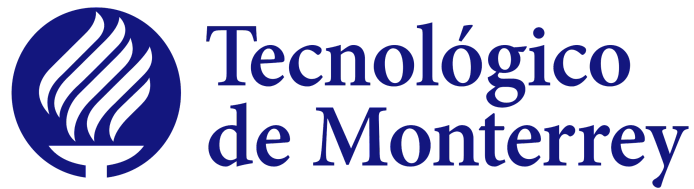


**Instituto Tecnológico y de Estudios  
Superiores de Monterrey**  
Campus Monterrey



**Ethics, sustainability and social responsibility**

# **Report of reduction of the ecological footprint: Part 1**

**Emilio Sibaja Villarreal**  
A01025139

Gpo 601

Gabriela Vieyra

February 2021

## **Current Situation**

In my opinion I have an average house, it is about 194 m<sup>2</sup> and 266 m<sup>2</sup> built where only me, my parents, my brother, and my two chihuahuas live. We have a medium backyard, 3 restrooms and 4 rooms. But we do generate a lot of garbage since my mother works with a laser machine and tries to waste as little as possible with everything she cuts, but in the end it is always a lot, but apart from that we don't have a lot of waste and we separate it as organic and inorganic, and about each week we dispose it (not including the laser machine waste).

We have 3 cars and they are used everyday because of my dad's work and me and my brother have to go to the Tec, but we have completely opposite schedules so we don't have a lot of options.

In the consumables we have a 300 liter LP gas tank, but now we don't use it as much as before since we bought two 100 liter water tank which heats with the power of the sun, a 6 burner stove with an oven, a dishwasher (which we barely use), a washing machine and a dryer

## Results

### RESULTS

• Your personal Earth Overshoot Day is:

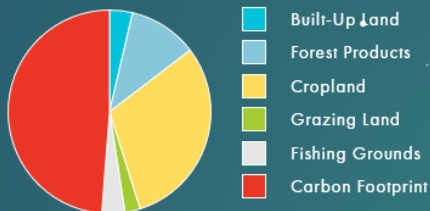
14. Mar 

If everyone lived like you, we would need

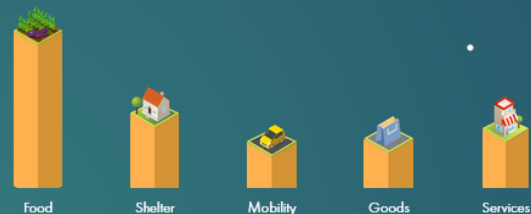
5 Earths. 



#### By Land Type



#### By Consumption Category



8.1

Your Ecological Footprint   
(global hectares or gha) 

11.5

Your Carbon Footprint  
(CO<sub>2</sub> emissions in tonnes per year)

49

Your Carbon Footprint  
(% of your total Ecological Footprint)

Utility Bills

Electricity

Concepto	Lectura actual		Lectura anterior		Total periodo	Precio (MXN)	Subtotal (MXN)
	Medida	Estimada	Medida	Estimada			
Energía (kWh)	04149		03663		486		
Básico					150	0.875	131.25
Intermedio					130	1.064	138.32
Excedente					206	3.106	639.83
Suma					486		909.40
Este gráfico refleja tu nivel de consumo. A menor uso, mayor apoyo.							Subtotal
Costos de la energía en el Mercado Eléctrico Mayorista					Desglose del importe a pagar		
Concepto	\$	\$/kW	\$/kWh	Importe (MXN)	Concepto	Importe (MXN)	
Suministro	143.58	0.00	0.00	143.58	Energía	909.40	
Distribución	0.00	0.00	403.53	403.53	IVA 16%	145.50	
Transmisión	0.00	0.00	84.42	84.42	Fac. del Periodo	1,054.90	
CENACE	0.00	0.00	4.08	4.08	Diferencia por redondeo	0.62	
Energía	0.00	0.00	353.91	353.91	Total	\$1,055.52	
Capacidad	0.00	0.00	282.37	282.37			
SCnMEM(%)	0.00	0.00	2.82	2.82			
Apoyo Gubernamental 365.21							

Gas

ORIGINAL NO A DE VENTA

LECTURA ANTES DE LLENAR

LECTURA DESPUES DE LLENAR

unigas

s.a. de c.v.

R.F.C. UGA-810602-EX1

SAN JOSE No. 7 COL. SAN JUAN IXHUATEPEC, CP. 54180

TLAHEPANTLA DE BAZ, EDO. MEX. TELS.: 55 5747-50 00, 55 5747-5220

FUGAS, PEDIDOS Y QUEJAS:

\*2500 desde su celular

55 5747 5000 / 55 5747 5252

CONTRATO

FOLIO

FECHA

UC4096017

26/01/2024

1486

CAPACIDAD

PRECIO LITRO

ROUTA

PROXIMA ENTREGA

CICLO

300

124616

IMPORTE DE ESTA CARGA

I.V.A.

IMPORTE TOTAL

M.N.

M.N.

M.N.

CIUDAD DE MÉXICO A

DE

DEL

BUENO POR

DEBO(ENOS) Y ME(NOS) OBLIGO(AMOS) A PAGAR

INCONDICIONALMENTE POR ESTE PAGARÉ A LA ORDEN DE UNIGAS, S.A. DE C.V. EL DÍA

MÉXICO O A ELECCIÓN DEL BENEFICIARIO LA CANTIDAD DE

ENTERA SATISFACCIÓN, DE CONFORMIDAD CON EL IMPORTE DE LA PRESENTE REMISIÓN-FACTURA, EN LA INTELIGENCIA

QUE DE ACUERDO AL ARTÍCULO No. 11 DE LA LEY GENERAL DE TÍTULOS Y OPERACIONES DE CRÉDITO POR LA PRÁCTICA

Y USOS DEL COMERCIO QUE ME UNEN AL BENEFICIARIO, AUTORIZO A TERCERAS PERSONAS PARA QUE A MI NOMBRE

RUEGO, SUSCRIBAN EL PRESENTE TÍTULO DE CRÉDITO, EL QUE PARA EL CASO DE NO VERIFICARSE SU PAGO, CAUSARÁN

INTERÉS MORATORIO AL TIPO DE

% MENSUAL

NOMBRE Y FIRMA

DEL CLIENTE

REFA-U3

# Water

GOBIERNO DE LA CIUDAD DE MÉXICO

SAP TESORERÍA

CEDECOR 02526

DOMESTICO

DERECHOS POR EL SUMINISTRO DE AGUA

CARGO DEL BIMESTRE	\$571.00
FECHA LÍMITE DE PAGO	19-ENE-2022
BIMESTRE / AÑO DE FACTURACIÓN	6/2021
NÚMERO DE CUENTA	12-34-717-594-01-000-6

URDAN SA  
CALZ. DE LAS AGUILAS 1486  
LOMAS DE LAS AGUILAS  
C.P. 01730, ALVARO OBREGON

CDA CORMORAN

DATOS DE LA TOMA	
DIÁMETRO DE LA TOMA	0013
NÚMERO DEL MEDIDOR	81270039
LECTURA DEL MEDIDOR	
BIMESTRE ANTERIOR	23-SEP-2021
FECHA	4,037
BIMESTRE ACTUAL	22-NOV-2021
FECHA	60
NÚMERO DE DÍAS	0.48
CONSUMO DE BIMESTRE EN M <sup>3</sup>	29.28
CONSUMO EN ÁREAS COMUNES	
CONSUMO EN LITROS	
PROMEDIO DIARIO	480
CONSUMO BIMESTRAL	29,280

CÁLCULO DE CONSUMO	
DOMESTICO	NO DOMESTICO
NÚMERO DE VIVIENDAS	NÚMERO DE LOCALES
20.01 A 30.00	
NIVEL DE CONSUMO M <sup>3</sup>	NIVEL DE CONSUMO M <sup>3</sup>
CARGO INICIAL POR NIVEL DE CONSUMO \$	CARGO INICIAL POR NIVEL DE CONSUMO \$
326.57	
M <sup>3</sup> ADICIONALES	M <sup>3</sup> ADICIONALES
9.28	
CARGO POR M <sup>3</sup> ADICIONALES \$	CARGO POR M <sup>3</sup> ADICIONALES \$
244.06	
BENEFICIOS \$	IVA \$
CARGO BIMESTRAL POR VIVIENDA	CARGO BIMESTRAL POR LOCAL
570.63	
CARGO DOMESTICO \$	CARGO NO DOMESTICO \$
571.00	

UD. DEBERÍA PAGAR	SUBSIDIO	CARGO DEL BIMESTRE
\$ 1,043.00	\$ 472.00	\$ 571.00
TIPO DE CONSUMO		
MANZANA ALTO 154.113		
SISTEMA DE EMISIÓN		
SERVICIO MEDIDO		

DATOS PARA CUENTAS CON MÚLTIPLES TOMAS									
NÚMERO DE CUENTA	DIÁMETRO DE LA TOMA	NÚMERO DE MEDIDOR	LECTURA ANTERIOR M <sup>3</sup>	FECHA	LECTURA ACTUAL M <sup>3</sup>	FECHA	NÚMERO DE DÍAS	PROMEDIO DIARIO M <sup>3</sup>	CONSUMO DEL BIMESTRE M <sup>3</sup>
12-34-717-594-01-000-6	0013	81270039	4,037	23-SEP-2021	4,066	22-NOV-2021	60	0.48	29.28

DOMESTICO	
CARGO DEL BIMESTRE	\$ 571.00
FECHA LÍMITE DE PAGO	19-ENE-2022
BIMESTRE / AÑO DE FACTURACIÓN	6/2021
NÚMERO DE CUENTA	2-34-717-594-01-000-6

LINEA DE CAPTURA DICIEMBRE 2021

8250872830621H42P0ND

LINEA DE CAPTURA ENERO 2022

8250872830621QAART7W

PAGO DE MEDIDOR EN PARCIALIDADES

CONFORME A LO DISPUESTO EN EL ART. 161 BIS DEL CÓDIGO FISCAL DE LA CIUDAD DE MÉXICO, VIGENTE PARA 2021-2022

LINEA DE CAPTURA DICIEMBRE 2021	LINEA DE CAPTURA ENERO 2022	CARGO
		PARCIALIDAD

# Good Environmental Practices

- Not leaving any unused electronics on.
- Get Solar Panels to lower the environmental impact and costs.
- Reduce the time spent on computers/television.
- At maximum take 5 minute showers.
- Use as little water as possible to wash the dishes.
- Always close the water tap while brushing my teeth.
- Use solar heated water instead of gas.
- Use electric alternatives for gas (i.e. electric stoves)
- Try to use cold water instead of hot water to save gas.

## Letter of Commitment

My ecological footprint is clearly not the best, but I think most of those who have answered the Ecological Footprint Calculator also have pretty bad (or worse) results. As humanity it is our responsibility to take care of our planet, because no one else will and it is everyone's home. In this letter I promise to do whatever I can to at least improve my surroundings and convince those who surround me, so together we can make a positive impact in our environment and guarantee a better future.

As my first commitment, I will turn off every electronic that is not necessary or isn't used. I will also avoid using my PC for too long and will find other things to do as entertainment to minimize using my computer and thus lower the high cost of electricity my house already has (as seen on the Electricity bill, we have a very high electricity usage). **Estimated electricity reduction: 20%**

My second commitment is to lower the water usage. When washing the dishes I will try to use the minimum water I need to complete that task, this also applies when I'm taking a shower (sometimes it would take me more than 20 minutes to finish taking a bath). This will significantly lower our water consumption which is awful to realize in our house we consumed 29,280 liters of water (as seen on the Water bill).

**Estimated water reduction: 10%**

My third commitment is to convince my parents to stop using gas as a heater. Even though we have solar heaters, in the mornings we have to turn on the gas if we want hot water. From now on I will take baths when the water is hot due to the solar heater, and I will try to convince my parents and my brother to do the same. Also try to get an electric stove and oven to eliminate the use of gas, which is very expensive. **Estimated gas reduction: 90%**

As my fourth commitment, I will definitely lower my meat consumption. I do eat a lot of meat, and sometimes I feel guilty, because I know it causes a lot of land, food and water to waste for a few kg of meat. I am very open with other alternatives, and as much as I love meat, I also love plant based foods and if it is for the best, maybe I won't eliminate it completely but I will lower my consumption.

My fifth commitment is to carpool on my way to school. I know a lot of friends who live near me, and it would be perfect if we had the same schedule, but that is not the case for most of them. We would have to take turns and wake really early for those who start at 7 am. It will be hard but it deserves a try. And with this we can lower our costs of gasoline significantly.

My final commitment is to improve the way we manage our garbage. With my mom's work we have a lot of waste but it can be recycled, one way or another (I will have to

do a deep research for that). And also get a third bin, a recycle bin and do the best for our environment.

These commitments will take their time, some less than others, but I will do my best to achieve them, and convince my friends and family to follow these steps so we can help our surroundings and thus, ourselves.