**Carbon footprint of a Public University campus in Mexico City**

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**Table 1S.** Activities and emission factors considered in the GHG inventory of the UAM-C in 2016

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type** | **Source/Activity** | **Emission factor** | **Units** | **Reference** |
| Fixed sources | LP gas combustion | 5.61E­51.00E­61.00E­7 | ton CO2/MJton CH4/MJton N2O/MJ | DOF, 2015 |
| Mobile sources | Gasoline combustion | 6.93E-52.5E-58.0E-9  | ton CO2/MJton CH4/MJton N2O/MJ | DOF, 2015 |
| Diesel combustion | 7.41E-53.90E-63.90E-6 | ton CO2/MJton CH4/MJton N2O/MJ | DOF, 2015 |
| Diesel combustion | 1.07E-3 | Ton CO2/km | DOF, 2015 |
| Fugitive emissions | R-134AR-404AR-290 | 143039223 | ton CO2 eq/ton ton CO2 eq/tonton CO2 eq/ton | US-EPA, 2014 |
| Electricity | Electric Energy | 0.458 | ton CO2 eq/ MWh | RENE, 2016 |
| Resources consumption | Water | 3.44E-4 | ton CO2 eq/m3 | UK emission factors, 2016 |
| Paper sheetsRecycled paper | 1.08 1.28 | ton CO2 eq/tonton CO2 eq/ton | AU-EPA, 2013 |
| Meat consumption (dining hall) |
| ChickenPorkBeef Fish | 2.364.6215.33.2 | ton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/ton | EWG, 2011 |
| Gases (research activities) |
| Carbon dioxide Methane | 121 | ton CO2/tonton CO2 eq/ton | US-EPA, 2014 |
| Solvents (research and teaching activities) |
| Acetone ChloroformEthanolHexanePetroleum etherMethanolEthyl acetateAcetonitrile2-methyl-2 butanolPhenolSpray paintXyleneDichloromethaneMixtures | 2.313.611.890.3170.8120.6032.650.5463.154.530.8121.763.470.812 | ton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/ton | EcoInvent 3.3 |
| Cleaning  |
| Liquid soapDetergent powderBleach | 0.9886.310.988 | ton CO2 eq/tonton CO2 eq/tonton CO2 eq/ton | EcoInvent 3.3 |
|  | Recycling |
| Municipal waste management | Paper sheetsPaperboardPETTETRAPACKGlassIronAluminumMixed plasticsOrganic fraction from the dining room (animal feed) | -0.459-0.122-2.192-0.452-0.314-0.459-8.143-1.240 | ton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/ton | Turner at al., 2015 |
|  | Landfill  |
|  | Not recoverable | 0.459 | ton CO2 eq/ton | UK emission factors, 2016 |
| Hazardous waste management | Thermal oxidation |
| Organic solventsAqueous solutions Halogenate solutionsGlass Empty containersSolids | 0.01580.01080.01580.0800.004180.003 | ton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/tonton CO2 eq/ton | UVA, 2014 |
| Wastewater management | Chemical oxygen demand (COD) | 0.075 | ton CO2 eq/ton | DOF, 2015 |
| Commuting | Private: Automobile | 2.374E-4 | ton CO2 eq/km | GHGP, 2017 |
| Public:MetroUrban busCollective transportInterurban bus | 0.07310.10800.00040.0496 | ton CO2 eq/persone kmton CO2 eq/persone kmton CO2 eq/persone kmton CO2 eq/persone km | GHGP, 2017 |
| Work trips: lodging and transport | Attendance to scientific meetings:Air transport (km):distance<482.8 km300 <distance<3701distance>3701Bus AutomobileLodging | 1.56E-42.43E-64.971E-98.88E-402.92E-91.0E-42.423E-63.48E-93.418E-53.728E-73.107E-102.206E-41.305E-59.321E-30.033 | ton CO2/kmton CH4/kmton N2O/kmton CO2/kmton CH4/kmton N2O/kmton CO2/kmton CH4/kmton N2O/kmton CO2/kmton CH4/kmton N2O/kmton CO2/kmton CH4/kmton N2O/kmton CO2/day | US-EPA, 2015UK emission factors, 2016 |

**Table 2S**. **Characteristics of the fleet**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type** | **Brand** | **Model** | **Year** | **# vehicles** | **Combustible** | **# passengers** |
| Camioneta | Chevrolet | Express | 2006 | 3 | Gasoline | 14 |
| Sedan | Chevrolet | Chevy C2 | 2008 | 2 | Gasoline | 4 |
| Sedan | Chevrolet | Chevy C2 | 2007 | 1 | Gasoline | 4 |
| Sedan | Suzuky | SX4-over | 2010 | 1 | Gasoline | 4 |
| Sedan | Volkswagen | Vento | 2017 | 2 | Gasoline | 4 |
| NP 300 carga | Nissan | Estaquitas | 2011 | 1 | Gasoline | 2 |
| Camioneta | Toyota | Hiace | 2011 | 1 | Gasoline | 12 |
| **Total** |  |  |  | **11** |  |  |