

Template for Evidence(s) UI GreenMetric Questionnaire

University : IFSULDEMINAS
 Country : BRAZIL
 Web Address : <https://www.ifsuldeminas.edu.br/index.php>

[2] Energy and Climate Change (EC)

[2.10] Greenhouse Gas Emission Reduction Program

Table 4 List of greenhouse gas emission sources (Woo & Choi, 2013)

	Emission data	Definition
Scope 1	Stationary combustion	Stationary combustion refers to the burning of fuels to produce electricity, steam and heat in a fixed location, such as boilers, burners, heaters, kilns, and engines.
	Mobile combustion	Burning of fuels by institution-owned transportation devices
	Process emissions	Direct greenhouse gas (GHG) emissions from physical or chemical processes rather than from fuel combustion
	Fugitive emissions	Hydrofluorocarbon releases during the use of refrigeration and air conditioning equipment and methane leakage from natural gas transport
Scope 2	Purchased electricity	Indirect GHG emissions resulting from the generation of the electricity purchased and used by the institution
Scope 3	Waste	Indirect GHG emissions resulting from the incineration or landfill of institution's solid waste
	Purchased waste	Indirect GHG emissions resulting from the generation of water supply purchased and used by the institution
	Commuting	Indirect GHG emissions resulting from regular commuting from and to institutions by students and employees (i.e., reducing regular commuting by using shared vehicles, carpooling)
	Air travel	Indirect GHG emissions resulting from air travels paid by institutions (i.e., reducing the number of staff air travel opportunities)



Figure 1: Machado Campus [investment in research for portable energy-efficient electric roaster that replaces gas-fired roasters.](#)



Figure 2: Figure 2: Campus Machado bike path with 2 kilometers in length.



Figure 3: Carmo de Minas Campus photovoltaic panels for solar energy production through the [IF Solar Program.](#)



Figure 4: Poços de Caldas Campus water tanks for rainwater storage through the [IF Pluvial Program.](#)

Description:

IFSULDEMINAS runs programs to reduce greenhouse gas emissions that cover the 3 Scopes defined in Table 4. The IF Solar Program meets Scopes 1 and 2, avoiding stationary combustion and reducing electricity purchases. The IF Pluvial Program meets Scope 3, reducing the purchase of drinking water. IFSULDEMINAS' policy of encouraging the use of bicycles, with the construction of cycle lanes and appropriate signage on campuses meets Scope 3.

The Innovation Pole linked to the Brazilian Company for Research and Industrial Innovation (Embrapii) is made up of specific technological competences from the Federal Institutes of Education, Science and Technology of the Ministry of Education. The work is focused on meeting the demands of the productive sector, for research, development and innovation (RD&I) and professional training for RD&I activities in the industry. This investment by IFSULDEMINAS results in equipment like the one in Figure 1. Available at: <https://portal.ifsuldeminas.edu.br/index.php/polo>.