

LEARN ABOUT THE IPAT EQUATION



$$I=PAT$$

This is known as the IPAT equation and it explains the impact of human activities on the environment

$$I = P \times A \times T$$

In words:

Human Impact (I) on the environment is the product of

P= Population

A= Affluence (or Consumption) per capita

T= Technology

This describes how growing population, affluence, and changing technology contribute towards environmental impact. The problem with changing or advancing our technology is it only helps if it increases the efficiency with which we use resources so that we use less of them and do less harm in the process of extracting, transporting and incorporating them into products. More often than not new technology further increases our consumption of resources, with the added complication called the [Jevons Paradox](#)

The IPAT equation was developed in the 1970s during the course of a debate between Barry Commoner, Paul Ehrlich and John Holdren.

The equation is an invaluable aid to understanding some of the basic factors affecting Human impacts on the environment.



But there is no way this equation can allow for such inexplicable, stupid, careless, and wasteful human behaviour as this!

“To the dismay of its citizens, France was lamentably slow over the New Year to roll out its Covid vaccination programme.

But the country continues to be bizarrely efficient at torching cars, which has become an annual tradition, with vandals burning 861 vehicles across France on December 31.

The French craze for setting cars ablaze on New Year’s Eve started in the 1990s, mainly as a form of protest. However, it grew in popularity after the 2005 riots in the suburbs of Paris and elsewhere and has since become an annual event.” (Daily Mail 10 January 2021)

It is almost as inexplicable, stupid, careless and wasteful of so many of us humans who seem to think that, on a finite planet with finite resources, they can run the whole world forever with an economic system that allows every human being to consume as much stuff as they can afford; and at the same time allows them to reproduce as many more new consumers as they like– and possibly cannot even support!

“Anyone who believes in indefinite growth in anything physical, on a physically finite planet, is either mad or an economist.” (Kenneth Boulding)

The planet isn’t getting any bigger and the resources on it are not increasing, so what on earth do all these mad people running it think they are doing?!

It seems they are conducting a very dangerous experiment to see how many people the Earth can take before it fails to support us all completely!

The thought has just struck me that there is another factor that maybe ought to be added to the IPAT equation, an E-factor for Education. Much human impact is caused by ignorance.

At which point a visit to this website would be a good idea, for a further education on all these matters: www.footprintnetwork.org

This will tell you that, for the population on this planet to be sustainable in the long term, instead of being ~8 billion now, and heading for ~10 billion by 2050, and possibly as many as 13 billion by 2100, according to the latest UN population projections, it really ought to be no more than 4.5 billion now, and less than that by 2050, and even less by 2100. The reason not only being the further unavoidable depletion of natural resources in the future, but also because the 4.5 billion figure makes no allowance for the biocapacity we should be leaving for other species. Hence it can be no surprise more biodiversity is being lost every year.

So, without quickly reaching an international agreement to dramatically reduce further population growth, I cannot see how we can possibly reach net zero CO2 emissions globally by 2050, while expecting more economic growth every year, and while allowing 2 billion more of us, at the rate of 80 million more every year, onto the planet by then!

“Growth is the disease for which it thinks it is the cure.”
(Sustainable. Population. Party Australia)

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