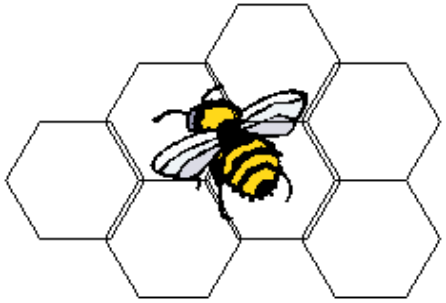
Interpreting BEES Environmental Performance Scores: A Primer



Product ABC has a BEES Environmental Performance Score of 0.0230 and Product XYZ a score of 0.0640. What does that mean?

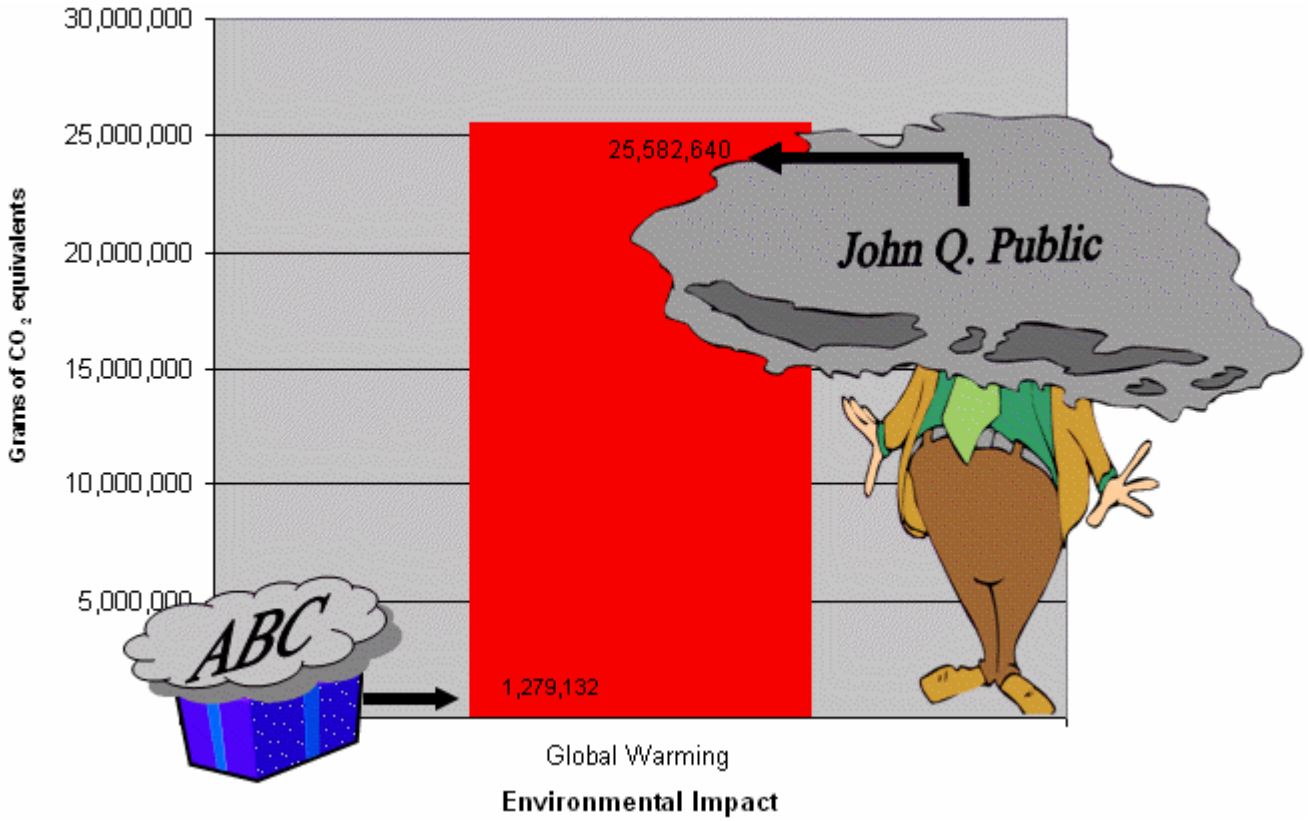
Let's start from the beginning, considering just one product and one environmental impact at a time. Let's take a look, say, at the Global Warming performance of Product ABC, and ask:

Q. How much does Product ABC contribute to Global Warming over its life cycle?

A. BEES tells me that Product ABC contributes 1,279,132 grams of carbon dioxide and other greenhouse gases over its life cycle.

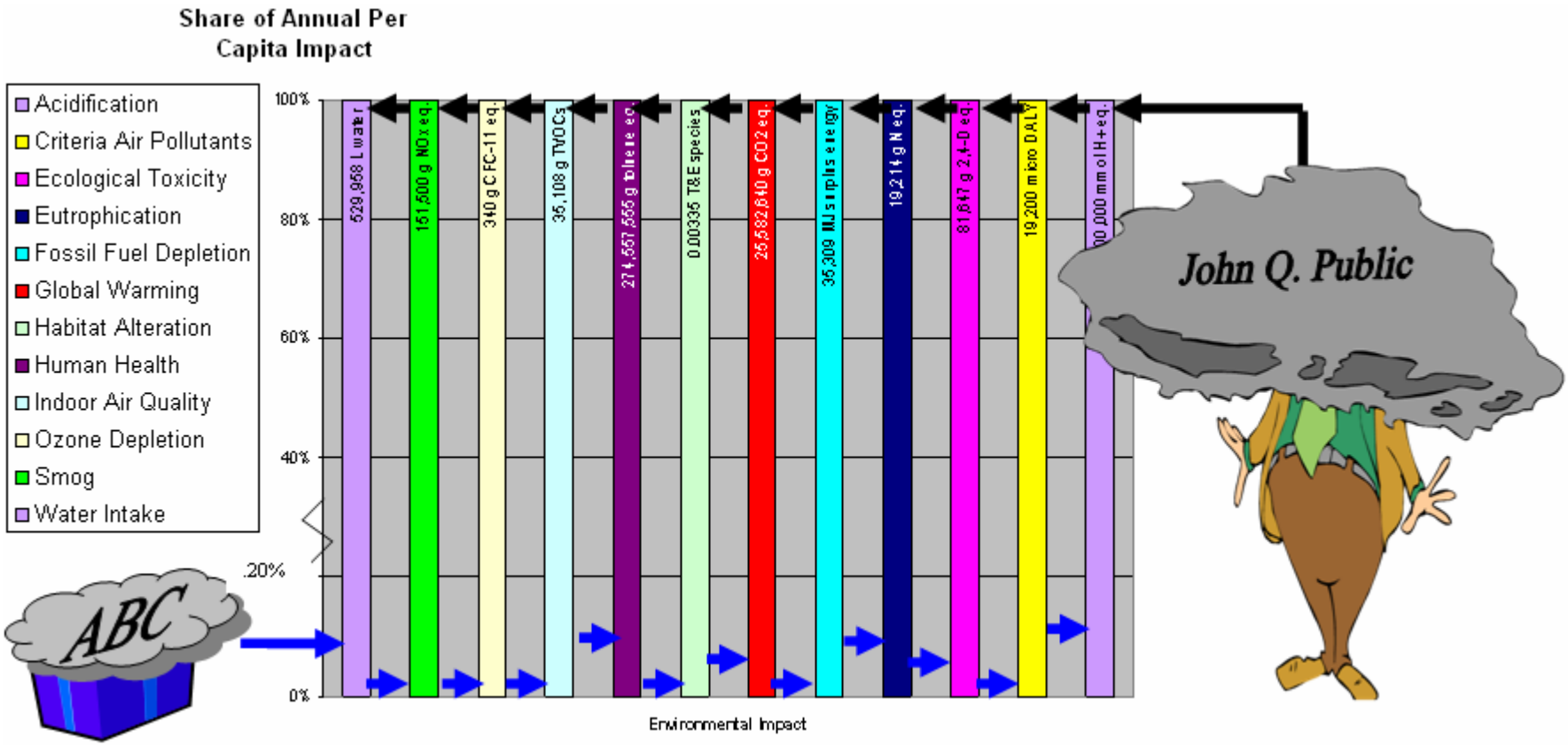
Q. So what? All products contribute greenhouse gases over their life cycle. Is 1,279,132 grams a lot or a little? How can I make sense of this number?

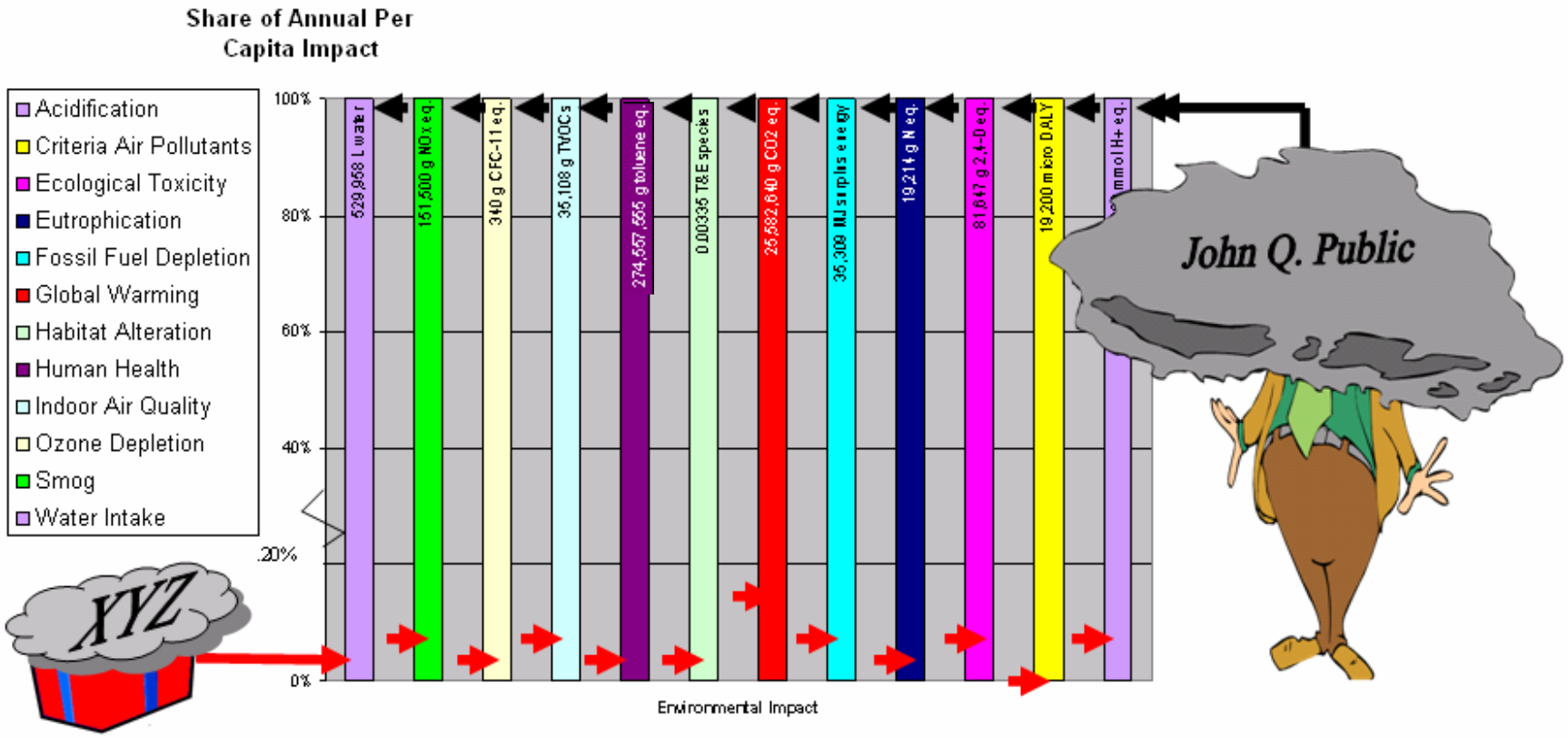
A. By relating the number to the total amount of greenhouse gases released every year, per person, in the United States. Let's make this person—John Q. Public—our yardstick, and mark the spot showing Product ABC's greenhouse gases relative to his.



Q. Okay. Let's say you do that for Product ABC for all 12 environmental impacts. But then what? How can you combine all 12 yardsticks when they're measuring different things? Wouldn't you be mixing apples and oranges?

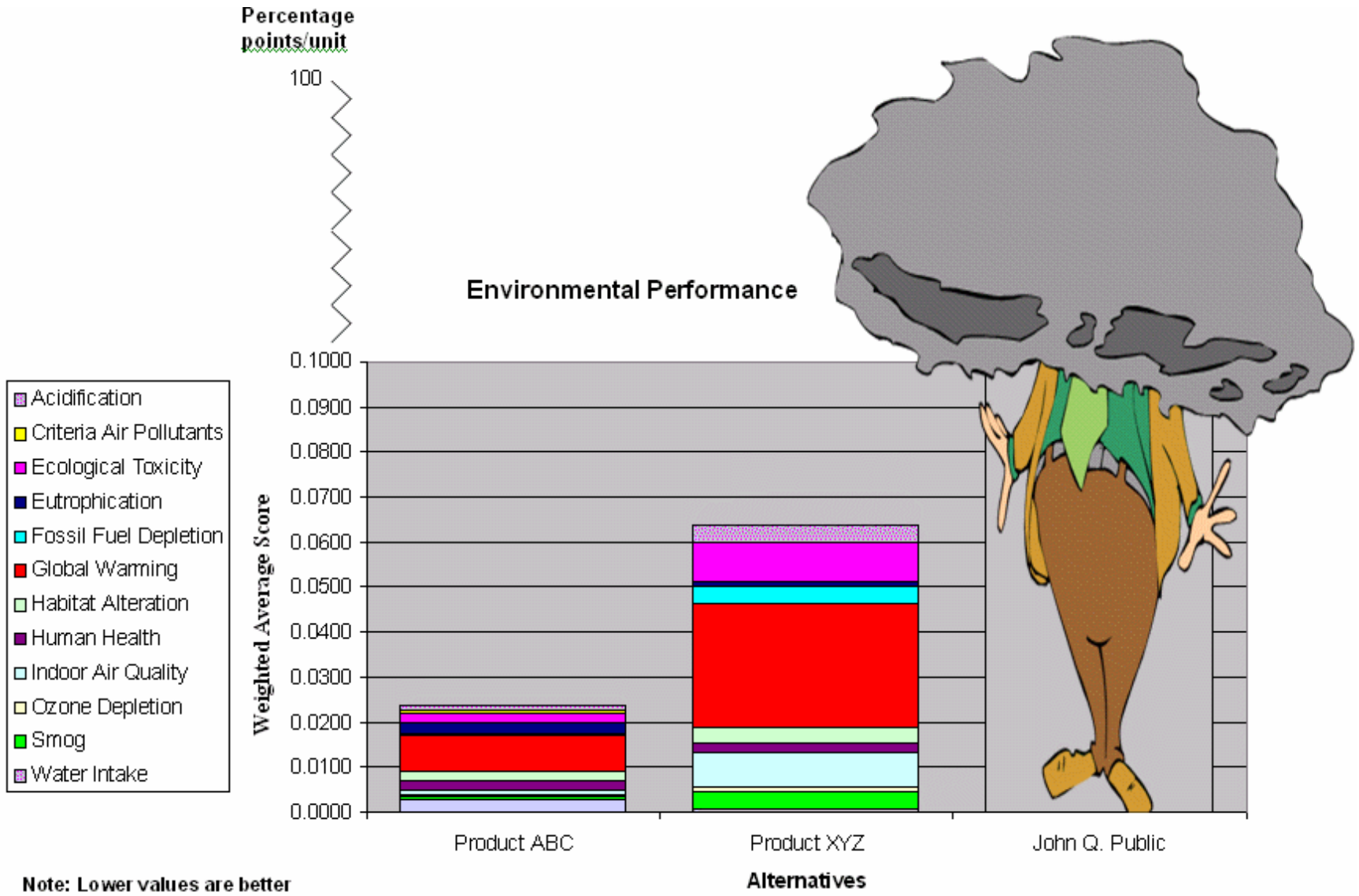
A. Yes, you would be, unless you made a single, common yardstick for all impacts—one based on Product ABC's *percentage share* of John Q. Public's impacts. That way, you could plot all impacts on the same graph. It's like a nutrition label, but instead of reporting a product's percentages of recommended daily allowances, we're reporting its percentages of John Q. Public's environmental impacts. Let's do this for Product ABC and Product XYZ.





Q. I'm still confused. It looks like Product ABC scores better on Global Warming, but worse on Human Health, than Product XYZ. How do I know which product is environmentally preferred, all things considered? Can't you just give me a simple average score?

A. I could, but that would mean all environmental impacts are of the same importance. Most experts say that's not the case, so I'll give you a weighted average score instead, using weights from U.S. EPA experts. Then you can compare Product ABC side-by-side with Product XYZ when you're shopping for "green" products. But always remember, it's better to have a *lower* BEES Environmental Performance Score. Think of the BEES Score as a penalty score—the higher it is, the worse it is.


Percentage points/unit
100
Environmental Performance
Acidification
Criteria Air Pollutants
Ecological Toxicity
Eutrophication
Fossil Fuel Depletion
Global Warming
Habitat Alteration
Human Health
Indoor Air Quality
Ozone Depletion
Smog
Water Intake
Weighted Average Score
0.1000
0.0900
0.0800
0.0700
0.0600
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
Product ABC
Product XYZ
John Q. Public
Alternatives
Note: Lower values are better

Q. Okay. But after all this, when I tell my colleagues that Product ABC, with a BEES Environmental Performance Score of 0.0230, is greener than Product XYZ, with a score of 0.0640, what am I really saying?

A. You're saying that, over its life cycle, one unit of Product ABC does less damage to the environment than does one unit of Product XYZ. If your colleague's eyes start to glaze over, quickly finish by saying that products with lower BEES scores are greener. Otherwise, explain that Product ABC is greener because it contributes, on average, 0.0230 % of annual per capita U.S. environmental impacts, while Product XYZ contributes a larger share, 0.0640 %.