

## Template for Evidence(s) UI GreenMetric Questionnaire

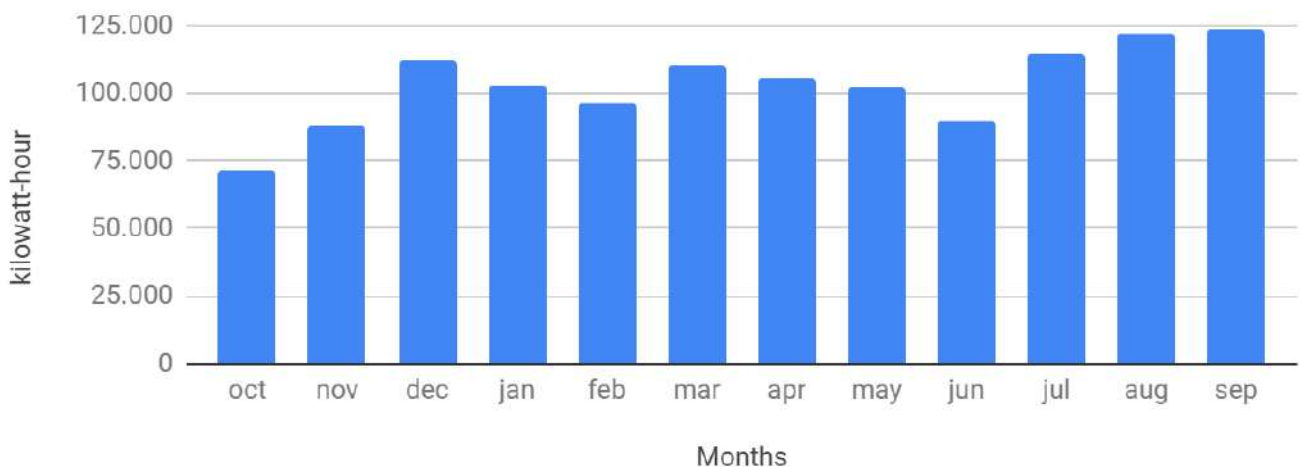
University : IFSULDEMINAS  
Country : BRAZIL  
Web Address : <https://www.ifsuldeminas.edu.br/index.php>

### [2] Energy and Climate Change (EC)

#### [2.5] Renewable Energy Sources and Their Capacity (in kWh)

IFSULDEMINAS Photovoltaic Electric Energy Production (kWh)											
Year	Months	Total	CDM	TCO	INC	MCH	MUZ	PAS	PCS	POA	RET
2021	oct	71.521	3.343	10.492	7.618	6.473	10.281	6.946	15.170	5.439	5.759
	nov	87.834	2.639	10.918	9.817	10.627	13.284	8.572	15.923	8.430	7.624
	dec	111.648	3.525	7.491	9.589	22.974	12.780	8.033	17.545	21.991	7.720
2022	jan	102.718	3.519	8.805	7.953	24.352	12.363	7.469	16.473	14.324	7.460
	feb	95.961	3.081	9.512	8.317	22.804	11.075	6.488	14.649	12.824	7.211
	mar	110.004	6.289	11.327	8.268	28.264	18.617	7.752	8.779	13.852	6.856
	apr	105.044	5.207	10.735	7.770	25.256	21.156	7.359	8.897	12.397	6.267
	may	101.621	7.863	10.329	6.990	24.279	20.352	9.199	7.962	9.693	4.954
	jun	89.441	6.424	8.773	6.536	21.835	18.432	8.602	7.111	4.961	6.767
	jul	114.054	7.087	9.206	16.205	24.526	21.291	9.373	5.969	14.327	6.070
	aug	121.818	7.007	8.569	24.314	24.162	20.763	10.666	6.193	14.487	5.657
	sep	123.641	7.644	8.939	24.340	21.801	20.803	12.034	5.983	15.217	6.880
	<b>Total</b>	<b>1.235.305</b>	<b>63.628</b>	<b>115.096</b>	<b>137.717</b>	<b>257.353</b>	<b>201.197</b>	<b>102.493</b>	<b>130.654</b>	<b>147.942</b>	<b>79.225</b>
	<b>Average</b>	<b>102.942</b>	<b>5.302</b>	<b>9.591</b>	<b>11.476</b>	<b>21.446</b>	<b>16.766</b>	<b>8.541</b>	<b>10.888</b>	<b>12.329</b>	<b>6.602</b>

IFSULDEMINAS Photovoltaic Electric Energy Production 2021-2022



# IFSULDEMINAS Photovoltaic Electric Energy Production 2021-2022 - Campi

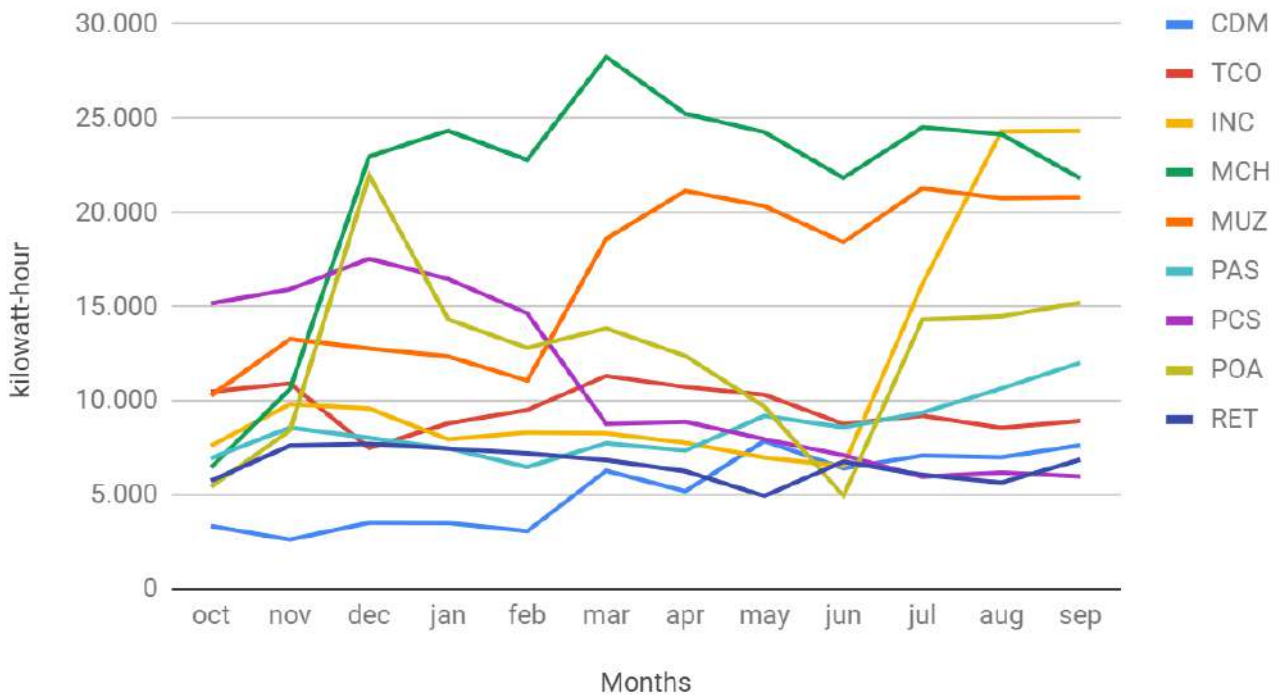


Figure 1: Campus Inconfidentes solar power plant.



Figure 2: Campus Machado solar power plant.



Figure 3: Campus Muzambinho solar power plant.



Figure 4: Campus Passos solar power plant.





Figure 5: Campus Poços de Caldas solar power plant.



Figure 6: Campus Pouso Alegre solar power plant.



Figure 7: Campus Carmo de Minas solar power plant.



Figure 8: Campus Três Corações solar power plant.



Figure 9: Rectory solar power plant.



Figure 10: Solar Seal, certification awarded to IFSULDEMINAS



Figure 11. Small Hydro Power Plant - PCH



Figure 12. PCH Generators.



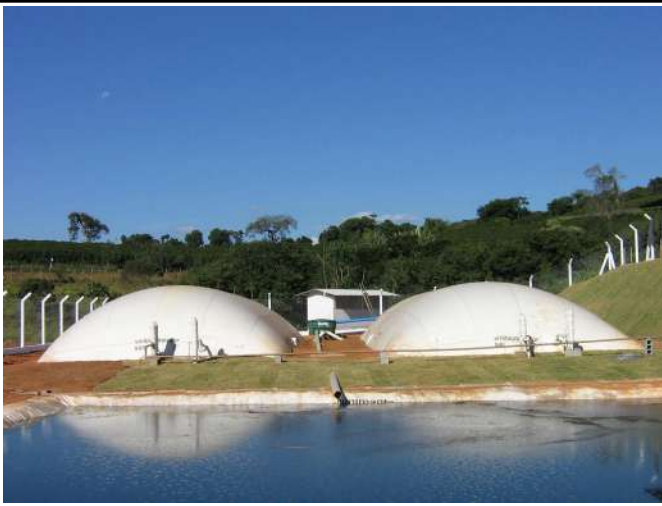


Figure 13. Swine waste treatment unit for biogas production.



Figure 14. Swine waste treatment unit for biogas production.



Figure 15. Inconfidentes Campus Solar water heating system.



Figure 16. Inconfidentes Campus Solar water heating system.



Figure 17. Machado Campus Solar water heating system.



Figure 18. Muzambinho Campus Solar water heating system.





Figure 19. Muzambinho Campus CeCAES Solar water heating system.

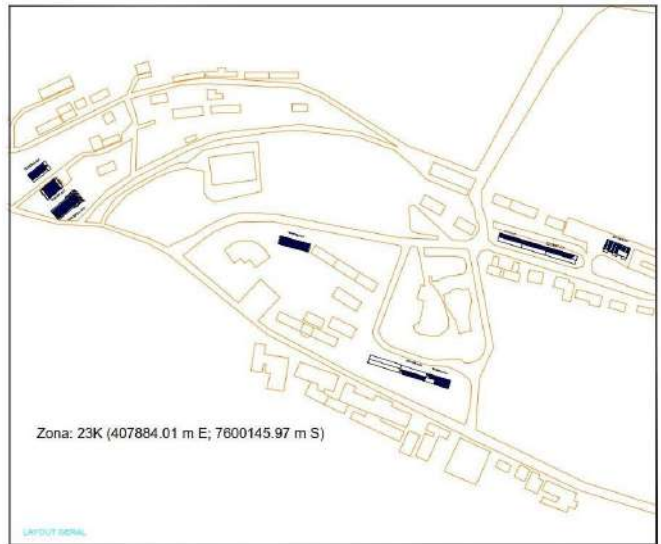


Figure 20. Muzambinho Campus new photovoltaic modules to be installed in 2020/2021.



Figure 21 : Campus Machado expansion of the photovoltaic plant.



Figure 22: Inconfidentes Campus [expansion of the solar power plant](#).

## Description

IFSULDEMINAS have nine (9) solar photovoltaic power plants who generated **1,235,305 kWh** in the last 12 months. This result represents an approximate savings of US\$ 138,750. Each power plant installed cost US\$ 114,405 and is expected to be paid in approximately 8 years. The plants have a useful life of 25 years (Figures 1 to 9).

Muzambinho Campus has a Hydropower / Hydroelectric Power plant who generated **301,350 kWh** in the last 12 months (Figures 11 and 12).

Muzambinho Campus has a Clean Biomass / Biogas plant which generated **57,714 kWh** in the last 12 months (Figures 13 and 14).

Muzambinho (400 m<sup>2</sup>), Machado (60 m<sup>2</sup>) and Inconfidentes (70 m<sup>2</sup>) Campi have solar water heating systems that generated the equivalent of **305,280 kWh** in the last 12 months (Figures 15 to 19).

IFSULDEMINAS is finishing the installation of 77 new modules of photovoltaic solar panels in all units, expected to generate more 2,010 MWh annually (Figure 20).

The Solar Seal is a certification awarded to IFSULDEMINAS by the Institute for the Development of Alternative Energies in Latin America - Ideal Institute (Figure 10). Available at: <https://portal.ifsuldeminas.edu.br/index.php/institucional-geral/76-acontece-nos-campus/2238-sustentavel-instituto-federal-do-sul-de-minas-recebe-selo-solar>.

Source: IFSULDEMINAS.