



Answering
tomorrow's
challenges
today

Martinique

**Study on living conditions and
access to selected basic needs in
the EU outermost regions**

REQUEST FOR SERVICES 005 Under Framework contract
2020CE160AT013

1.0 Key economic and social structure of the region

Specificities of the region: Martinique is a Caribbean Island, belonging to the Lesser Antilles archipelago. Martinique is a *single territorial collectivity*¹ divided into four districts, 45 cantons and 34 municipalities. The island features a mountainous relief and is exposed to multiple natural hazards, including earthquakes, tsunamis, volcanic eruptions, tropical cyclones, coastal erosions and landslides. Martinique has a tropical climate with two seasons: a dry season from January to May and a wet season from June to December. The economy of the south of Martinique is geared towards tourism, while agriculture dominates in the north². Despite its small size (1,080 km²), and declining population³, the island remains densely populated, with approximately 377,000 inhabitants⁴. The territory is unevenly inhabited, as the topography in some parts of the island - in particular, in the north - is less favourable, leading to a concentration of the population in the centre with approximately 42% of residents



Figure 1. Martinique map. Source: DG REGIO

living in the *Communauté d'Agglomération du Centre Martinique*⁵. On the contrary, tourism tends to concentrate in the south. Furthermore, the population has been decreasing at an average of 1% per year since 2014, due to a decrease in the number of arrivals and more people leaving the region⁶. This trend, coupled with an ageing population, is affecting Martinique's housing policy adaptability to those changing needs⁷ - 40% of the population in 2030 is expected to be 60 (or older)⁸. The population living below the national poverty line (28.6 %) is still around twice the percentage of mainland France (14.1%)⁹.

- ▶ **Water and sanitation**, as well as **Adequate Housing** have been defined as the **key basic needs** to be analysed in Martinique. **Key facts and figures** on the overall access to the two needs, further developed in this fiche, are summarised below:

- ▷ **Key Area 1 "Water and sanitation"**: Almost 95% of the population has access to drinking water¹⁰. Nevertheless, network leaks, ageing infrastructure and geographic conditions hinder efficient water distribution and universal access. It is estimated that around half of the drinking water produced is lost during distribution. The prevalence of non-compliant wastewater treatment systems poses risks to the environment and health¹¹.
- ▷ **Key Area 2 "Adequate housing"**: The rate of over-occupied residencies¹², as well as the number of dwellings equipped with facilities and supplied with basic services, is following a positive trend. In addition, the number of social housing units has increased whilst the population decreased¹³. However, 24,419 homes are considered "degraded", and substandard accommodation constitutes a concern.

2.0 Water and sanitation

2.1 Access to drinking water and sanitation in Martinique

2.1.1 Conditions in place to meet the needs and main factors constraining access

Conditions in place

- ▶ In Martinique, **geography** is an important factor affecting access to water and sanitation. With an average annual rainfall estimated at over 2 billion m³ per year¹⁴, Martinique enjoys abundant water resources. However, its management can be challenging due to an uneven distribution of sources. The majority (94%) of water comes from rivers (with around 60% originating from one river – Lézarde), while 6% comes from groundwater. Water harvesting is primarily carried out in the north of the island and four municipalities (Saint-Joseph, Gros-Morne, le Lorrain and Fort-de-France) supply 85% of Martinique's drinking water¹⁵, whereas consumption is concentrated in the centre and south. Additionally, the tropical island's complex territorial topography and high population density make Martinique particularly vulnerable to weather conditions such as droughts. Unlike mainland France, the largest portion of harvested water is used for domestic purposes.
- ▶ Overall, around 95% of the population has access to drinking water¹⁶. The estimated number of inhabitants supplied remained almost unchanged between 2014 (375,818 inhabitants served) and 2020 (308,534 inhabitants served)¹⁷. However, average **water consumption** per customer decreased from 169.02 m³ in 2014 to 298.39 m³ in 2020¹⁸. The domestic volume accounted for per inhabitant served has also increased during this period¹⁹.

- ▶ Regarding **affordability**, despite a decrease from 2014 (2.95 €/m³) to 2020 (2.64 €/m³)²⁰, the average price of water per cubic meter for 120 cubic meters²¹ remained above the national average of 2.11 €/m³ (excluding the cost of sanitation for households connected to a collective network)²². Furthermore, the rate of unpaid water bills from the previous year almost doubled between 2014 (5.4%) and 2020 (10.77%)²³. This is particularly significant in an island where 28.6% of the population is living below the national poverty line²⁴, which, coupled with high inflation rates^{25 26}, places a disproportionate burden on households' budgets.
- ▶ Water **quality** is following a positive trend. Compliance of distributed water samples for sanitary control with microbiological quality limits²⁷ increased from 98.47% (2014) to 100% (2020)²⁸. Similarly, compliance with physico-chemical quality limits²⁹ rose from 16.43% to 27.16% over the same period³⁰. Progress in protecting water resources also increased from 97.56% (2014) to 100% (2020)³¹. Although slightly below the national average of 76%, around 72% of water catchments are protected³², meaning that water abstraction facilities have been designated with protection perimeters. This shows that additional efforts were undertaken by public and private entities to preserve water infrastructure.
- ▶ From an **administrative** standpoint, three agglomeration communities³³ oversee water and sanitation production, distribution, and management: Centre de la Martinique (CACEM); Pays Nord Martinique (CAPNM); Espace Sud (CAESM). They have delegated the operation and maintenance of drinking water facilities to private operators such as the Société Martiniquaise des Eaux (SME) for Espace Sud and Cap Nord, or to a community operator such as the Régie Communautaire de l'Eau et de l'Assainissement (ODYSSI) for CACEM³⁴.
- ▶ As of 2016, the **Action Plan for Drinking Water and Wastewater services** (known as Plan Eau DOM) is the key **policy framework** for water action in the French outermost regions, as it supports local authorities in improving drinking water and sanitation services, by strengthening their technical and financial capabilities. Since 2020, a series of plans (at state and regional level) have been put in place to finance up to 100% of operations. Additionally, as the key strategic framework for water management, the **Master Plan for Water Development and Management** (SDAGE) Martinique was approved in 2022. In general terms, the National Recovery and Resilience Plan (RRP) (2021) focuses on the implementation of Plan Eau DOM and enhancing the resilience of the drinking water supply. In the French overseas administrations, water leaks in the networks are so substantial that basic drinking water needs can no longer be met³⁵.
- ▶ In terms of relevant funding **programmes and investments**, the European Regional Development Fund (ERDF) and the European Social Fund Plus (ESF+) 2021-2027 Programme for Martinique includes a specific objective aimed at favouring access to water and sustainable water management with a planned amount of almost 26 million euro³⁶. For instance, the CARIBSAN project³⁷, which aims to promote wastewater treatment using treatment wetlands across the Caribbean region, received funding from ERDF Interreg (75%), the Water Offices of Martinique and Guadeloupe and the French Development Agency³⁸. Moreover, the French RRP for 2021-2026³⁹ has earmarked 50 million euro for the French Overseas Territories⁴⁰, in particular French Guiana, the Antilles (which includes Martinique) and Mayotte, to renovate water and wastewater networks and enhance drinking water production.
- ▶ At national level, French regions have access to subsidies and loans from the French Development Agency and the Deposit and Consignment Fund for drinking water production⁴¹. Additionally, financing has been made available by the French government under the Convergence and Transformation contracts and the Plan Eau DOM⁴². The regional administration, including the Water Office of Martinique⁴³, offers funding as is the case of the multiannual intervention programme (2017-2022, with a provisional overall budget of 70 million euro) and the system for financing wastewater treatment for private individuals, which covers 30% of the cost of connection work on private property.

Constraining factors

The region faces challenges which partially constrain access to this basic need or are likely to constrain access in the future:

- ▶ **Climate change** is increasing the likelihood, frequency and severity of extreme weather events. Longer droughts put additional pressure on available resources, while heavy rainfall often leads to drinking water production plants shutdowns due to water turbidity. Addressing uneven water distribution across the territory and across the dry and wet seasons is crucial. Earthquakes and cyclones cause substantial damage to infrastructure, and often trigger landslides, disrupting water and sanitation services. Given the mountainous terrain and vulnerability to cyclones and rising sea levels, Martinique regularly faces coastal flooding, erosion, and landslides⁴⁴ that damage water networks.

Drought in Martinique

In 2020, amid the outbreak of the COVID-19 crisis, Martinique faced severe water scarcity. The island's residents endured regular water cuts, primarily attributed to a combination of drought conditions and faulty water infrastructure. In March 2020, typically the driest month of the year, the region experienced an even more acute shortage than usual⁴⁵.

- ▶ The **numerous actors**, including producers, distributors, and operators adds complexity to the water management process, particularly in terms of coordination. **Transparency and accountability** practices are not widely implemented, with recent events having a negative impact on citizens' trust in water management bodies⁴⁶.
- ▶ Martinique has also faced water **pollution issues**, particularly from pesticides like Chlordecone, which have been prohibited for years. For example, the Vivé production unit in Le Lorrain had to be equipped with a Chlordecone treatment system, which drove up the cost per m³ produced. Low concentrations of this pesticide were still found in water catchment points in 2020⁴⁷.
- ▶ Regarding the **conditions of the water infrastructure**, average renewal of drinking water networks decreased from 2014 (0.74%) to 2020 (0.15%)⁴⁸. The frequency of unscheduled service interruptions decreased from 11.87% to 7.76% between 2014 and 2016, although they increased again to 15.08% in 2020^{49 50}. Service interruptions remain frequent, particularly in the municipalities of the centre south and Schœlcher. Causes include landslides, droughts, aging infrastructure and insufficient investment in maintenance and renovation. It is estimated that approximately 500 km of the distribution networks (pipes), mostly dating from the 1970-1980s, will need reparation in the short term requiring major investments^{51 52}.
- ▶ When it comes to **water losses**, the linear network loss index (m³/km/day) improved from 16.4 to 11 between 2014 and 2020⁵³. Despite this improvement, only 50% of the extracted water for drinking purposes is billed in Martinique and around half of the drinking water is lost during production and distribution⁵⁴.
- ▶ Regarding sanitation, merely 40% of Martinique's population is connected to a **public sewerage system**. Existing plants are in poor conditions, with only 48 out of 112 plants compliant with performance requirements in 2019⁵⁵. In Martinique, there is an over-representation of very small treatment plants with a low treatment capacity⁵⁶. The remaining 60% of the population are connected to a private sewerage system, known as autonomous or individual sewerage system⁵⁷. The operation of individual sewerage systems can be problematic given that they are not always up to standard or are inadequately maintained, creating health risks. For instance, individual sewerage systems can lead to the proliferation of mosquitoes which transmit numerous diseases⁵⁸. In some cases, untreated water is discharged into the environment⁵⁹, causing environmental harm⁶⁰.

3.0 Adequate housing

3.1 Access to adequate housing in Martinique

3.1.1 Conditions in place to meet the needs and main factors constraining access

Conditions in place

- ▶ **Habitability** has improved as evidenced by a reduced rate of over-occupation of main residences, dropping from 12% (2009) to 7.8% (2020)⁶¹. However, **homeownership** rates stagnated between 2009 and 2020 as low-income levels restrict access to property, with a homeowner rate of around 54% - significantly below the national average of 63.6%⁶². The median standard of living or equivalent disposable income for Martinique's population is 18,570€ per year, which stands 15% below the national median⁶³. The decline and subsequent stagnation of homeownership rates may be attributed to the policy of reducing substandard housing, specific to Martinique. This policy focused on helping households leave poor-quality housing and facilitating access to homes that met hygiene standards, often necessitating the demolition of traditional huts. This turned many landlords into tenants⁶⁴. Moreover, the number of primary residences is declining while secondary and vacant dwellings are on the rise, with a rate of unoccupied houses nearly doubling the national average (15% vs. 8%)⁶⁵.
- ▶ In contrast, **social housing units** per 10,000 inhabitants increased by 10% (2018-2022). In 2020, the number of open social housing demands stood at 11,800 and even though the population decreased, demand increased by 9% between 2013 and 2019⁶⁶. This mismatch between demand and offer is closely related to the low level of turnover in the existing social housing stock, coupled with less social housing development⁶⁷. Common trends for the profile of requesters are: a higher average age pointing to an ageing population; single-parent households; one-person households; a high number of

requests motivated by the lack of own accommodation, often relying on temporary or third-party housing arrangements like household members); and poverty or at risk of poverty, more prevalent than at national level⁶⁸.

- ▶ As for **affordability**, with 5.72 the average rent per square metre of living space was lower than the national average of 6.05 in 2021⁶⁹ but the median standard of living of Martinique's population is 15% below the national standard⁷⁰.
- ▶ In terms of **housing typology**, the proportion of houses or solid buildings has increased from 94.4% in 2009 to 95.4% in 2020. However, the share of households made of wood/plant/soil slightly rose from 3.2% (2009) to 3.4% (2020)⁷¹. Over the same period, the number of both makeshift dwellings and traditional dwellings decreased, reaching values of 0.8% and 0.4% respectively⁷². Both electricity and sanitation **facilities** are present in almost 100% of households. The presence of an air-conditioned room became more prevalent over the period 2009-2020 from 18.40% to 29.7⁷³.
- ▶ From an **administrative** point of view, housing policy falls within the remit of the State and is under the framework of the second **Overseas Housing Plan 2019-2022**, which was extended until 2023⁷⁴. At a more territorial level, the main document for formulating a housing strategy at the agglomeration community level is the **Local Housing Programme (PLH)**⁷⁵ ⁷⁶. The Inter-municipal Plan to Combat Substandard Housing (PILHI), is a key tool to reduce the number of substandard homes, and is being used by the three agglomeration communities⁷⁷. Lastly, the **Earthquake Plan Antilles**, was devised in 2007 to ensure that housing is adapted to the risk of earthquakes⁷⁸.
- ▶ Funding **programmes and investments** include the national government's 'Unique Budgetary Line' (LBU), managed by the Department of the Environment, Planning and Housing (DEAL) of Martinique. It is the Housing Financing Unit that examines funding applications, validates funding plans in conjunction with operators and other investors, certifies invoices and makes payments⁷⁹. Additional tools of the State's policy to promote social housing include tax measures, grants, and loans from Action Logement and the National Housing Agency (ANAH)⁸⁰. The Banque des Territoires also provides financing in the form of loans and equity investments⁸¹. The government's 'Action Coeur de Ville'⁸² programme aids Fort-de-France and Le Lamentin for city centre development, while the 'Petites villes de demain' initiative⁸³ supports smaller towns⁸⁴. Moreover, the French Major Natural Risk Prevention Fund provides funding for risk prevention measures⁸⁵.
- ▶ At EU-level, the ERDF-ESF+ 2021-2027 Programme for Martinique plans to invest 9.5 million euro to improve housing infrastructure⁸⁶ and 20 million to support equal and timely access to affordable, sustainable, and quality services. This involves services promoting access to housing, modernising social protection systems, including facilitating access, with a particular focus on children and disadvantaged groups⁸⁷. InvestEU⁸⁸ and the French RRP for 2021-2026⁸⁹ offer grants and financial tools to increase access to and improve housing, including spaces for the elderly. Finally, the French RRP also focuses on protecting windows against solar radiation and replacing existing air conditioning units to step up efficiency⁹⁰.

Constraining factors

The region faces diverse challenges which partially constrain access to this basic need or are likely to constrain access in the future:

- ▶ The **social housing stock is ageing** and in need of repair, thereby becoming less suited to the needs of the population. Around 3.8% of the social housing stock remains unoccupied, exceeding the national average at 2.7%. Additionally, administrative obstacles hinder access, reflected in the fact that the average waiting time for social housing allocation is 15 months⁹¹. On top of this, the turnover rate within social housing is low. This suggests that households tend to stay in their social housing units for longer periods, and fewer homes become available. Even though a third of the building stock is quite recent⁹², almost half of all social housing was built between 1980 and 1999⁹³, and homes show increased need for renovation. Local climatic conditions and high humidity often accelerate the deterioration of the dwellings. Demographic shifts also influence social housing as currently most homes are intended for families. However, there is a growing need for smaller units (representing only 5% of the stock)⁹⁴, which would require a restructuring of larger dwellings.
- ▶ Alongside **land shortage** hampering the development of new housing, Martinique also faces difficulties in land management. **Property ownership is notably intricate** due to the rising prevalence of joint tenancy agreements, affecting 40% of privately-owned land⁹⁵. This complicates property maintenance and poses obstacles to the development of a sufficient housing supply in the region.
- ▶ Despite improvements in housing infrastructure, **substandard housing** remains a concern according to data from 2019 collected by the Department of the Environment, Planning and Housing (DEAL) of Martinique with 24,419 degraded homes, characterised by a very poor state of repair, quality of the construction, facilities of the building and the home itself⁹⁶. 42.6% of the degraded housing of the island is located in the *Communauté d'agglomération du centre de la Martinique*⁹⁷. Around

12% of social housing applicants state substandard conditions in their current accommodation as a reason for the request, compared to 7% nationally⁹⁸.

- ▶ **Comfort problems** and defects persist. The presence of a neighbouring property less than 10 metres away⁹⁹ and humidity are some of the often-raised issues¹⁰⁰. The latter can be partly explained by the tropical climate of the island. Additionally, home humidity can have a negative impact on health¹⁰¹.

4.0 Mitigating actions and recommendations

Needs identified in Key Area 1: Access to water and sanitation

COMBINE WATER STORAGE AND ALTERNATIVE WATER RESOURCES TO INCREASE WATER RELIABILITY AND A FAIR DISTRIBUTION

- ▶ Explore the use of water sources – other than surface water - including **groundwater** (currently representing only 6% of the water) to reduce pressure on surface waters.
- ▶ Explore opportunities to increase the **storage capacity** of existing reservoirs, allowing to save water for drier times and adapt to climatic conditions. This could be especially valuable for irrigation by storing pumped water for future use.
- ▶ Set up and improve **interconnections** between the different water networks and storage facilities allowing to mobilise different resources and compensate shortages through water transfers.

BRING COLLECTIVE WASTEWATER TREATMENT FACILITIES INTO COMPLIANCE AND INCREASE COVERAGE

- ▶ Strengthen **diagnostics** to activate **extension and rehabilitation** work on wastewater networks.
- ▶ Support **households to connect to the public sanitation** system by promoting existing subsidies offered by the National Housing Agency (ANAH), agglomeration communities, family allowance fund (CAF), among others.
- ▶ Implement **rehabilitation operations for non-collective sanitation**, prioritising areas with health and environmental issues.

DECONTAMINATE WATERCOURSES POLLUTED BY CHLORDECONE

- ▶ Systematically **monitor** the situation to gain a better understanding of the extent and effects of the **Chlordecone pollution**.
- ▶ Allocate **resources for research** to develop new and more effective **decontamination techniques**.

ENHANCE WATER GOVERNANCE BY REINFORCING TECHNICAL CAPACITY

- ▶ Offer and/or facilitate **trainings and tools** on asset management, leak detection, network regulation, network inventory, among others, to support network operators.
- ▶ Increase transparency and timely **information sharing** on the progress of operations carried out by the operators.

Needs identified in Key Area 2: Access to adequate housing

RENOVATE AND ADAPT HOUSING OFFER TO CHANGING NEEDS AND PRIORITIES

- ▶ **Renovate and restructure existing social housing** to better suit smaller households, including the conversion of larger units into smaller ones. Additionally, prioritise diversity in the design of new social housing to accommodate different household profiles.
- ▶ **Support social housing tenants** as they become older, allowing them to remain in their own homes (e.g., social support, home adaptations, etc.), while offering complementary solutions within the social housing stock (e.g., residences and homes for the elderly).
- ▶ **Help renovate older and degraded private stock**, often vacant or occupied by low-income households and located in city centres.

PROMOTE THE LOCAL CONSTRUCTION INDUSTRY TO SEIZE LOCAL AND TRADITIONAL KNOW-HOW

- ▶ **Support local industries and bio-sourced materials**, such as bamboo, which can be used as a building material and has the capacity to absorb carbon.
- ▶ **Make building and development projects' framework more flexible** by proposing adaptations of regulatory requirements or creating an enabling environment for increased SMEs participation in tenders. This includes offering greater visibility over future operations, raising awareness and building capacity for collaborative efforts among SMEs.
- ▶ **Develop local renovation expertise platforms**, offering integrated support for private homeowners, from initial advice to financing solutions for renovation. This can take the shape of one-stop-shops.

SET UP MULTI-SECTORAL TERRITORIAL PARTNERSHIPS TO PROMOTE THE DEVELOPMENT OF ADAPTED AND AGE-SENSITIVE HOUSING POLICIES AND APPROACHES

- ▶ **Foster coordination** among economic development, transport, employment, healthcare, environmental departments to support housing policies and measures that strive for adequate, well-connected, resource-efficient housing.

STRENGTHEN AWARENESS AND KNOWLEDGE OF THE CONDITIONS AND PROCEDURES TO APPLY TO THE EXISTING SUBSIDIES FOR HOME RENOVATION

- ▶ **Organise local capacity-building and awareness raising workshops** in cooperation with local authorities, to inform about current subsidies available, i.e., 'Agir Plus' and zero interest eco-loans. Provide guidance on the requirements and procedure to access them. This can be particularly useful for home insulation in areas affected by humidity, high temperatures, and elevated energy prices.

Annexes

Annex 1 - References

- ¹ Chartered subdivision of France that exercises the powers of both a region and a department.
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- ³ Recensement de la population en Martinique : 364 508 habitants au 1^{er} janvier 2019, Corentin Douriaud, Xavier Reif (Insee), 2021. <https://www.insee.fr/fr/statistiques/6012596>
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- ⁶ Ibid.
- ⁷ La demande de logement social en Martinique, L'Union sociale pour l'habitat, 2021. https://www.union-habitat.org/sites/default/files/communiqués/documents/2021-11/brochure_la_demande_de_logement_social_en_martinique.pdf
- ⁸ La Martinique face au vieillissement de la population : hausse importante du nombre de seniors dépendants à l'horizon 2030, Marcelle Jeanne-Rose, Baptiste Raimbaud, Floraline Cratère (Insee), 2020. <https://www.insee.fr/fr/statistiques/4796029>
- ⁹ Numbers are from 2017 https://doc.cerema.fr/Default/doc/SYRACUSE/21972/ameliorer-la-resilience-des-services-publics-d-eau-potable-et-d-assainissement-dans-les-drom-et-a-sa?_lg=fr-FR
- ¹⁰ Les chiffres clés 2020 de l'eau potable et de l'assainissement en Martinique, Office de l'eau Martinique, 2020. <https://www.observatoire-eau-martinique.fr/documents/ODE-chiffreclé2020-WEB.pdf>
- ¹¹ Programme de Travail ERDF 2021-2027
- ¹² The appearance of the building is information specific to the French overseas departments. It allows housing to be distributed according to the following methods: makeshift dwellings; traditional huts; wooden houses or buildings; solid houses or buildings.
- ¹³ La demande de logement social en Martinique, L'Union sociale pour l'habitat, 2021. https://www.union-habitat.org/sites/default/files/communiqués/documents/2021-11/brochure_la_demande_de_logement_social_en_martinique.pdf
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- ¹⁵ Les chiffres de l'eau potable en Martinique, Observatoire de l'eau Martinique, 2021. <https://www.observatoire-eau-martinique.fr/services-d-eau-potable-et-d-assainissement/eau-potable/les-chiffres-de-l-eau-potable-en-martinique>
- ¹⁶ Les chiffres clés 2020 de l'eau potable et de l'assainissement en Martinique, Office de l'eau Martinique, 2020. <https://www.observatoire-eau-martinique.fr/documents/ODE-chiffreclé2020-WEB.pdf>
- ¹⁷ Fiche de métadonnées du jeu Services publics d'eau potable - jeux de données exploités pour les rapports nationaux, SISPEA, 2022 <https://data.eaufrance.fr/jdd/7d6a3010-cf19-42c3-8a38-9823074185ce>
- ¹⁸ Ibid.
- ¹⁹ Ibid.
- ²⁰ Ibid.
- ²¹ This indicator refers to the price of water per m³ for 120 m³ including VAT. Nonetheless, it is difficult to specify the price of a m³ of water in France, as different rates are applied. On average, however, the price of water is estimated at €2.11 /m³ for drinking water as at 1^{er} January 2021, based on an annual consumption of 120 m³ (figures published in the latest SISPEA report in July 2022).
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- ²⁵ Bilan économique 2022 – Martinique, Insee, 2023. <https://www.insee.fr/fr/statistiques/7621705?sommaire=7343444>

- ²⁶ REPLAY. Inflation galopante en Martinique, à la Une de l'Info Outre-mer, Le portail des Outre-mer, 2023. <https://la1ere.francetvinfo.fr/replay-inflation-galopante-en-martinique-a-la-une-de-l-info-outre-mer-1372854.html>
- ²⁷ This indicator refers to the process of collecting water samples from the water distribution network to assess the microbiological quality of the water supplied to consumers.
- ²⁸ Fiche de métadonnées du jeu Services publics d'eau potable - jeux de données exploités pour les rapports nationaux, SISPEA, 2022. <https://data.eaufrance.fr/jdd/7d6a3010-cf19-42c3-8a38-9823074185ce>
- ²⁹ This indicator refers to the process of collecting water samples from the distribution network to assess the physico-chemical quality of the water supplied to consumers.
- ³⁰ Fiche de métadonnées du jeu Services publics d'eau potable - jeux de données exploités pour les rapports nationaux, SISPEA, 2022. <https://data.eaufrance.fr/jdd/7d6a3010-cf19-42c3-8a38-9823074185ce>
- ³¹ Ibid.
- ³² Les chiffres clés 2020 de l'eau potable et de l'assainissement en Martinique, Office de l'eau Martinique. <https://www.observatoire-eau-martinique.fr/documents/ODE-chiffreclé2020-WEB.pdf>
- ³³ In French called 'communautés d'agglomérations', they group several communes or municipalities.
- ³⁴ Améliorer la résilience des services publics d'eau potable et d'assainissement dans les DROM et à Saint-Martin : Connaître les risques de perturbation des services, Cerema, 2021. https://doc.cerema.fr/Default/doc/SYRACUSE/21972/ameliorer-la-resilience-des-services-publics-d-eau-potable-et-d-assainissement-dans-les-drom-et-a-sa?_lg=fr-FR
- ³⁵ Plan National de Relance et de Résilience. French Government, 2021. https://efaidnbmnnnibpccjpcglclefindmkaj/https://www.economie.gouv.fr/files/files/directions_services/plan-de-relance/PNRR%20Francais.pdf
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