

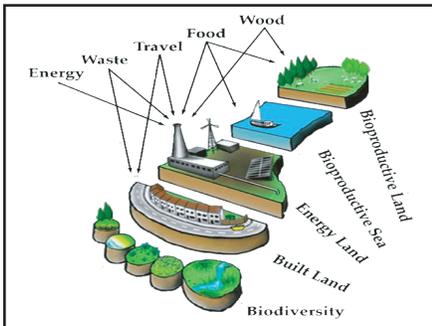
## What is it?

An ecological footprint (EF) is a measure of the demands that people place on nature. More specifically, the EF measures how much biologically productive land and water area is required to produce all the resources a given population consumes and absorb the waste that is produced. By looking at human consumption and comparing it to nature's productivity, the EF provides a means of estimating the impact individuals, organizations, cities, regions or nations have on nature.

The EF of any individual, household or population considers all of the land and water that is used for crops, roads, grazing, fishing, buildings and for producing wood products, and organizes this information into six separate components (Energy Land, Crop Land, Pasture Land, Forest Land, Sea Space, and Built Area) to calculate a total ecological footprint for an individual or community.

## Why is it important to you?

Everyday, everyone has an impact on the earth. While this is not necessarily a bad thing, the size of the impact we have can quickly lead to an unsustainable balance between our demands on nature and its ability to supply us with the things we need to live.



Source: Best Foot Forward Limited

The Federation of Canadian Municipalities (FCM) in their 2003 report on the Ecological Footprints of Canadian Municipalities and Regions refers to ecological footprint analysis (EFA) as an accounting tool and reporting system for measuring progress towards sustainability.

At the municipal or regional level, EFA is suggested as one of several performance indicators for measuring community sustainability.

## What is Peel's Ecological Footprint?

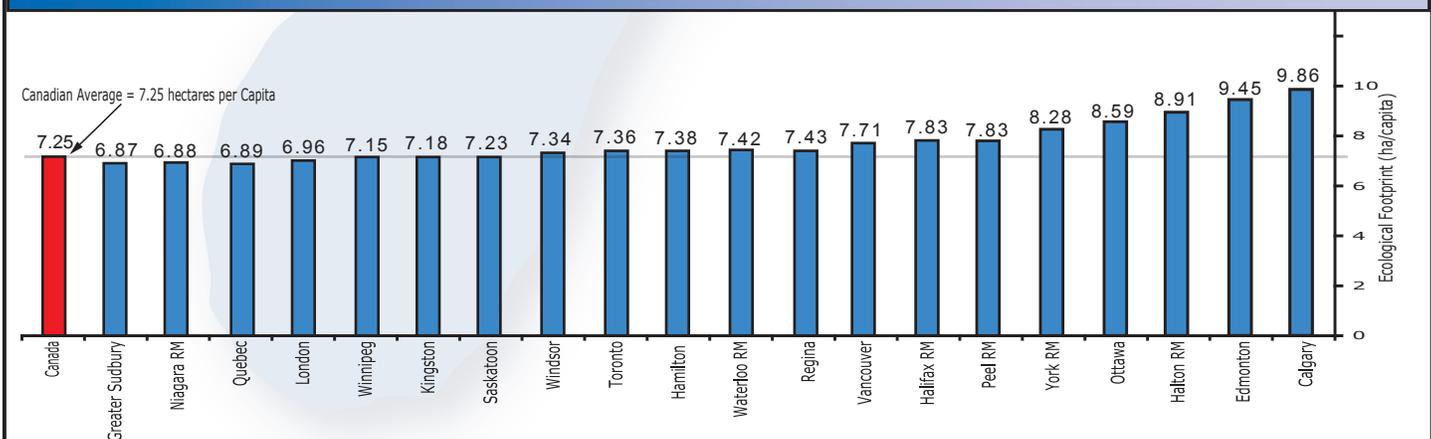
Across Canada, the FCM reported a wide range of footprints in municipalities from a low of 6.87 hectares per capita in Greater Sudbury to a high of 9.86 hectares for Calgary. Peel's ecological footprint is 7.83 hectares per capita and is the sixth highest in Canada, behind Calgary, Edmonton, Halton, Ottawa and York. For Peel, this represents 108 per cent of the Canadian average ecological footprint.

In general, municipalities with larger footprints have higher household incomes and higher fossil fuel based energy consumption. Peel scored well in the built area category and is listed as having one of the lowest per capita built area footprints of the regions and municipalities that were measured. Built area is based on provincial urban land use and infrastructure data and is the land area used to accommodate homes, roads, utilities, industry and hydro-electric energy generation.

Overall, Peel's land area is 122,500 hectares. The land area required to support Peel's ecological footprint is 7,743,439 hectares; therefore, we are clearly placing demands on nature that exceed our available land area.

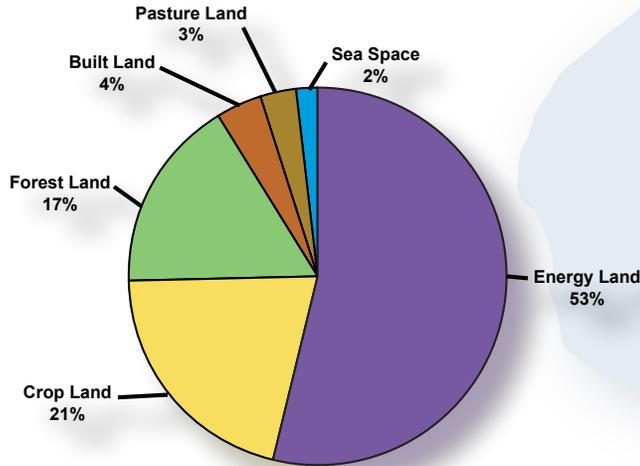
To find out more about how Peel compares to other municipalities across Canada, log onto the Federation of Canadian Municipalities website ([www.fcm.ca](http://www.fcm.ca)) and click on the link to Ecological Footprint to read their report.

## Ecological Footprint Results for Canadian Cities & Regions



## The Average Peel Resident's Ecological Footprint by Land/Area Category (%)

This diagram illustrates the average ecological footprint or total land and water area that is required to support a resident of Peel Region by land and water category.



## Comparing the Ecological Footprint Internationally

How Does Canada Compare? The FCM report found that the average Canadian has the third largest ecological footprint in the world, behind the United States and the United Arab Emirates. Current analysis shows that on average the Canadian ecological footprint is 7.25 hectares. This indicates that it takes 7.25 hectares of land and sea throughout the world to support each Canadian.

Internationally, ecological footprints in many other countries are much lower than Canada's as indicated by the following examples:

- India - 0.86 hectares/person
- Pakistan - 0.64 hectares/person
- Japan - 4.77 hectares/person

Source: WWF Living Planet Report 2002

INFORMATION NEEDED TO CALCULATE AN ECOLOGICAL FOOTPRINT	
HOUSEHOLD OR INDIVIDUAL FOOTPRINT	CITY, TOWN OR REGION FOOTPRINT
<ul style="list-style-type: none"> <li>» Amount and type of food consumed</li> <li>» Amount and type of electricity used</li> <li>» Size of house or apartment</li> <li>» Gasoline use</li> <li>» Fuel efficiency</li> <li>» Miles travelled by vehicle, transit, bike and foot</li> </ul>	<ul style="list-style-type: none"> <li>» Population density</li> <li>» Average household size</li> <li>» Consumer spending</li> <li>» Energy use</li> <li>» Urban land use</li> </ul>

ECOLOGICAL FOOTPRINTS						
Comparing Footprints in the Greater Toronto Area						
CD: Census Division	Canada	Toronto (CMA)	York Regional Municipality (CD)	Peel Regional Municipality (CD)	Halton Regional Municipality (CD)	Hamilton (CMA)
CMA: Census Metropolitan Area						
Energy Land	4.00	4.05	4.56	4.23	5.03	4.03
Crop Land	1.39	1.48	1.70	1.70	1.70	1.50
Pasture Land	0.21	0.22	0.25	0.25	0.25	0.23
Sea Space	0.15	0.15	0.18	0.18	0.18	0.22
Forest Land	1.14	1.14	1.27	1.16	1.43	1.09
Built Area	0.36	0.31	0.32	0.31	0.32	0.31
<b>Total Ecological Footprint (hectares per capita)</b>	<b>7.25</b>	<b>7.35</b>	<b>8.28</b>	<b>7.83</b>	<b>8.91</b>	<b>7.37</b>

## What can I do to change my community's and my personal footprint?

While it may not be possible to affect all of the variables that produce your community's ecological footprint, you can personally take action in several ways to reduce your individual ecological footprint.

If enough individual action is taken we can expect to observe improvements in the Region's ecological footprint over time.

You may wish to try some of the following actions in these areas:

### Food:

- Buy more locally grown and organic food
- Buy more unpackaged and unprocessed foods
- Eat vegetarian meals more frequently

### Mobility:

- Drive your car less and carpool whenever possible
- If you drive, choose a more fuel efficient vehicle
- Use public transit, bike or walk whenever possible

### Housing:

- Hang clothes to dry - limit the number of loads of laundry that go in your dryer
- Reduce the number of days you use the air conditioner  
Practice water and energy conservation
- Turn off lights and use energy efficient bulbs and appliances

Try these simple suggestions and see how much you can reduce your ecological footprint.

*Note: All Charts and Graphs are reproduced from the Ecological Footprints of Canadian Municipalities and Regions report prepared by Anielski Management Inc. for the Federation of Canadian Municipalities.*