L'ÉCOLOGIE ET LE NUMÉRIQUE

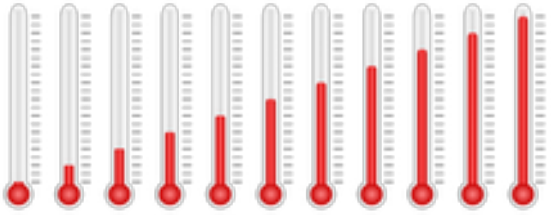
Nicolas Koenig

NODATEK
formation & développement informatique

#GEN 7e édition

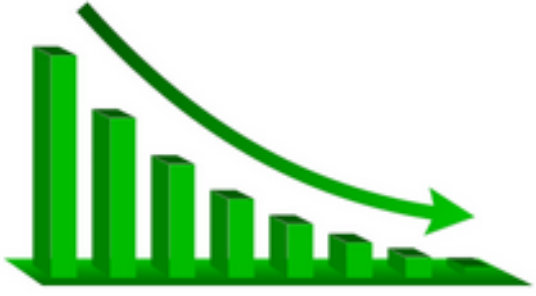
LE NUMÉRIQUE COMME SOLUTION ?

Outil de mesure



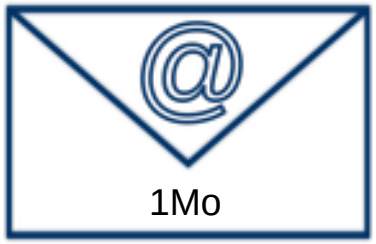
Dématérialisation

IT for green



EFFET REBOND

« L’amélioration de la qualité d’un bien technologique a pour conséquence une augmentation de sa consommation »

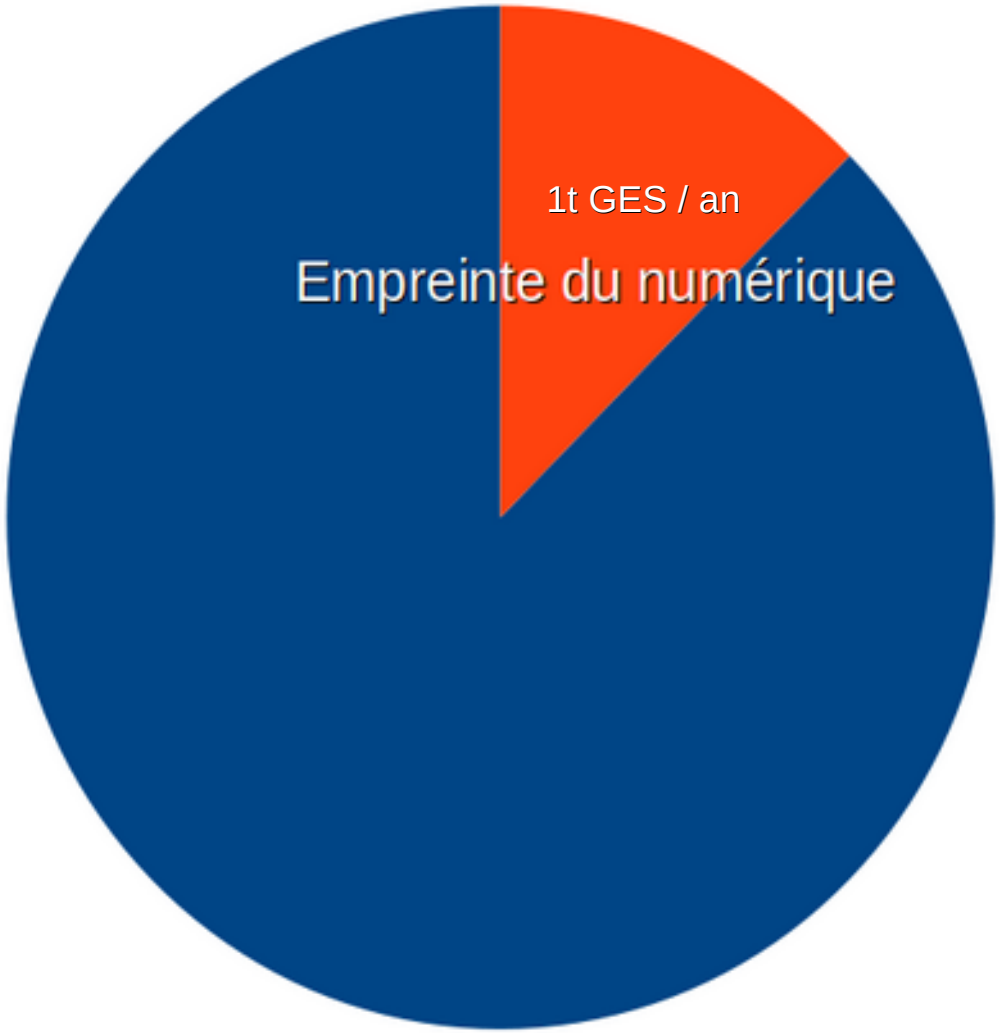


60W, 25mn

~~**390km**~~

25km

Part des émissions de GES individuelles



QUEL SECTEUR ÉMET LE PLUS DE GES ?

Aviation civile

2%

Écosystème numérique

4%

ET ÇA CONTINUE D'AUGMENTER !

- Trafic de données : **+25 % / an**
- Consommation énergétique : +9 % / an

→ **×2 en 8 ans** !

(Tous secteurs confondus : +1,5 % / an)

PRÉVISIONS POUR 2025

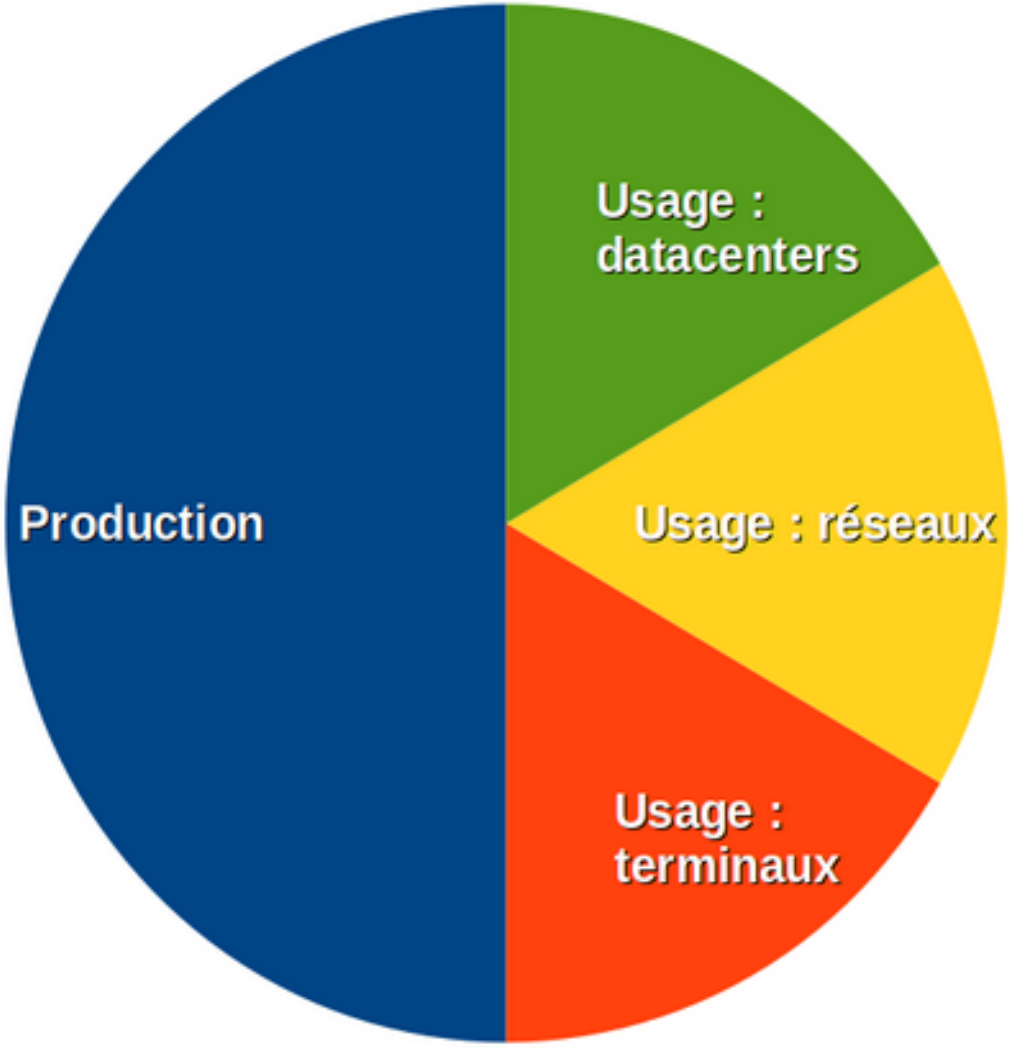
Véhicules légers

8%

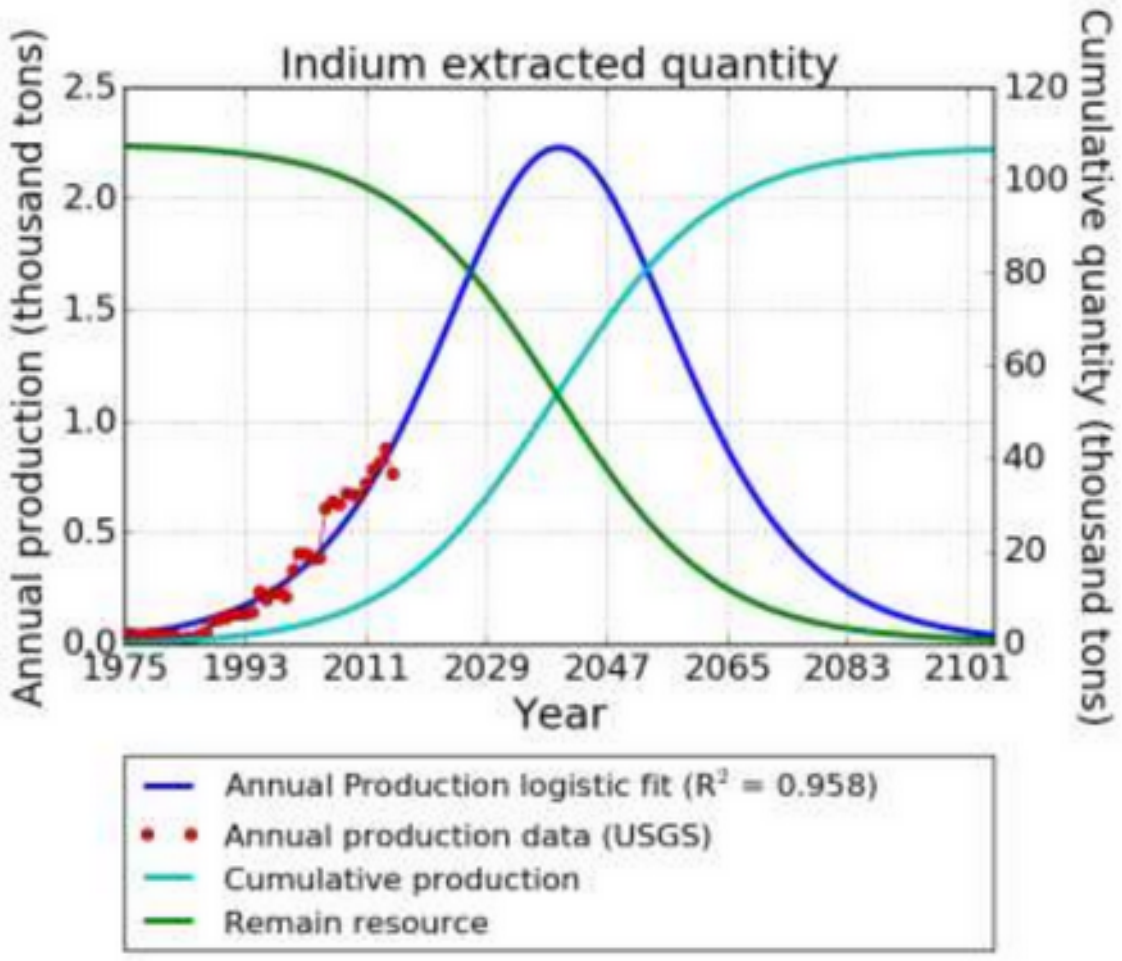
Écosystème numérique

8%

Répartition de la consommation énergétique du numérique



LA LIMITE DES MÉTAUX RARES



Source : Halloy, 2018

LES CONSÉQUENCES DE L'EXTRACTION

globe.com

Source : aboutenvironment.com

Source : la-croix.com, photo de Lionel Healing, AFP

THE SHIFT PROJECT

THE CARBON TRANSITION THINK TANK

Levier N°1

3 → 5 ans

37 %

THE SHIFT PROJECT

THE CARBON TRANSITION THINK TANK

Levier N°2

2,5 → 3,5 ans

26 %

THE SHIFT PROJECT

THE CARBON TRANSITION THINK TANK

Levier N°3

20 % → 70 %

37 %

Pro

Perso

THE SHIFT PROJECT

THE CARBON TRANSITION THINK TANK

Levier N°4

mail → espace partagé

81 %

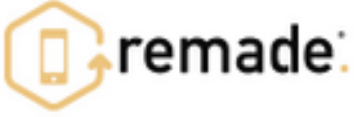
THE SHIFT PROJECT

THE CARBON TRANSITION THINK TANK

Levier N°5

Mettre en place des métriques

PRODUITS RESPONSABLES, PRODUITS RECONDITIONNÉS, ÉCONOMIE DE LA FONCTIONNALITÉ



INR Institut du Numérique Responsable

Charte Numérique Responsable

COMMENT RÉDUIRE L'EMPREINTE DES SERVICES NUMÉRIQUES ?

MAIS D'ABORD, QUELS AUTRES INTÉRÊTS ?

SE CONCENTRER SUR L'USAGE

DB BAHN

Ko ÷ 700

Search connection

Please specify the connection you want. You will get connections before and after the time entered.

From: .....
To: .....
Date: 11.09.19
Time: ..... 11:00 Departure Arrival

Query functions

Search connection
Means of Transport
more via stations

Links

New Query
Main Page of Deutsche Bahn AG

House-to-House-Service is only available with newer Netscape- or Microsoft Browsers.

[Lynx] [Standard] -- [Deutsch] [English]

SoftwareData: HAFAS 5.44.DB.R19.08.1.a - 11.09.19

All information is issued without liability. Please consider the local references concerning the platform information. You can reach us here in case of any problems.

BIEN QUANTIFIER LES BESOINS

20 % résultats

80 % infrastructure

CHOISIR LES TECHNOLOGIES EFFICIENTES

facebook

Serveurs ÷ 2

LinkedIn

Serveurs ÷ 112

ÉVITER L'OBSOLESCENCE

- En augmentant la durée de maintenance
- En distinguant les mises à jour de sécurité et les mises à jour de fonctionnalités
- En rendant open-source les solutions non maintenues

MESURER

ecometer

W.E.A
WEB ENERGY ARCHIVE

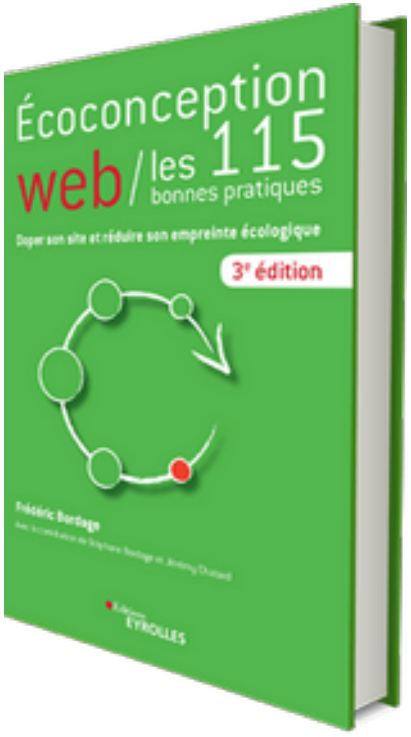
ecoIndex.fr

PowerAPI

GREENSPECTOR

SE FORMER, SE DOCUMENTER

greenIT.fr



https://solar.lowtechmagazine.com/

LOW←TECH MAGAZINE

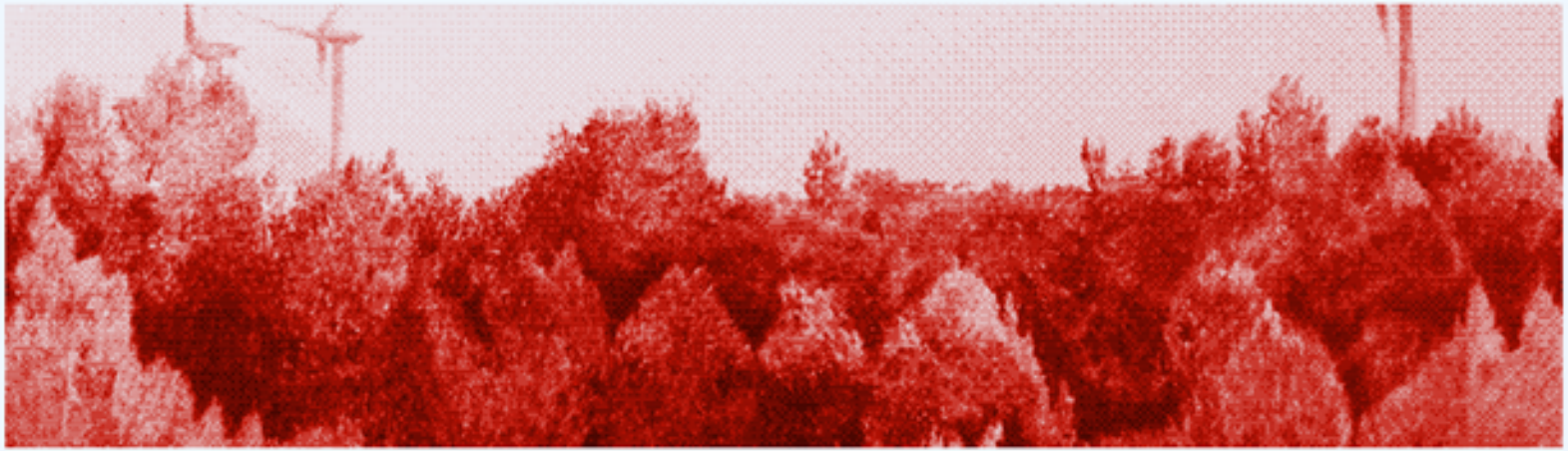
This is a solar-powered website, which means it sometimes goes offline ☀

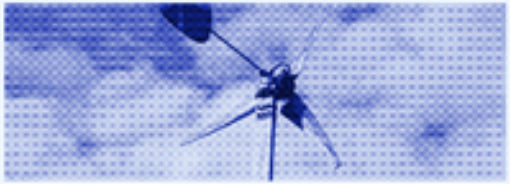
How to Make Wind Power Sustainable Again

High-tech Problems

If we build them out of wood, large wind turbines could become a textbook example of the circular economy.

June 2019





Reinventing the Small Wind Turbine

Low-tech Solutions

A wooden rotor and tower greatly increase the net energy output over the lifetime of a small wind turbine.

June 2019

Low-tech Magazine: The Printed Website

Obsolete Technology

Read Low-tech Magazine with no access to a computer, a power supply, or the internet.

March 2019

Heat your House with a Mechanical Windmill

Low-tech Solutions

Given the right conditions, a mechanical windmill with an oversized brake system is a cheap, effective, and sustainable heating system.

February 2019

Keeping Some of the Lights On: Redefining Energy Security

Low-tech solutions

To improve energy security, we need to make infrastructures less reliable.

December 2018

MERCI !

NODATEK

formation & développement informatique

https://nodatek.com

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