TOOL – GREEN COMPUTING

SAFETY > 4.4 PROTECTING THE ENVIRONMENT

TARGET GROUP	AGE GROUP	PROFICIENCY LEVEL	FORMAT	COPYRIGHT	LANGUAGE
Facilitators	N/A	Level 1	Preparatory guide	Creative Commons (BY-SA)	English, French

This document contains background information for facilitators before they run the workshop with participants. It helps broaden the knowledge of concepts behind an environmentally friendly use of the internet and new technologies.

General Objective	Knowledge acquisition
Preparation time for facilitator	less than 1 hour
Competence area	4 - Safety
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Resource originally created in	French

WORKSHOP DIRECTIONS

1 Definitions

Green computing, also called green information and communications technology (ICT) or ICT sustainability, comprises various ideas regarding the limiting of impact of ICT technology on the environment. Green computing therefore promotes the idea of sustainable development. It also addresses questions regarding the social and economic influence of ICT. Green computing advocates for the idea of reducing greenhouse gases emitted by the ICT industry and more generally. Those who lobby for green computing would also aim to convince political decision-makers to favour policy encouraging the transition towards more environmentally friendly technology. In other words, green computing aims to minimise the negative impact of the ICT impact on the environment through the designated production of environmentally sustainable ICT. This could be done by reducing the use of dangerous materials, optimising energy efficiency during product lifecycles and demanding that obsolete products by biodegradable.

2 Environmental impact of ICT

Our ICT impacts the environment in the production and transport processes as well as in our homes, as it consumes large amounts of energy. There is also the fact that we tend to replace our technology frequently and there is no way to recycle effectively. This is made worse by the fact that the manufacturers incorporate planned obsolescence strategies in their design processes which deliberately reduces a product's lifespan, pushing us to buy new devices more than we would otherwise need to, which contributes to climate change. Each step of an object's lifecycle generates carbon emissions, from primary element extraction primary elements until its disposal. It has been estimated that up to 270 kilograms of carbon emissions are produced in the production of a laptop computer.

3 Internet and invisible pollution

With each email sent, every online search and video posted on YouTube for example, energy is

consumed which produces carbon emissions. This is due to to high energy data centres.

4 Some tips to become a more environmentally conscious digital consumer

1. Strictly limit the purchasing of new devices
2. Repair broken material
3. Buy second hand or reconditioned tech
4. Minimise your use of cloud storage
5. Clear out your inbox regularly
6. Don’t use email when not connected to wifi

5 Going further

See this video or this video. Scientific study on the subject