

# Gender Assessment

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## **FP065: Financial Instruments for Brazil Energy Efficient Cities (FinBRAZEEC)**

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# Gender documents for FP065

## ANNEX 10: Brazil: Financial Instruments for Brazil Energy Efficient Cities - FinBRAZEEC (P162455)

### *Gender Action Plan*

#### I. 1. Gender Action Plan's Objective

The Gender Action Plan (GAP) aims to identify potential entry points and opportunities to mainstream gender issues within the FinBRAZEEC project, based on the gender analysis. The GAP, including M&E indicators, are described in last section of this document.

#### II. 2. Project Background

The *Financial Instruments for Brazil Energy Efficient Cities* (FinBRAZEEC) project aims at overcoming investment challenges for urban energy efficiency (EE) projects by (i) unlocking private financing through the reduction of the credit risk of LED street lighting and industrial efficiency projects and (ii) providing technical assistance to enhance the quality of the projects. In order to achieve these goals, FinBRAZEEC proposes the creation of an EE facility that will offer financing to EE projects in the urban industrial and street lighting sectors. The objective of this facility is to create a new asset class for energy efficiency that can attract the interest of a wide range of investors and bondholders. The EE facility will be managed by national public bank Caixa Economica Federal (CEF).

the FinBRAZEEC project will be divided into two main components: (i) CEF Energy Efficiency Financing Facility, to support street lighting projects and urban industrial energy efficiency projects; and (ii) Technical Assistance. The street lighting EE investments is expected to benefit Brazilian citizens through the provision of better quality lighting services, which should also result in an enhanced perception of safety and improved mobility, especially for women, and increased local economic activity and wellbeing of the population at large. The industrial EE is expected to allow urban industries to become more competitive and improve their ability to preserve existing jobs. Both components will have significant environmental co-benefits, such as cleaner air and water resulting from less industrial pollution.

#### III. 3. Gender Analysis

This section provides an analysis of how gender has been integrated into the Brazilian institutional and legal frameworks, highlights advances and remaining gaps on gender equality, examines the different roles and needs of women in Brazil, and discusses additional vulnerabilities faced by women.

##### A. Legal and Institutional Frameworks

Over the past two decades, Brazil has made significant strides to mainstream a gender approach into policy making, promote gender equality and combat violence against women. In 2003, the Federal Government created the *Secretariat for Policies for Women* (SPM) under the Presidency. Throughout the following years, similar institutions were put in place at the state and municipal levels. The national Secretary was in charge of leading the design, implementation and enforcement of *National Plans of Policies for Women*, which were developed through highly participatory processes (World Bank 2016). Similar efforts were also seen at the sub-national level, with several states and some municipal governments designing their own plans or strategies to mainstream gender issues across different sectoral policies.

One of the National Secretary's initiatives was the creation of the "Pro-Gender Equity Seal of Approval", and Caixa Economica Federal, FinBRAZEEC's EE financing facility, was one of its winners in two consequent editions. This program aimed at raising awareness and sensitizing leaders, employers and workers to promote gender equality and stimulate management practices that promote equal opportunities for men and women within organizations that volunteer to adhere to the program. After presenting a basic diagnosis, the organizations develop an Action Plan, which is then agreed with the SPM Program Committee. The evaluation is based on the fulfillment of the plan, which occurs at the end of each year from the date of signature of the Term of Commitment. The "Pro-Gender Equity Seal of Approval" is then granted to organizations that have reached the agreed targets. CEF received the Gender Equality Seal in the first two editions based on its actions to increase the number of women and afro-descendants in managerial positions and the recognition of regional units with better gender indicators (Pinto e Midlej 2012).

To address domestic violence, in 2006, the country enacted the groundbreaking legislation *Maria da Penha Law*, which made the country a world reference in this front. A *National Pact for Combating Violence Against Women* and the program *Brazilian Women - Living Free of Violence* were also launched, and included the creation of one-stop-shop centers for women (*Brazilian Women's Houses*) in all 26 states of the country, integrating public security, justice, health, social welfare, counseling, shelter, employment, and income generation services. In 2015, the government also passed new legislation recognizing femicide as the act of murdering women because they are women.<sup>1</sup> That same year, a new protocol was established for treating sexual assault survivors, eliminating the need for victims to be examined by both health professionals and law enforcement agents.

In 2009, a *Special Prosecutor's Office for Women* was also created in Brazil's lower chamber of Congress, with the main objective of promoting more gender equitable legislation and policy. The *National Policy for Comprehensive Attention to Women's Health* and the *Third National Plan of Policies for Women* provided a comprehensive approach to women's health, covering all stages of the lifecycle (World Bank 2016).

Despite the above-mentioned achievements, institutional setbacks and implementation challenges demonstrate that more needs to be done to ensure the effectiveness and sustainability of such policies, laws and programs. In 2015, amid political turmoil and fiscal constraints, SPM lost its ministerial status and was merged with the Ministry of Human Rights

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<sup>1</sup> "Brazil Femicide Law Signed by President Rousseff." BBC News: Latin American & Caribbean. Published March 9, 2015. <http://www.bbc.com/news/world-latin-america-31810284>.

and Racial Equality. Capacity and political capital of similar entities at the state and municipal bodies varied significantly, affecting their overall ability to operationalize policies. The Maria da Penha Law, for instance, is a federal legislation, but states and municipalities are responsible for its implementation, which has had limited success. Service points created to protect women often don't have the adequate resources, this includes in few states Women's Police Stations and police battalions tasked with the protection of women who are under "protective measures", courts and health centers.

## **B. Gender Inequality & Gender Roles**

**Advances in the legal and institutional/political spheres have been accompanied by significant improvement in education and health.** Women in Brazil have surpassed men in some education indicators. The female youth's literacy rate (15 to 24 years old), for instance, increased from reached 99 percent in 2014, up from 84 percent in 2004, compared with the 98 percent male rate. Maternal mortality, commonly used as a proxy for women's access to quality healthcare, fell from 120 deaths per 100,000 live births in 1990 to 69 in 2013 (World Bank 2016).

**Nevertheless, progress in other dimensions that are key to ensure sustainable achievements in gender equality are still lagging behind.** According to the World Development Report on Gender Equality and Development (World Bank 2012), gender equality can be achieved as a result of gains in three dimensions: endowments (e.g. education, health, assets), agency (e.g. voice and decision making power), and economic opportunities. While in the former Brazil has made great progress, as previously described, on the latter two fronts there are still several gaps to overcome.

**Gains in the labor market have been significantly slow, falling short of bridging the gender gap.** Female labor force participation rose only five percentage points in the last two decades, from 54 percent in 1995 to 59 percent in 2014, while the share of women employed went from 50 percent to 54 percent over the same period. The unemployment rate for women is almost two times higher than for men (8.2 percent versus 4.8 percent in 2013).

**Occupational segregation is another concern, with 45 percent of women's jobs being concentrated in sectors traditionally related to female roles,** such as accommodation and food, education, health, social services and domestic services, while 48 percent of the employed men were in the agricultural, industrial and constructions sectors (World Bank 2016, Brasil 2014). The labor market in Brazil is also characterized by high levels of informality, with the proportion of women in that condition being slightly higher than men. In 2014, 42.7 percent of the women and 41.5 percent of the men in the labor force were in the informal market (IBGE 2014). Moreover, sectors traditionally associated with female work tend to have lower growth potential and higher levels of informality, further limiting their economic opportunities.

**In the energy sector, women represented between 20 to 25 percent of the total labor force in 20XX worldwide<sup>2</sup>** Although the rate is still low, women have been gaining space in this field. In 2006, the share of female workers in the electricity sector in Brazil, for example, was 16.7 percent (Dieese 2006). The renewable energy sector, specifically, where women account for approximately 35 percent of the labor force globally<sup>3</sup>, seems to be a key driver of female participation in the energy sector.

**Gender occupational segregation patterns are reflected on and reinforced by the vocational training courses offered in Brazil.** While women comprise the majority of students in areas such as education (80.4 percent) and health (82 percent), men are focused on industrial processes (80.6 percent), information and communication (62.3 percent), natural resources (60.7 percent) and infrastructure (59.7 percent) (World Bank 2016, Brasil 2014).

**Gender gaps in wages are also persistent even in female-dominated occupations, and women tend to spend more hours working.** In 20XX, women professionals in Brazil made on average 40 percent less than men. In the -male-dominated “managerial positions”, the gap widens to almost 90 percent (ILO 2016). Overall, female workers make R\$ 10.2 per hour, versus R\$ 12.2 earned by men.<sup>4</sup> Brazilian women also tend to spend four times the number of weekly hours that men do on domestic tasks. When added to their paid work, they spend on average 41.5 hours per week working, in contrast to 37.3 hours of work carried out by men (World Bank 2016).

**Women in Brazil also receive fewer benefits than men.** Female workers have on average 84.5 percent of the pension levels received by their male counterparts (ILO 2016). This is usually a consequence of “the lower wages earned by women during their working life, shorter periods of contribution and career breaks, higher incidence of part-time work, higher proportion of women receiving benefits from survivors’ pensions and from non-contributory old-age pensions (...)” (ILO 2016, 33).

### **C. Additional Vulnerabilities and Social Norms**

**Gender inequality in Brazil is also heavily based on and exacerbated by race and ethnicity.** For all the disadvantages and inequities mentioned in this document, the gender gaps are significantly wider when looking specifically at afro-descendant and indigenous women, as well as their geographic location. For that reason, race and gender issues were both included in the previously mentioned 2012-2015 National Plans for Women, and in 2014 a national law was created to establish a race-based affirmative action program for federal civil servant positions countrywide (World Bank 2016b).

**Women in Brazil are also extremely vulnerable to violence.** Despite the 10 years of Maria da Penha Law, data shows that Brazil is ranked fifth in Violence Against Women (VAW) global rates, according to the 2015 Violence Map of the United Nations. Between 1980 and 2013, more than

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<sup>2</sup>AES. Published July 13, 2017.

<http://www.aesbrasil sustentabilidade.com.br/pt/noticias/item/mulheres-no-mercado-de-energia-renovaveis>.

<sup>3</sup> *Ibid.*

<sup>4</sup> Currency exchange rate on October 6th, 2017: 1 US\$ = 3.16.

106,000 women were victims of homicide in the country, and the number of femicides per year increased from 1,353 to 4,762 – an increment of 252 percent. In 2013, 33 percent were victims of their own or former partners or another relative. The majority of them also came from vulnerable areas, and 66.7% of the victims were afro-descendants (Waiselfisz 2015).

**Victimization in public spaces is also a major concern.** A recent national survey showed that 74 percent of women under 24 years old have been victimized at least once in public spaces. Almost 25 percent of all women interviewed that suffered an aggression within the past year and, among those, 39 percent had been victimized on the streets. Finally, 40 percent also declared to have suffered some type of harassment, 78 of which had happened on the streets (FBSP 2017).

**Women victimization and perception of insecurity may hinder their overall mobility.** Consequently, victimization or fear of victimization can influence their work choices and options, their ability to take on extra work activities, or simply their right for a better quality of life. This issue is so relevant that in the capital city, Brasília, the government adopted a measure to improve women’s safety on public transport in 2014 by allowing women to request to get off buses anywhere along a route after 10pm - including areas where there are no traditional bus stops.<sup>5</sup> Other cities were considering similar options.

**Cultural and social norms reflect and partially explain gender inequalities discussed in the previous section, and also result in a context of permissiveness to violence against women.** In Brazil’s patriarchal culture, which favors traditional and dominant male gender roles, a national survey showed that one in three citizens believes that a woman is to blame for a rape. The survey also showed that 42 percent of the interviewed men think that women that “don’t deserve respect” should be raped. It is thus not surprising that 85 of the women are afraid of being victims of sexual violence (FBSP 2016).

#### IV. 4. Project Beneficiaries & the Potential Gender Role of EE

The FinBRAZEEC project provides entry points and opportunities to impact some of the main gender issues faced by Brazil today. The country has made significant achievements to overcome gender inequality in areas such as education and health, but a lot still needs to be done to bridge the gaps in the labor market and the provision of economic opportunities. Violence against women and racial disparities are also great concerns, and further exacerbate gender disparities as they impact a whole range of outcomes. Women’s safety can be increased through improved street lighting, female employment can be encouraged and adoption of gender-sensitive policies can be promoted amid implementing entities and beneficiary businesses.

**Evidence shows that interventions that focus on improving street lighting tend to reduce crime and perception of insecurity.** Such outcomes are a result of a modification of the environment that reduces the opportunities for offenders. The theory behind these types of

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<sup>5</sup> “Brasília, Brazil now lets women choose where to get off the bus at night”. November 23, 2014. Available at <http://thecityfix.com/blog/brasilia-brazil-women-bus-stop-night-safety-sexual-assault-luisa-zottis/>.

interventions is based on two main ideas. First, they are part of what criminology defines as “situational crime prevention”, which focuses on reducing the opportunities for crime while also increasing an offender’s perception of the risks of being caught (Jacobs 1961). Second, installing or improving street lighting can foster social control and community cohesion, which can also lead to lower crime rates. In addition, as community members perceive the intervention as a positive investment in their communities, there is more interest in taking care of these areas (Clark 2008, Sampson et al. 1997).

**Lack of street lighting or poor lighting quality and/or coverage can have different impacts on men and women.** Even when we consider the issue of insecurity as the main adverse social impact, men and women are affected in different ways. Overall, studies indicate that lack of street lighting favors crimes and the feeling of insecurity, which may restrict access to work and education, especially in vulnerable areas where workers study at night.

The 2017 Public Security Yearbook<sup>6</sup>, published by the Brazilian Forum on Public Security, presents data that can reveal gender inequalities in relation to the types of crimes in which men and women are victimized. Women are more prone to rape, assault, and robbery, while men are exposed to robbery, murder, and homicide. While the homicide rate among men is 90 per 100,000 inhabitants, the rate for women is 10 per 100,000 inhabitants. Homicide victims in Brazil also have an age and racial cutoff, since the main victims are black youths between 15 and 24 years old. Men are also the main perpetrators of crime, which is demonstrated by the prison population profile, composed 93% of men.

In 2016, 49,497 women were raped in Brazil, which equates to approximately 135 women raped per day. The result was the second highest since it began to be published in the Public Security Yearbook. The data presented in the document is sourced from the Departments of Public Safety of the respective states. Data sourced from the Ministry of Health, by means of the SINAN (Information System for Notifiable Diseases), and analyzed by the IPEA study (2017)<sup>7</sup> show data reported by the health services and indicate that 53% of rapes of adult women are carried out by strangers, in public roads (48.7%), usually on working days (88% of the cases). SINAN data, while pointing out that rape is a serious crime committed against women in the context of domestic violence, does not exclude the streets as a place of risk to women.

According to estimates from the Public Security Yearbook, the cost of violence in Brazil represents 5,9% of the GDP, including public and private expenditures, which corresponds to approximately R\$ 373 billion per year.

In this context, it is possible to suggest that investments in strategies to expand the coverage of public street lighting represent different impacts for men and women, mainly the security condition, guaranteeing the fundamental right to freedom of movement, as well as expanding the possibilities for work and education for both men and women, especially young persons.

**Street lighting can also have a specific impact on women’s perception of safety.** Safety audits conducted as part of the United Nations Women’ Safer Cities Program in several countries, from Mexico to Tanzania and India, have concluded that public lighting is a key tool to improve women’s sense of insecurity and prevent violence against women in public spaces.

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<sup>6</sup> [http://www.forumseguranca.org.br/wp-content/uploads/2017/12/ANUARIO\\_11\\_2017.pdf](http://www.forumseguranca.org.br/wp-content/uploads/2017/12/ANUARIO_11_2017.pdf)

<sup>7</sup> [http://www.ipea.gov.br/portal/images/stories/PDFs/TDs/td\\_2313.pdf](http://www.ipea.gov.br/portal/images/stories/PDFs/TDs/td_2313.pdf)

Improvements in lighting near bus stops and near public toilets are some of the most common recommendations.<sup>8</sup>

Given that 50 percent of the investments in the CEF Energy Efficiency Financing Facility component will be targeted at street lighting projects, it is expected that the project will have a significant impact on women's and men's perception of safety and in some types of crime rates, such as assaults, property crimes, and thefts. The projects' EE facility will primarily lend to Special Purpose Vehicles (SPVs) established by the private sector, which will be granted concessions by municipalities to modernize and operate the street lighting system on a PPP basis. The project could recommend that such interventions be targeted at areas where women's victimization and perception of insecurity are higher, and in "hot spots" where crime and homicides rates are higher. Administrative police and health system data and victimization surveys, if available, can provide a baseline for the selection of target areas. Such targeted interventions are therefore expected to improve quality of life of women as well as the broader beneficiary communities. Crime indicators can be monitored to measure results.

With the promotion of street lighting and industrial energy efficiency in Brazil, the project will likely also benefit intermediary industries delivering energy efficiency-related goods and services, such as manufacturers of efficient industrial equipment, as well as LED manufacturers. Increased demand could generate more jobs in these areas, and a special focus could be made on the incentive to employ women. Although these are not outcomes that will be enforced or necessarily measured by the project, they should be taken into consideration.

**Businesses and manufacturers operating in the energy efficiency sector will most likely benefit from increasing sales and activity, which could generate more jobs.** Businesses selling energy efficiency-related goods and services, such as manufacturers of efficient industrial equipment, as well as LED manufacturers, may need to support increased demand with additional hiring. In such case, the FinBRAZEEC project can provide technical assistance and propose an incentive structure to participating businesses aiming to encourage female employment. Results can be monitored through sex-disaggregated employment numbers in these entities.

**Finally, CEF could provide technical assistance to participating industries regarding adoption of gender-related policies,** as described in the previous sections. As part of the Technical Assistance component, workshops and discussions could be organized to share lessons learned in the development and implementation of the policies that led the institution to win the "Pro-Gender Equity Seal of Approval". These efforts will help to raise awareness, disseminate good practices of non-discrimination in terms of recruitment, equal remuneration, and promotions, and highlight the benefits of gender-sensitive working conditions (including anti-harassment policies, separate sanitation facilities, etc.) on employee satisfaction and performance. To monitor results, an indicator such as "number of gender-sensitive policies adopted" could be adopted.

## 5. The Gender Action Plan

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<sup>8</sup> "Better lighting, wider pavements: steps towards preventing sexual violence in New Delhi". May 6, 2013. Available at <http://www.unwomen.org/en/news/stories/2013/5/better-lighting-wider-pavements-steps-towards-preventing-sexual-violence-in-new-delhi>.

The plan outlined in this last section describes expected outputs and outcomes that are informed by the present gender analysis, and which aim at addressing some gender gaps that are crucial for Brazil's development and which should contribute to greater gender equality in project activities.

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