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| **Canadian Geography** | **Cgc1di** |

**The Ecological Footprint of Nations**

**Introduction**

To gain a better understanding of our Canadian ecological footprint (EF) we need to look at our EF in comparison to other countries in the world. The statistics in this assignment show the EF of various other countries as well as Canada’s. The EF statistics are compared to the carrying capacity of each country. The carrying capacity takes into account all land which could be used and considers the present population and consumption rate of each country’s population.

**Instructions**

1. Refer to the steps at the top of the chard to calculate each country’s surplus capacity or overshoot. The first five (as well as the world’s) have been completed for you.
2. On the world map provided, locate each country listed using the atlases provided. Now colour the country’s ecological condition according to the colour code chart shown below.

|  |  |
| --- | --- |
| > 5 | Green |
| 0 to 5 | Purple |
| -0.1 to -1.5 | Yellow |
| -1.6 to -3 | Orange |
| < -3 | Red |

1. Once the map has been completed (don’t forget your mapping essentials!), answer the following questions.
   1. How many countries are in **each of the five** groups?
   2. How many countries have a surplus capacity? \_\_\_\_\_\_

How many countries are in an overshoot situation? \_\_\_\_\_\_

What do these figures indicate about the “sustainability” of the world at present?

* 1. What areas of the world seem to be the most sustainable at present (green and purple) and which areas seem to be the least sustainable (orange and red)? List at least three reasons why you think this pattern exists.
  2. Describe Canada’s EF compared to other countries. Are we in a relatively good or bad position here? Why do you think this is?
  3. What is one thing we need to consider when looking at the data being used?

Calculate the Ecological Condition (Surplus Capacity or Overshoot) of each country by subtracting its EF from its Carrying Capacity. The first five have been done for you.

A positive number indicates surplus capacity (= good)

A negative number indicates overshoot (= bad)

Formula 🡪 Ecological Condition = Carrying Capacity – Ecological Footprint

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Country** | **Population (2003)**  **In millions** | **Carrying Capacity (ha)** | **EF (ha)** | **Ecological Condition (ha)** |
| Argentina | 38.4 | 5.9 | 2.3 | 3.6 |
| Australia | 19.7 | 12.4 | 6.6 | 5.8 |
| Austria | 8.1 | 3.4 | 4.9 | -1.5 |
| Bangladesh | 146.7 | 0.3 | 0.5 | -0.2 |
| Brazil | 178.5 | 9.9 | 2.1 | 7.8 |
| Canada | 31.5 | 14.5 | 8.6 |  |
| Chile | 15.8 | 5.4 | 2.3 |  |
| China | 1,311.7 | 0.8 | 1.6 |  |
| Colombia | 44.2 | 3.6 | 1.3 |  |
| Czech Rep | 10.2 | 2.6 | 4.9 |  |
| Denmark | 5.4 | 3.5 | 5.8 |  |
| Ethiopia | 70.7 | 0.5 | 0.8 |  |
| Finland | 5.2 | 12.0 | 7.6 |  |
| France | 60.1 | 3.0 | 5.6 |  |
| Germany | 82.5 | 1.7 | 4.5 |  |
| Greece | 11 | 1.4 | 5.0 |  |
| Guatemala | 12.3 | 1.3 | 1.3 |  |
| India | 1,065.5 | 0.4 | 0.8 |  |
| Italy | 57.4 | 1.0 | 4.2 |  |
| Japan | 127.7 | 0.7 | 4.4 |  |
| Netherlands | 16.1 | 0.8 | 4.4 |  |
| New Zealand | 3.9 | 14.9 | 5.9 |  |
| Norway | 4.5 | 6.8 | 5.8 |  |
| Peru | 27.2 | 3.8 | 0.9 |  |
| Poland | 38.6 | 1.8 | 3.3 |  |
| Portugal | 10.1 | 1.6 | 4.2 |  |
| Russia | 143.2 | 6.9 | 4.4 |  |
| South Africa | 45 | 2.0 | 2.3 |  |
| Spain | 41.1 | 1.7 | 5.4 |  |
| Sweden | 8.9 | 9.6 | 6.1 |  |
| Thailand | 62.8 | 1.0 | 1.4 |  |
| United Kingdom | 59.5 | 1.6 | 5.6 |  |
| USA | 294 | 4.7 | 9.6 |  |
| World | 6301.5 | 2.2 | 1.8 | -0.4 |

Data obtained from Global Footprint Network ([www.footprintnetwork.org/](http://www.footprintnetwork.org/)) and is current to 2006