platforms	Dez/2022	30%	70%	<ul> <li>Knowledge Management Plan prepared. The lessons learned are in systematization and will be availabe at SCIO platform:</li> <li>Methodologies systematized (2.3.1): Sustainability of the DF Basins; phytoremediation in the "Lixão da Estrutural" experiment 2; stabilization of metals in the soil in the old Lixão da Estrutural area.</li> <li>Governance arrangements systematized (2.3.2): pilot of mechanized agroforestry system - SAFs and restoration of springs.</li> <li>The positive and negative aspects from project implementation (2.3.3) are foreseen at SCIO template for all deliverables and activities to be reported.</li> </ul>	MS
<b>Output 2.1R:</b> The financial and technical viability of operating 2 solar boats across the Capibaribe river is assessed	Apr/2021	47%	100%	<ul> <li>Output concluded. Studies indicated that the solar boats would not be financially viable. This is due to three reasons:</li> <li>Need for an initial contribution of approximately R\$ 150,000.00 for the initial cash flow of the operation (decides the projects investment).</li> <li>High costs of importing boat parts.</li> <li>Uncertainties about long-term governance and sustainability of the solar boats.</li> <li>In July 2021, activities related to the solar boat were early concluded and a new proposal for active mobility (Travessias) was developed to be implement by CITinova Recife (see output 2.5R)</li> </ul>	S

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
Output 2.2R: Banks of the Capibaribe River urbanized in two sections	Feb/2023	45%	55%	<ul> <li>Delay in urbanization (2.2.1) was due to adjustments in the executive project because of the removal of the floating piers due to high costs. Several meetings were held with Recife Municipality to understand the impact of their removal taking into consideration the non-implementation of solar boats. During the period of this report the following activities were carried out: <ul> <li>Adjustments to the executive project and other complementary projects, including budget templates.</li> <li>Development of complementary environmental studies, requested by the municipal government during the project's licensing process.</li> <li>Issue of Prior License by Recife Municipality.</li> <li>Processing other licenses at the municipal, state, and federal instances.</li> <li>Development of a communication plan for the construction, involving the community and avoiding problems during the execution of the project.</li> </ul> </li> </ul>	S

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
Output 2.3R: Filtering Garden cleaning the water through the use of vegetation	Set/2022	45%	78%	<ul> <li>Filtering Gardens (2.3.1) advanced with the following activities:</li> <li>Finalization of the executive project, complementary and budget template.</li> <li>Construction company to carry out the filtering gardens work hired.</li> <li>Licenses issued.</li> <li>Negotiation with EMLURB (Urban Maintenance Company) for necessary measures to maintain the Filtering Garden after the end of CITinova project.</li> <li>Company to supervise the construction hired.</li> <li>Development of a communication plan for the Filtering Gardens, involving the communication plan for the Filtering Gardens, involving the community and avoiding problems during the construction</li> <li>Construction initiated in February 2022</li> <li>Construction of the filtering garden began in February 2022 and during the earthmoving services in April significant garbage was found within the earth of the intervention area. This negatively impacted the structural solution for the base of the filters, the number of filters to be executed, the budget, and implementation schedule. Three filters initially designed will not be executed, however, the efficiency of water treatment by the garden is being guaranteed.</li> <li>In addition, the City of Recife has been suffering from heavy rains since May 2022. The filtering gardens are located on the Capibaribe riverbanks, which flooded. The damage to the work has not yet been measured (waiting for the rains to stop), but there will be budgetary and schedule impacts.</li> </ul>	MS
<b>Output 2.4R:</b> The city tracks and generates information and lessons on the experiences with the pilots for the national platform	Apr/2023	78%	78%	<ul> <li>In Lessons learned (2.4.1) the SCIO Platform was not updated, with no registration on the progress of the indicator. However, the following activities were developed:</li> <li>Indicator Monitoring System, including details and ways of measuring indicators.</li> <li>Training of ARIES team to feed the Indicator Monitoring System. The Indicator Monitoring System was developed as a risk mitigation measure and organizes information for registration of the projects' lessons learned. ARIES will hire a specialist to monitor results and assess impact of CITinova solutions in Recife. The definition of requirements for this service, is in progress.</li> </ul>	MU

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
<b>Output 2.5R:</b> The connection between the two banks of the Capibaribe river through two bridges for pedestrians and cyclists	Apr/2023	0%	32%	The output was proposed and approved during the reporting period, in replacement of the Solar Boat project. For the national project competition (2.5.1) articulation meetings were held with the Government of Recife, IAB ( <i>Instituto de Arquitetos do</i> <i>Brasil</i> ) and <i>Instituto Jaime Lerner</i> to define the governance for organizing the competition and the preliminary studies to be hired. Three months after the launch of the competition (July), the result will be announced (in October). In March 2023 ARIES planned to have the final project and in April, the license will be granted. The delay on launching the competition will be compensated by the licensing process, that was revised considering the lessons learned on previous actions of the project in Recife.	MS
COMPONENT 3: Knowledge Platform				· · · ·	
Output 3.1: An operational Knowledge Platform online	Dec/2022	90%	95%	<ul> <li>System maintenance, improvement of resources and functionality (3.1.1) - administrative system / general</li> <li>New field inserted in the city data form to include city focal point</li> <li>PCS accession data editing</li> <li>Sending alert email notifying new signatory cities</li> <li>Sending alert email notifying registration of persons in charge of signatory municipalities</li> <li>New graph support function inserted in the text editor</li> <li>Confirming saving before logging out</li> <li>Library module, attending multiple deliverables, completed and under testing</li> <li>Bulletin, forum, search filters and management reports</li> <li>Availability of the platform's source code on GitHub</li> <li>Insertion on the website of a term of acceptance of the use of cookies to contemplate the LGPD, when entering the main page</li> <li>New user support form (Help Desk via Forum)</li> <li>Integration with CGEE (3.1.2)</li> <li>PCS's API page developed and made available for SCIO consumption.</li> <li>Added support layer for viewing SCIO/CGEE layers</li> <li>Best Practices Registration - Improve the visibility of the SCIO solutions list on the Best Practices Registration page.</li> </ul>	S

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
<b>Output 3.2:</b> Operational modules for the Knowledge Platform portal online.	Dec/2022	97%	97%	The activities of the output were revised and impacted the implementation status. This is the reason why, despite the deliveries made during the reporting period, the percentage of the implementation status was maintained.	HS
				Indicators Module (3.2.1) available. The system was improved with sending alert email notifying registration of Goals Plan, dashboards of indicators, registration of indicators, API availability for consumption of indicators data for other users and organizations, and selection forms for indicators.	
				Partnership with the Sustainable Development Solution Network (SDSN) renewed to carry out the second round of the <u>Brazilian Cities</u> <u>Sustainable Development Index</u> (IDSC-BR). Indicators selected (100) and data collection of the 5570 Brazilian municipalities started, development and preparation of the system to incorporate data, maps, and contents of the IDSC-BR into the platform.	
				Integrated geo-referenced urban planning tools operational (3.2.2). The system was improved with availability of shapes linked to SCIO's MVT for download, API of GIS data available for consumption, point size for theme with point file choice allowed.	
				Financing Opportunities Module (3.2.3) and the Financing and Budget Management Guide completed. Waiting for the diagram to launch in early July.	
				Best practice database (3.2.4) available. Improvements on the system involved: visibility of SCIO solutions list at the best practices registration page, visibility of PCS indicators list at the best practices registration page, resources and functionalities for text editing and image insertion in the Best Practices sections, API availability for consumption of best practice data for other users and organizations	
				<u>Module</u> and <u>Guide for Academic Collaborations – Partnerships</u> <u>between Municipalities and Higher Education Institutions</u> (3.2.5) launched at an event held in Florianopolis (SC). Map of Higher Education Institutions in Brazil fed at GIS.	
				Public participation (3.2.6) module enhanced with forum resources. Private Sector Partnerships (3.2.7) guides, module and sessions	
				delivered and available online. Training and skills development (3.2.8) module and session	
				Plans, Law, and Regulations (3.2.9) module and session completed and under testing.	
				Events (3.2.10) module delivered and available online.	

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating <sup>4</sup>
<b>Output 3.3:</b> Skills development training designed and delivered	Dec/2022	81%	90%	23 training courses – in person or online – on deliverables 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.6, and about the Citizen Participation module. Approximately 120 city managers (around 40 cities) trained.	S
				6 workshops in partnership with the Brazilian Association of Municipalities (ABM in Portuguese) for municipal public managers on the Sustainable Development Goals (SDGs), the New Urban Agenda (NAU) and PCS platform (deliverables 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.6) reaching out 104 cities from Rio Grande do Sul (26), Sergipe and Alagoas (18), Maranhão (13), São Paulo (28) and States of the midwest of Brazil (19).	
				Workshop for public managers on the use of the PCS platform (deliverables 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.6) and Agenda 2030, at Smart City, in Curitiba, for 12 cities.	
				Workshop on PCS involving deliverables 3.3.2, 3.3.3, 3.3.4, 3.3.6 for technicians and managers of the 13 municipalities in the Southwest of Paraná	
				Workshop held in Caruaru (PE), on the deliverables 3.3.2, 3.3.3, 3.3.4, 3.3.6, and about the Citizen Participation module for 14 municipalities in Agreste and Sertão Pernambucano.	
				<b>Inequality Map tools and data training (3.3.1)</b> – subject of training courses and workshops for 156 cities.	
				<b>Integrated Urban planning tools and data training (3.3.2)</b> - subject of training courses and workshops for 179 cities. A special capacity-building workshop held on Integrated Geo-Referenced Urban Planning attended by 80 technicians and public managers of 183 cities.	
				<b>Municipal Goals Plan preparation, implementation, and development (3.3.3)</b> - subject of training courses and workshops for 183 cities.	
				<b>Indicators module tools and data training (3.3.4)</b> - subject of training courses and workshops for 183 cities. 296 inquiries by city managers about indicators were answered.	
				PCS formalized a partnership with the City of São Paulo to hold the <b>Sustainable Cities International Conference (3.3.5)</b> - within the scope of the Virada SDG. Preparation of the conference: "Forum for Sustainable Development of Cities - the evolution and challenges of Brazilian cities in the 17 SDGs of the 2030 Agenda by the UN".	
				<b>Knowledge Platform training (3.3.6)</b> - subject of training courses and workshops for 183 cities.	

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating⁴
<b>Output 3.4:</b> Mayors and politicians mobilized to join the sustainable cities	Dec/2022	85%	91%	The number of signatory cities raised from 75, reported previously, to 247 representing 172 new cities at PCS platform.	HS
platform				<ul> <li>Mayors were mobilized (3.4.1) by the following actions:</li> <li>Cooperation agreement signed with the Government of the State of Paraná and other organizations to support the implementation of the 2030 Agenda in the 399 municipalities of the State. Seven regional events were held, and 117 new cities signed their adhesion to PCS.</li> <li>The event held in Serra Talhada (sertão of Pernambuco) with the mayor(s) of the Consortium for the Integration of Municipalities in the Pajeu Region, brought together 19 municipalities and witnessed the accession of 9 new cities.</li> <li>PCS offered two courses for new Mayors at the National Academy of Public Administration, in December, which resulted in 7 new accessions.</li> <li>At the Maranhense Congress of Sustainability and Fiscal Management, in São Luís, where six mayors out the 20 mayors that attended the event, registered their adhesion to the PCS.</li> </ul>	
				have a letter of commitment with the PCS.	
Output 3.5 (SCP): GEF Brazil project communication	Dec/2022	75%	85%	Considering a new communication plan and project extension, percentage of status implementation was recalculated.	S
				Integrated Communication Plan, developed and approved by partners (3.5.1).	
				<ul> <li>Communication agency hired in April 2022. Communication actions (3.5.2) developed in the period:</li> <li>ClTinova website regularly updated with news about the activities and deliveries of co-executing partners.</li> <li>Instagram page with 50 new publications and 387 new followers in the period, adding up 162 publications and 1.095 followers.</li> <li>LinkedIn profile created.</li> <li>Regular meetings with communication team of co-executing partners for exchange of information and communication actions alignment.</li> </ul>	

Outputs/Activities <sup>1</sup>	Expected completion date <sup>2</sup>	Implementati on status as of 30 June 2021 (%)	Implementat ion status as of 30 June 2022 (%)	Progress rating justification <sup>3</sup> , description of challenges faced and explanations for any delay	Progress rating⁴
<b>Output 3.5 (CGEE):</b> Sustainable solutions to eight urban planning and investment challenges identified and delivered to MCTIC. Brasilia, Recife and SCP	Dec/2022	85%	66%	Regarding the percentage of the Output (66%), it is important to note that some activities were included in the project's deliverables and others were discontinued. This re-evaluation of activities ended up reducing the percentage in relation to the previous period.	MS
				For the deliverables 3.5.1 to 3.5.6, the content of the platform is under review. The number of solutions and case studies was reduced. The review is in progress by researchers at USP and UFRJ Universities and inclusion of new cases is expected.	
				3.5.1. Solutions for low carbon mobility - 49 solutions and 87 case studies available. Executive Summaries: <u>Innovation for sustainable cities: mobility</u> and <u>Policies and solutions for sustainable cities:</u> <u>mobility</u> published.	
				3.5.2. Solutions energy systems - 44 solutions and 74 case studies available. Executive Summaries: <u>Innovation for sustainable cities:</u> <u>energy</u> and <u>Policies and solutions for sustainable cities: energy</u> published.	
				3.5.3. Solutions to improve built environment - 50 solutions and 67 case studies available. Executive Summaries: <u>Innovation for sustainable cities: built environment</u> and <u>Policies and solutions for sustainable cities: built environment</u> published.	
				3.5.4. Solutions for potable water - 45 solutions and 80 case studies available. Executive Summary: <u>Policies and solutions for sustainable cities: sanitation / water published.</u>	
				3.5.5. Solutions for solid waste treatment systems - 26 solutions and 67 case studies available. Executive Summary: <u>Policies and solutions</u> for sustainable cities: sanitation / solid waste published.	
				3.5.6. Nature based solutions - 43 solutions and 76 case studies available. Executive Summaries: <u>Innovation for sustainable cities:</u> <u>nature based solutions and Policies and solutions for sustainable cities: nature based solutions</u> published.	
				3.5.7. The Proposal for the Territorial Strategies for Sociotechnical Transformation Program - RIS3 (3.5.7) delivered.	
				3.5.8. Integrated urban planning guide (3.5.8) and activities were discontinued because of the overlap with activities already carried out by PCS.	

<b>Output 3.6:</b> Solutions for urban planning and investments promoted to other cities.	Dec/2022	67%	51%	This output is for the development of the SCIO platform, definition of a search interface, application of solutions by city typology, innovation policy through the identification of solutions for sustainable city transition and promotion of the solutions. The platform is functional; however, the information is not useful for city managers. The platform will be adjusted to present additional content for solutions and allow friendlier interaction with city managers.
				<ul> <li>3.6.1. A database of solutions is populated and available online. The current solutions are under technical revision and improvement. Moreover, database are being updated with new solutions and with new information regarding the already identified solutions such as impact indicators measured and coverage area (50%):</li> <li>Solutions and case studies updated at the platform, with now 257 solutions and 355 case studies available for consultation, out of the 355 solutions and 528 case studies mapped initially.</li> <li>The interface to disclose new information and solutions is still in development.</li> <li>Environment for lessons learned from pilots available for data inclusion, and users trained. Three of the four lessons learned workshops have been held.</li> </ul>
				<ul> <li>3.6.2. A search interface is functioning to allow search of solutions by challenge and city typology. The search interface for finding solutions will allow a broader search, by challenge, type, desired impact, location. The search interface and connections with PCS will have to be updated: (73%): <ul> <li>Improvements in the <u>GIS Web – 3rd version</u>.</li> <li>Integration of PCS GIS to provide geographic information layers and incorporation of PCS indicators into the base of SCIO indicators.</li> </ul> </li> </ul>
				<ul> <li>3.6.3. Requirements for application of solutions by city typology are developed. The tool for solutions by city-region typology – scoring, ranking and multi-criteria prioritization of solutions according to cities priorities and typology is under development and adaptation to the revision of OICS content (55%): <ul> <li>Implementation of bot associated with the map.</li> <li>Development of interactive dashboards.</li> </ul> </li> </ul>
				<ul> <li>3.6.4. Implications for innovation policy are developed. Innovative technologies and processes, related to the solutions, are being mapped. Data and studies on technological needs for climate actions, technology readiness is being incorporated to OICS platform. (43%):</li> <li>Convergence between technologies and database for policy innovation delivered</li> <li>Impact indicators under development</li> </ul>
				3.6.5 The uptake of solutions is actively promoted. Interruption of the promotion of solutions until the SCIO is improved. The platform

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				<ul> <li>updated will be presented to city managers according to a planned strategy. Below, activities developed during last year (39%):</li> <li>Organization of the IV International Seminar on Nature-based Solutions</li> <li>Workshops on Integrated Urban Planning and on SbN Catalog.</li> <li>Online seminars: "Accessibility and Sustainable Cities" and "Technologies to Support Integrated Urban Planning".</li> <li>Virtual Technical Missions in Anápolis (GO) and Rio de Janeiro (RJ) and Niterói (RJ), to present case studies</li> <li>Workshop with ICLEI to promote SCIO in Minas Gerais with participation of 5 municipalities</li> <li>Dissemination of the SCIO on the following cities: Campinas (SP), Belo Horizonte (MG), Serra (ES), Curitiba (PR).</li> </ul>	

### 3.3. Risk Rating

#### Table A. Risk-log

	Risk affecting:			I	Risk R	ating			Variation respect to last rating			
Risk	Outcome / outputs	CEO ED	PIR 1	PIR 2	MTR	PIR 3	PIR 4 (this PIR)	PIR 5	Δ	Justification		
Social, cultural and economic factors The project bears the full exchange rate risk:	All outcomes &	н/н					М		Ŷ	The dollar exchange rate is volatile due to international and national economic issues. For some partners, last budget revision has been slightly affected by the devaluation of the US dollar against the Brazilian real so far. Although risk increased, partners have mitigation measures in		
exchange rate risks between the USD and Real because of political uncertainty in the country	outputs						IVI		I	ARIES experienced special impact on the constructions, leading to the reduction of some items after a careful review of budget, considering a more conservative dollar rate, without significant impact on the final delivery. In the case of a favorable rate, during implementation, ARIES expects to include those items back.		
										- The SISDIA Portal was launched in 2021 and supports direct communication between the database of 18 agencies. 1 Technical Cooperation Agreement was signed, 8 are under formalization and 132 people were trained including Federal District government officials. (L)		
Information products of the project are not perceived as being useful by the users. In particular: • SISDIA • IMS	Outcomes 1 & 3	L/H	М	М	-	М	М		=	- Engagement efforts with stakeholders who see value in the delivery. Redirection of the IMS to Capibaribe Park. A Cooperation Agreement is being developed for the management and maintenance of the IMS to be signed between the parties involved, including EMPREL (Municipal Informatics Company) and SDECTI/Parque Capibaribe (H)		
<ul> <li>The enhanced knowledge platform</li> <li>SCIO</li> </ul>										- Technicians and managers from the signatory cities are giving feedbacks for adjustments and new implementations that can be developed by the end of the project. PCS is conducting many capacity-buildings workshops to enable municipalities to use the platform (L).		
										- SCIO: Content and functionalities are under adjustments to better attend municipal managers. CGEE is articulating with ICLEI to give visibility to the Observatory through dissemination and training events with municipalities after adjustments. (H)		
Less than 300 cities join the Sustainable Cities Programme.	All outcomes & outputs	L/M	L	М	-	М	L		Ļ	The PCS has been working with new strategies of approach, awareness, and mobilization via inducing agents (State Governments, regional municipal entities, and partner civil society organizations) in all regions of the country, with very good results. Currently, the PCS has the adhesion of 246 signatory cities, among them 15 of the 27 Brazilian capitals. There is a small		

									risk of not reaching the 300 cities and, despite that, is important to ensure capacity-building for all of them to guarantee the effective use of the Platform.
The investment pilots are not									
successful:									(1) The solar boat studies proved to be financially and
<ul> <li>1) Solar boats are not</li> </ul>									operationally unsustainable. (not considered for rating)
<ul> <li>financially sustainable;</li> <li>2) Filtering gardens, and Phyto-remediation technologies do not work</li> <li>3) The PV business model cannot find a satisfactory formula for distribution companies and distributed generators</li> </ul>									(2) High cost of the filtering gardens project is a risk for its replicability. ARIES is involving the mayor of Recife in the implementation phase hoping to give more visibility of the pilot and its benefits. Soil with a high percentage of garbage found at the pilot site, by Capibaribe bank, indicates possible similar situation for future projects, with anticipated recommendation of ARIES, to choose other than the Capibaribe banks for filtering gardens (S). The phytoremediation pilot, in Brasilia, is completed. The results showed that the area did not contain much contamination of heavy metals, but it was possible to observe that the methodology is advantageous because even with low contamination it was possible to observe the absorption capacity of the plants.
<ul> <li>4) Land users do not buy- inte the lead pasts in</li> </ul>	Outcomo 2	N.4./N.4	c	c		c	N/		of the plants tested. (L)
Descoberto and Paranoá watersheds	Outcome 2	101/101	5	5	-	5	IVI	Ļ	(3) The solar energy pilot has undergone scope changes. The new proposal is more viable and within the governance of Sema. The arrangement involves the Secretariat of Economy, at the risk of being monitored. (M)
									(4) The landowners of the Descoberto and Paranoá Basins, direct beneficiaries of the project's actions, participated in workshops and signed a sustainability pact, other initiatives such as: basin sustainability studies, diagnosis of recovery areas and other mobilization actions during the Project, have contributed to the continuous participation in actions to protect the basins. An internal workshop was held by Sema to realign the mobilization strategy and approach the compliance of the indicator. The actions decided involve initiatives in schools, with rural producers, other projects with similar actions in the two basins to expand the agreement for the sustainability. In the period we have already obtained 559 signatures on the Pact. (S)
The project will not gain the level of expected scale up because political leaders do not agree with legal recommendations or make	Outcomes 1 & 2	L/M	м	S	-	м	М	=	In Brasília, the systematization of pilots and studies, as well as the governance arrangements that are elaborated under the Knowledge Management Plan indicate the sustainability of post- project actions, considering recommendations. Along the project's implementation, strategic stakeholders have been involved on projects actions, to engage them on projects importance and sustainability of its results.
decisions to support scale up of proven activities.									The local government and other relevant stakeholders got significantly involved on the development of Recife's actions for the last year. The national direction is constantly monitoring ARIES' political articulation. MCTI is participating more actively in the decisive articulation processes.

Changes in political leadership weakens project support: • Mayoral elections 2016 • Governor elections 2018 • Unstable federal political situation	All outcomes	M/L	Н	Н	-	L	М	Ť	At the national level of coordination of the project, federal elections are about to occur, but MCTI is committed with projects execution (M) SEMA – 2022 elections represent a risk at SEMAs execution's pace due to possible changes to management team. Nonetheless, the institutional arrangement of the Project is favorable to the continuity of actions (M) ARIES - The 2022 elections may have a low impact on the CITinova Recife project, with the possibility of removing stakeholders from the Recife municipality management due to the involvement in the campaign of candidates for governor from the same party of the current mayor. For 2023 we see a moderate risk due to the possibilities of change in federal management and change in municipal and state secretariats. (M) PCS - The PCS has been working with new strategies of approach, awareness, and mobilization via inducing agents (State Governments, regional municipal entities and partner civil society organizations) in all regions of the country, with very good results. A change was made in the letter of commitment to guarantee the continuity of the commitments of the city regardless the management change every four years. (L) For CGEE - The discontinuity of teams from Ministries may represent implications for the work of the SCIO in achieving Indicator 1 (Letters from Ministries). (S)
As far as the project were designed in 2016 and started in 2018, the scenario in Brazil changed.	All outcomes			L	-	L	L	=	Some strategies of the project were redesigned to ensure the delivery of the agreed outcomes. Some changes for ARIES and SEMA were also approved, along with projects extension to December 2022 for SEMA, PCS and CGEE and to April 2023 for ARIES.
Recife actions were affected by lack of partner capacity to develop key technical requirements (such as technical terms of reference).	Outcome 2 & 4			L	-	L	L	=	Technical team was strengthened with new specialists as a way of filling some knowledge gaps.
The gender actions are not created and implemented by partners and social impacts related to gender are not achieved.	All outcomes			L	-	L	L	=	Gender mainstreaming is integrating the project scope in various activities, from implementation processes (such as hirings) to implementation activities (gender parity on events, field actions) as well as on the identification of relevant indicators for monitoring, and recommendations of actions for municipal managers, directed to women.
Field actions in Brasília and Recife were hampered by the pandemic and may have the monitoring period compromised.	Outcome 2			М	-	L	М	¢	Some deliveries have been delayed, but SEMA is accelerating activities as possible. Extending the project reduced the risks. ARIES had a delay in hiring the research that will measure the impact of the Project's investments however, the research will start in early July. The extension of the project to April 2023, gave

								ARIES enough time to measure the impacts, but heavy rains in Recife are causing unexpected delays on constructions.
								The Reinforcement Plan, with more staff members at the coordination of partners, has streamlined and allowed improvements in some activities. (L)
The project arrangement was designed to speed up execution and implementation, however, the processes and criteria for contracting partners are slow and bureaucratic.	All outcomes		L	-	L	L	=	For SEMA, CGEE went through a digital transformation to manage procurement and payment processes electronically. Staff were hired at the financial, contractual, and administrative areas to speed up processes. However, there due to high demand for procurement processes at CGEE from August 2021, they are delayed, especially with the the requirement of research prior to the selection process with at least 3 full proposals. This slowness in the procurement process has compromised and contributed to the delay of some deliveries. (M)
								Technical team of ARIES was improved as a way of filling some knowledge gaps. Due to the technical specificity of deliveries ARIES invested more time in defining the scope of contracts, making a previous mapping of possible suppliers with a minimum of guaranteed quality to minimize problems in the development of products. (L)
Recife's execution schedule is very tight, especially the actions related to works and constructions.	Outcome 2R		S	-	М	S	¢	The approval of the project extension of ARIES to April 2023 adjusted the execution schedule. However heavy rains in the City of Recife since May 2022, affected the constructions schedule. Since the meteorological forecast is that heavy rains will occur until August 2022, it was not possible to measure the impact on the project's deadline yet. (S)
								The Project was impacted in its implementation, mainly in field actions and in actions that depended on interaction with the public, such as workshops, trainings, and public consultations. Some activities were redesigned to be done in a virtual format or postponed, and schedules were adjusted. Partners reviewed their workplan and proposed extensions, approved by UNEP in the beginning of 2022.
Risks related to health crisis								In the Brasilia pilot, field actions, mainly for training farmers and planting, were compromised until the next rainy season.
Risks related to health crisis and the Covid-19 pandemics	All outcomes			-	S	M	Ļ	For ARIES, the pandemic situation in the last year is more stable and they have been able to hold events with adequate sanitary measures, which allowed the resumption of some face-to-face events. Eventually they still deal with employees and key partners/suppliers affected by COVID-19 and the work continues to be carried out in a hybrid way.
								For SCIO, the consequences of the pandemic were felt more mildly in the period in question. In particular, the maintenance of online events to avoid crowds was one of the actions to adapt to the moment.

					PCS resumed its mobilization actions and face-to-face training workshops as of December 2021. However, many training activities are still being carried out remotely, at the request of municipalities. The justification is that technicians from different departments find it easier to participate remotely. We also point out that recently, with the high number of Covid in the city of São Paulo, PCS experienced shortage on the team, which has caused delays in some activities planned.
Lack of ongoing consideration of project risks and development of risk mitigation plans leads to a reduced project impact				L	Risk is being tracked and a risk mitigation plan is in place. Bilateral and management meetings are kept monitor development of the project and potential impacts.
In Recife, unforeseen construction problems (such as heavy rains) affect project's pilots implementation.				Н	<ul> <li>Recife is experiencing exceptionally heavy rains and other unforeseen construction problems. Those problems are affecting the budget and workplan of the project's implementation:</li> <li><u>Budget</u> - Despite the survey studies in the executive design stage of the filtering garden (2.3.1), soil with garbage was identified during the execution of the earth movement which impacted on the number of filters to be executed, due to the increase of cost. Budget lines had to be reviewed to accommodate the increase of the final value of the work. Despite the garbage problem, heavy rains started in May 2022 and is also generating impacts on the construction of the filtering gardens. Budgetary impact to be evaluated when the rains end.</li> <li><u>Workplan</u> - The construction company of the filtering garden (2.3.1) is analysing the impacts of heavy rains and will present a new schedule considering the forecast of rain for the next two months (until August 2022). ARIES is reviewing the feasibility of starting the urbanization works (2.2.1) before August 22 (contract to be sign). An impact analysis is being carried out on the workplan of the CITinova Project.</li> </ul>
Participation of key municipal stakeholders in project actions and deliveries hampered by the state of emergency in the municipality due to heavy rains.				S	Because of the tragedies that occurred in Recife, the mayor declared state of emergency (Decree 36.669, May 28, 2022). Municipal managers were mobilized in the assistance of the affected families, compromising their dedication to meetings and analysis of products of the project.
Project activities and results of SEMA and CGEE affected by shortage of funds due to payment of taxes to the Federal District Government.				н	A reallocation of budget is necessary to mitigate the effects of fiscal issues payment. SEMA: The current Risk associated with the Project costs are those raised by the CGEE in May/22, referring to the need to collect ISS by the CGEE on the value of the resources transferred by the project for execution. The ISS values in this situation were not foreseen in the Project. The identification of a set of initiatives to solve the problem is still in the evaluation process.

#### Table B. Outstanding medium & high risks

<b></b>	Actions decided during the	Actions undertaken	Additional mitigation measures for the next six months until 30 December		
document previous PIR, HLPR, MIR, CEO over the period		over the reporting period	What	When	By whom
Management and Political         Risks         - Changes in political         leadership due to the 2022         federal elections weakens         project support or leads to         changed priorities	New risk	Articulation, particularly with MDR, is being made at ministry level, to make good experiences of the project available for further dissemination as public policies (under MDR competence).	1. Hold meetings with new political authorities if a political change occurs, including MDR.	1. Jan-Feb/2022	1. National Director, Nacional Coordinator, UNEP Task Manager
<ul> <li>SEMA         <ul> <li>Lack of focus and lack of time to perform actions to achieve Sustainable Pact indicator target leads to a reduced impact</li> </ul> </li> </ul>	Address users in Descoberto and Paranoá that have already been mobilized by community programmes to adopt financially viable solutions for agricultural and forestry practices. Users attended workshops and signed the Pact for Sustainability. In 2020 mobilization actions, workshops and monitoring activities ensured the continuity of their participation in the protection of the watersheds. In 2021 a communication and mobilization campaign to encourage landowners to commit to sustainability pacts was recommended.	Sustainable Pact indicator was overestimated, and foreseen actions would not be enough to reach it. SEMA started execution of activities to get closer to the indicator range such as the water week, environmental week and actions at schools. A strategy to achieve the Sustainable Pact was presented and is under discussion between MCTI, UNEP, the project management team and	<ol> <li>Meeting with the Secretary of SEMA</li> <li>Technical meeting</li> <li>Strategy for the Sustainable Pact agreed on.</li> <li>Execution of activities according to the strategy.</li> </ol>	<ol> <li>Aug 31/2022</li> <li>Sep 15/2022</li> <li>Sep 30/2022</li> <li>Oct-Dec/2022</li> </ol>	<ol> <li>UNEP Task Manager</li> <li>SEMA Coordinator, Subsecretary of Strategic Affairs, Technical Coordinator</li> <li>SEMA Coordinator, Subsecretary of Strategic Affairs</li> <li>SEMA Coordinator, Undersecretary for Water and Waste</li> </ol>
<ul> <li>Changes in political leadership due to the 2022 state elections weakens articulation with other governmental institutions which is essential for integrated urban planning (including through SISDIA)</li> </ul>	New risk	SEMA's SISDIA has some cooperation agreements in place and some others under negotiation. Is important to ensure that data availability and SISDIA access is kept unchanged, even with public managers turnover.	<ol> <li>Prepare a strategy to ensure that SISDIA and other project's actions are maintained by a new government, if a political change occurs, including availability of the project files and documents.</li> <li>Hold meetings with new political authorities to implement the strategy in 1</li> </ol>	1. Nov/2022 2. Jan-Mar/2022	1. SEMA Coordinator 2. SEMA Coordinator, MCTI, project management team, UNEP Task Manager

Risk		Actions decided during the previous PIR, HLPR, MTR, CEO document	Actions undertaken	Additional mitigation measures for the next six months until 30 December		
			over the reporting period	What	When	By whom
				above if a political change occurs.		
-	Administrative delays and regulation changes cause the photovoltaic pilot to be completed close to project closure, leading to a lack of time to assess the pilot's impact for replication.	In 2021 SEMA prepared an action plan to implement the solar energy pilot within the project timeline, for the consideration of MCTI and UNEP	Action plan for PV pilot submitted and approved. The term of reference and additional procurement documentation was finalized. New CGEE staff questioned the procurement criteria established by SEMA (technical and price) which demanded explanations and loss of significant time.	<ol> <li>Revise workplan and budget to ensure monitoring period after pilot is executed.</li> <li>Hold weekly CGEE-SEMA procurement and hiring meetings.</li> <li>Establish and implement a monitoring framework before construction ends and ensure a commitment of the FDG to continue monitoring the pilot and sharing data with MCTI after the project ends.</li> </ol>	<ol> <li>Aug/2022</li> <li>Starting Aug/2022 and continuing until contract is signed</li> <li>Jan/2023</li> </ol>	<ol> <li>SEMA Coordinator, CGEE Director</li> <li>SEMA Coordinator, CGEE Director, Contract, Procurement and Legal assessorial of CGEE.</li> <li>SEMA Coordinator, Undersecretary of Strategic Affairs and Executive Secretary.</li> </ol>
-	SEMA's outputs and results affected by budgetary shortages due to tax payments.	New risk.	CGEE paid ISS on the received funds since the beginning of the project, that was not foreseen at project's budget.	1. Prepare a budget revision, including descriptions on how SEMA intend to mitigate the impact of budget shortages on projects results, to be delivered with budget revision.	1. Aug/2022	1. SEMA Coordinator with SEMA Undersecretary of Strategic Affairs and CGEE Director
<u>AR</u> -	IES The use of another IT tool, ArcGIS, leads to IMS not being used by city managers	New risk	ARIES rearranged the governance of IMS and ensured data exchange with ArcGIS (both ways). Functionalities of IMS under testing and adjustments with the Capibaribe Secretariat for final delivery.	<ol> <li>Update IMS strategy, considering the sustainability of the platform after the end of the project.</li> <li>Ensure data exchange between IMS and ArcGIS and define, by IMS delivery, the data update system.</li> <li>Develop and execute an engagement and mobilization plan for the use of IMS by other municipal secretariats.</li> </ol>	<ol> <li>Sep/2022 and updates every two months</li> <li>Sep/2022</li> <li>Oct/2022 (develop) / Nov/2022- Feb/2023 (execute)</li> </ol>	<ol> <li>ARIES Coordinator</li> <li>ARIES Coordinator</li> <li>ARIES Coordinator</li> </ol>
7 - the mo of by of PC	- Short time until the end of project compromises the initoring and demonstration pilots success for replicability city managers and sharing essons through SCIO and S platforms.	In 2019 it is proposed that MCTI advocates regularly with mayors, other ministers, and key stakeholders. Co-executing partners should use project results to obtain new funds for sustaining projects actions. In 2020, partners	City managers has been involved on projects deliveries to see, during its execution, the potential benefits.	<ol> <li>Revise workplan to make sure that when pilots start functioning a monitoring period is included.</li> <li>Prepare a monitoring plan (indicators, periodicity and</li> </ol>	1. Sep/2022 2. Dec/2022 3. Feb/2023	<ol> <li>ARIES Coordinator</li> <li>ARIES Coordinator</li> <li>ARIES President and PCR</li> </ol>

Actions decided during the Actions undertaken Additional mitigation measures for				es for the next six n	for the next six months until 30 December	
Risk	previous PIR, HLPR, MTR, CEO document	over the reporting period	What	When	By whom	
	should have their monitoring system within project's timeline. As of 2021, monitoring systems under development should consider pandemic.		responsible) for each pilot and consider a monitoring method and results dissemination even after project ends. 3. Ensure a commitment of the PCR to continue monitoring the pilot and sharing data with MCTI after the project ends			
8 Heavy rain, unforeseen site issues, and changing Recife government requests delay the completion of deliverables.	New risk	Detailed registration and reporting of each situation (rain, site issues, changes request) along with information for decision making (alternative solutions and impacts on projects execution).	<ol> <li>Prepare and submit change request</li> <li>Prepare a budget and workplan revision</li> <li>Obtain letter of commitment from PCR on co-financing activities to support project changes</li> </ol>	1. Sep/2022 2. Sep/2022 3. Aug/2022	<ol> <li>ARIES Coordinator</li> <li>ARIES Coordinator</li> <li>ARIES President and PCR</li> </ol>	
SCIO 9 City managers do not use SCIO due to: a lack of awareness about the platform's existence; the platform being not user friendly; and the platform not containing relevant information.	In 2020 surveys with the users to ensure that the new platform meets the needs of users. 2021 - Articulation with various stakeholders to give visibility to the SCIO and preparation of a communication plan to ensure that the platform reaches Brazilian cities. Monthly report on platforms access and usage. SCIO and PCS combined efforts to reach city managers.	CGEE articulated with various stakeholders to give visibility to SCIO and monitored the accesses to the platform with delivery of reports. SCIO and PCS joint actions were planned and implemented. Two university institutions were hired to improve data of solutions and case studies in the platform. The outreach for city managers was postponed, to occur after incorporation of changes, to present a more useful tool to the cities. UNEP and MCTI also communicated the need to include the user- friendliness of the platform, including with regards to simplifying the typologies.	<ol> <li>Revise budget and workplan to ensure execution of outreach activities once platform is ready for sharing.</li> <li>Revise the outreach strategy and execute it.</li> <li>Hold two workshops with UNEP and MCTI to highlight SCIO improvements, and on user friendliness.</li> <li>Establish a consultative group to assist SCIO's effective delivery, including representatives of municipalities, NGOs (ICLEI, WRI) and other key groups (FNP, ABM, CNM) and hold monthly meetings.</li> </ol>	1. Aug/2022 2. Sep/2022 (strategy), Jan- Apr/2023 (execution) 3. Aug/2022 and Dec/2022 4. Sep/2022 (constitution), Sep/2022- Apr/2023 (execution).	<ol> <li>CGEE Coordinator and CGEE Director</li> <li>CGEE Coordinator</li> <li>CGEE Coordinator / CITinova Platform Coordinator</li> <li>CGEE Coordinator</li> </ol>	

	Actions decided during the previous PIR, HLPR, MTR, CEO document	Actions undertaken over the reporting period	Additional mitigation measures for the next six months until 30 December		
RISK d			What	When	By whom
10 CGEE/SCIO's outputs and results affected by budgetary shortage due to tax payments.	New risk	CGEE paid ISS on the received funds since the beginning of the project.	<ol> <li>Prepare a new budget revision</li> <li>Prepare a report which describes how CGEE will mitigate the impact of budget shortages on projects results to be delivered with budget revision.</li> <li>Prepare a report on the financial execution of the project to understand how the tax payment was not verified / identified previously and not recommended to be considered by the CGEE financial team, including lessons learned and recommendations to avoid similar situations in the future</li> </ol>	1. Aug/2022 2. Aug/2022 3. Aug/2022	<ol> <li>CGEE Coordinator and CGEE Director</li> <li>CGEE Coordinator and CGEE Director</li> <li>CGEE Director</li> </ol>
11 Delays in advancing of SCIO development and lack of sustainability plan complicates its incorporation into SIS+	New risk	N/A	<ol> <li>Prepare a description of the system (i.e. describing all system elements: IT platform, coding, etc.).</li> <li>Prepare a strategy for facilitating the migration of SCIO to SIS+, including identification of actions and costs.</li> <li>Prepare a strategy for the sustainability of SCIO after project ends.</li> </ol>	1. Oct/2022 2. Oct/2022 3. Oct/2022	<ol> <li>CGEE Coordinator</li> <li>CITinova Technical Coordinator and CITinova Platform Coordinator (co- leads), MCTI Project Director, MCTI National Coordinator and UNEP Task Manager, with input from CGEE Coordinator and CGEE Director</li> <li>CGEE Director</li> </ol>

High risk (H): Probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks.

Significant risk (S): Probability of between 51% and 75% that assumptions may fail to hold or materialize, and/or the project may face substantial risks.

Medium risk (M): Probability of between 26% and 50% that assumptions may fail to hold or materialize, and/or the project may face only modest risks.

Low risk (L): Probability of up to 25% that assumptions may fail to hold or materialize, and/or the project may face only low risks.

#### 4. Project Minor Amendments

Minor amendments are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5% as described in Annex 9 of the Project and Program Cycle Policy Guidelines.

Please tick each category for which a change occurred in the fiscal year of reporting and provide a description of the change that occurred in the textbox. You may attach supporting document as appropriate.

Results framework
Components and cost
Institutional and implementation arrangements
Financial management
Implementation schedule
Executing Entity
Executing Entity Category
Minor project objective change
Safeguards
Risk analysis
Increase of GEF project financing up to 5%
Co-financing
Location of project activity
Other

Minor amendments	In Recife, after the development of studies, the solar boat pilot was found unfeasible. ARIES, with the government of Recife, designed and proposed a new output, observing one of the main objectives of the project in Recife – urban active mobility. The pilot – Travessias – is a non-motorized transport connectivity promoted across the Capibaribe river through the establishment of bike lanes and government commitment to construct two pedestrian/cyclist bridges. The budget from the solar boat is sufficient for the new output and activities may be finalized by April 2023.
	In Brasília, the original version of the deliverable "2.2.1.B Solar pilots installed, operating and changes measured" foresaw the installation of a photovoltaic energy generation unit to attend 10 schools, with the sale of the surplus. From the time the pilot was planned to the period of execution, the legal base of photovoltaic energy generation and distribution changed. After a careful analysis of the current legislation and with adequate technical support to evaluate the available technological options, SEMA concluded that it is more economic and efficient to install a plant with greater capacity, concentrating resources and safety measures. The project will install 4 PV power systems and attend, by compensation, the demand of all environmental agencies in the Federal District, in addition to the 10 schools originally planned. SEMA and the State Secretariat of Economics of Federal District (SEEC / DF) developed a partnership model that will benefit the agencies involved and stimulate the generation of data regarding public resources saved with the arrangement showing the economic advantages of investing in PV solar energy besides the environmental benefits, that are already clear.

### **GEO Location Information:**

Location Name Required field	Latitude Required field	Longitude Required field	Geo Name ID Required field <u>if</u> the location is not an exact site	Location Description Optional text field	Activity Description Optional text field
Recife	-8.05389	-34.88111	3390760		
São Paulo	-22.00000	-49.00000	3448433		
Brasilia	-22.25000	-42.50000	3451189		

Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate.

N/A