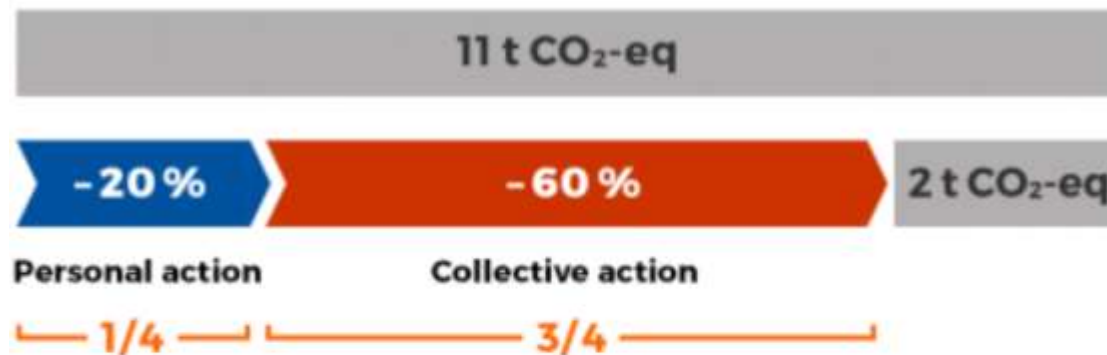
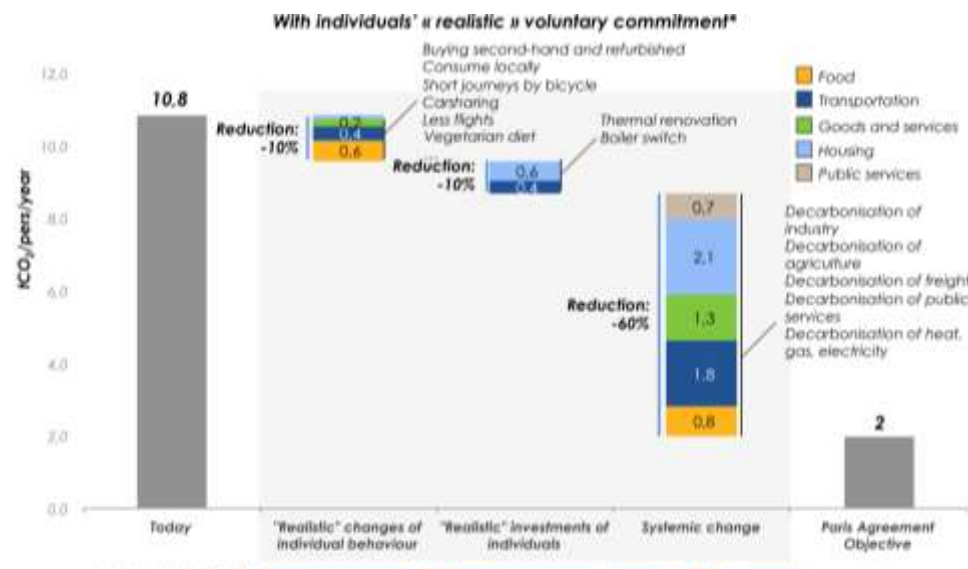
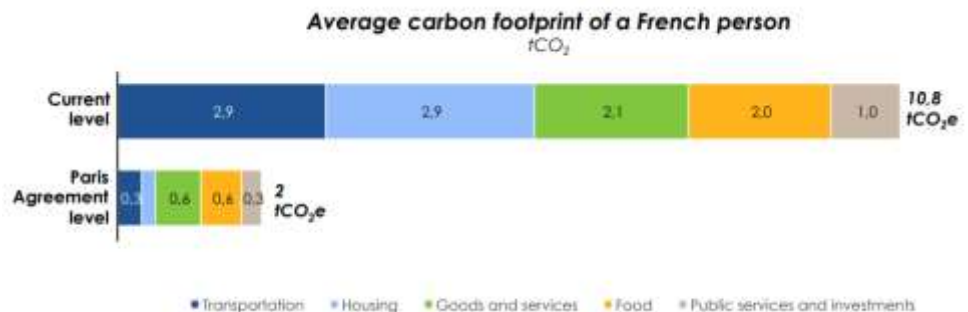




Belgian Institute for Sustainable IT asbl/vzw
Introduction to our non-profit association

Olivier Vergeynst, Director
olivier@isit-be.org

It's not an individual problem: it's a collective one

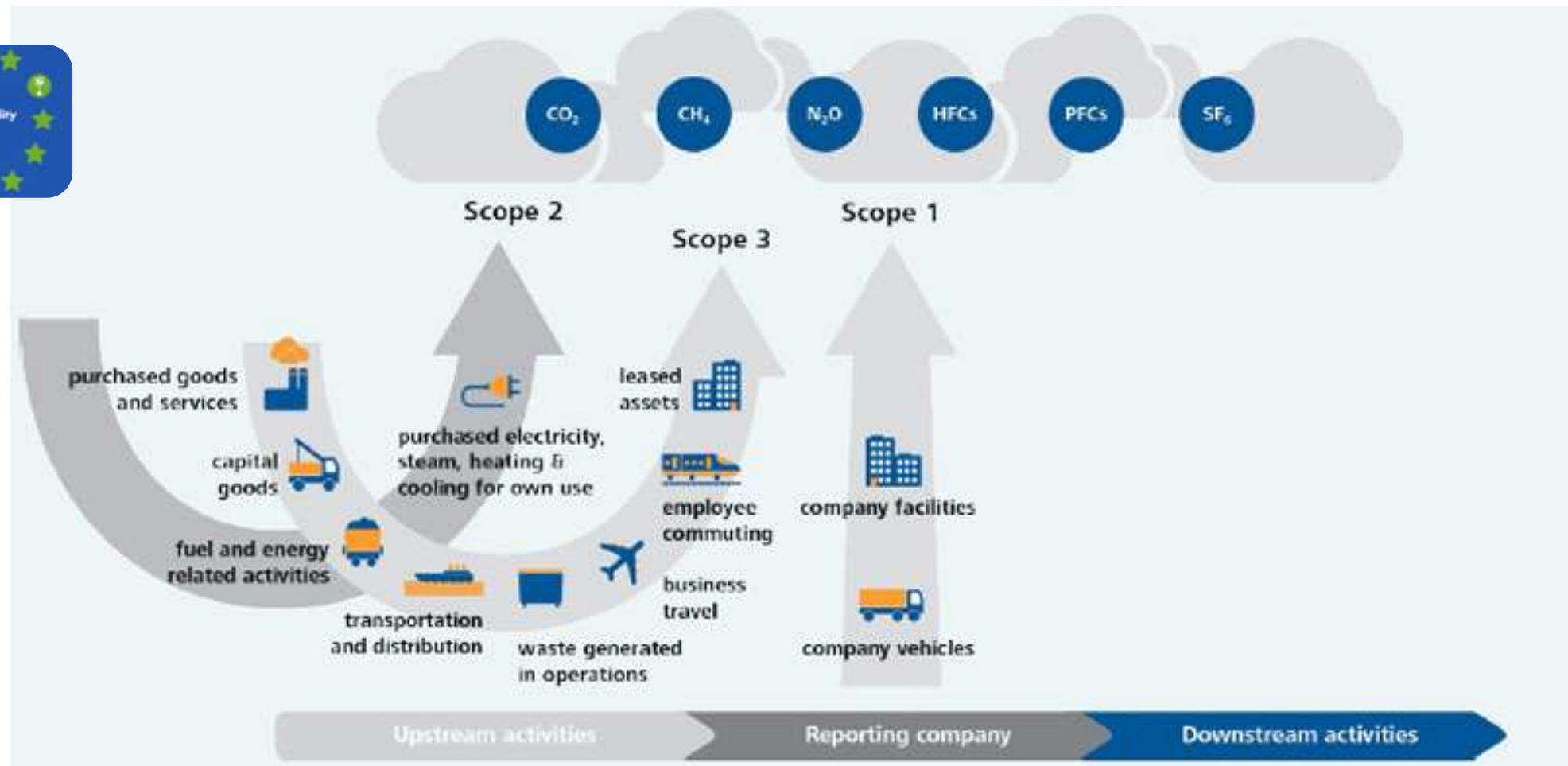


In order to reduce our personal carbon footprint, **companies and the State also need to **drastically change**.**

There is no business on a dead planet.

David R. Brower

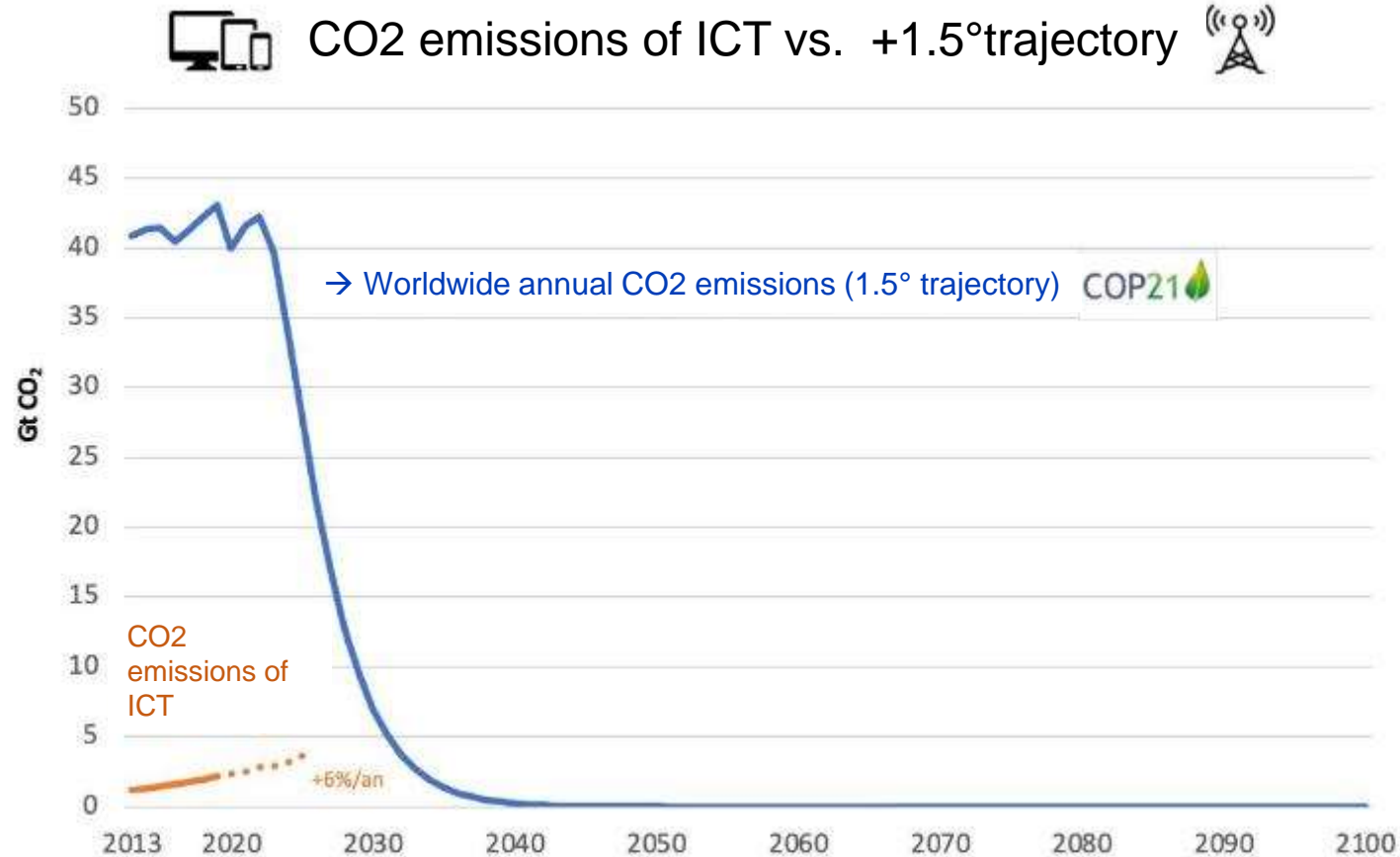
GHG emissions



The Sonian Forest, 5 000 Ha



Evolution of the carbon footprint of ICT



Réalisé par Basile Fighiera à partir des sources suivantes :

- Trajectoire de réduction des émissions de CO2 : Robbie Andrews (2019) based on data from the Global Carbon Project & IPCC SR15 ;
- Emissions de CO2 du Numérique : émissions historiques jusqu'en 2019 + projections 2025 (scénario « Growth ») issues du rapport « Impact environnemental du numérique : tendance à 5 ans et gouvernance de la 5G », The Shift Project (2021) ;

Environmental impacts...

A polluting industry



Resource depletion and energy consumption

Water



Metals



Rare earths



Electricity



A creation of waste



... and **social** impacts throughout the life cycle

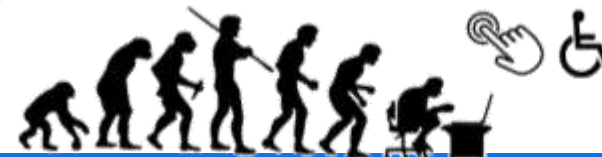
Extraction



Manufacturing



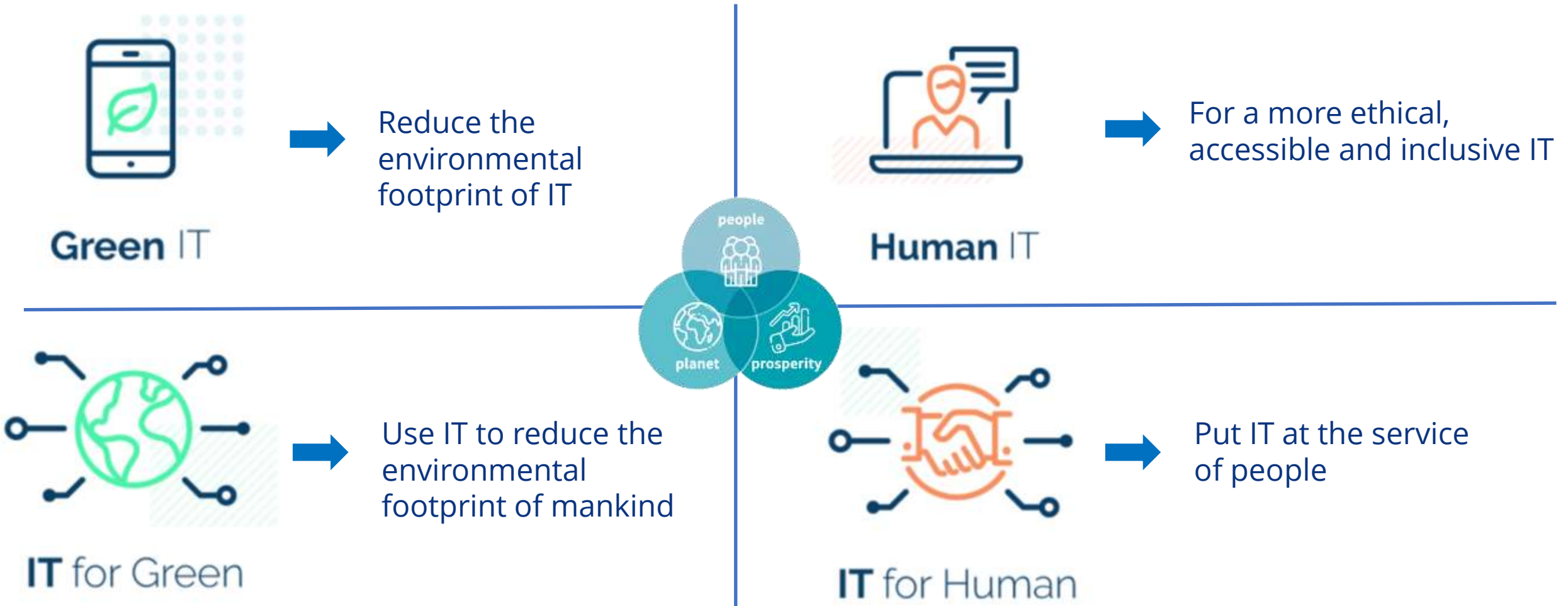
Use



End of life



The 4 pillars of Sustainable IT



Taking action in organisations : Why and how ?



Sustainable IT is good for business !

Reduce the carbon footprint of your IT



Enhance your CSR strategy



Lead by example



Train & empower your employees



Obtain investments



Act for inclusivity and accessibility



Reduce costs



Attract talents



Anticipate new regulations



Reduce risks



Improve brand equity



And much more!



Get ready ahead of regulations

**Data privacy
& security**



**More sustainable
products**



**Avoid
greenwashing**



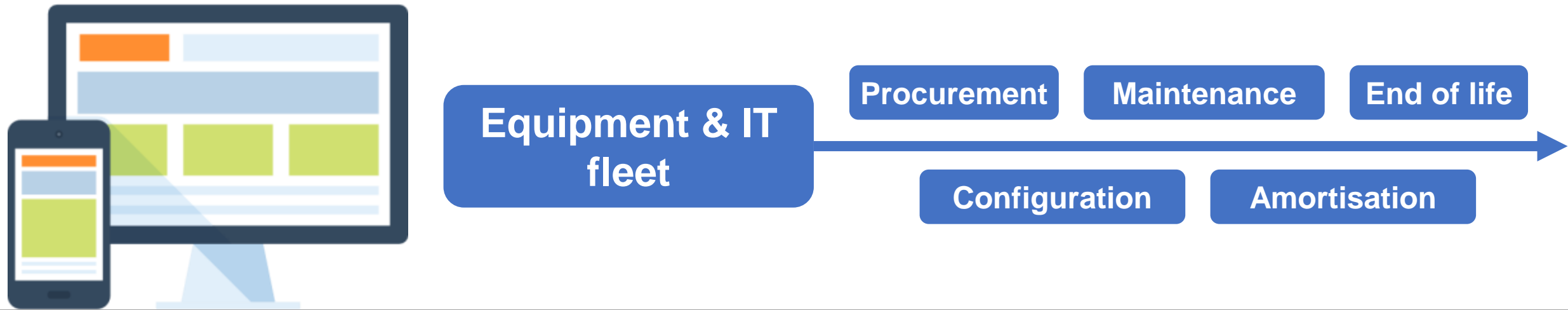
**Digital
accessibility**



Sustainable IT : everyone has a role to play



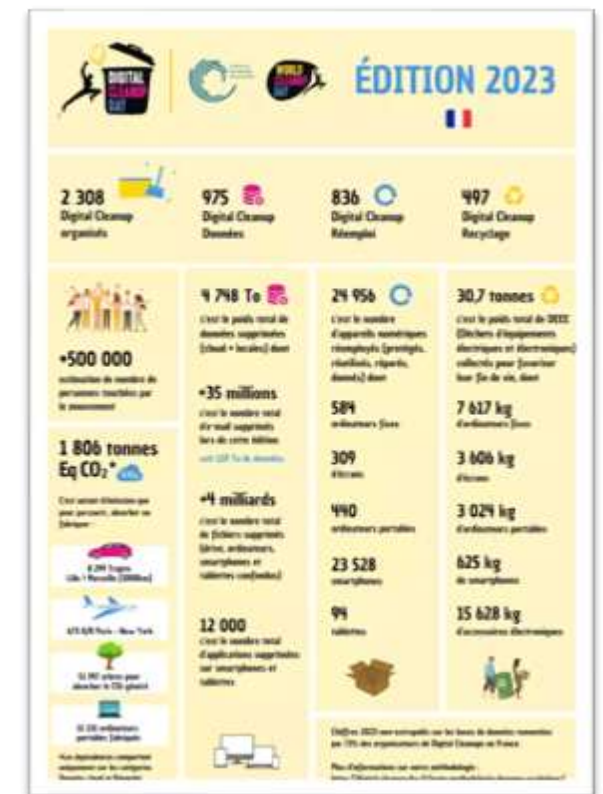
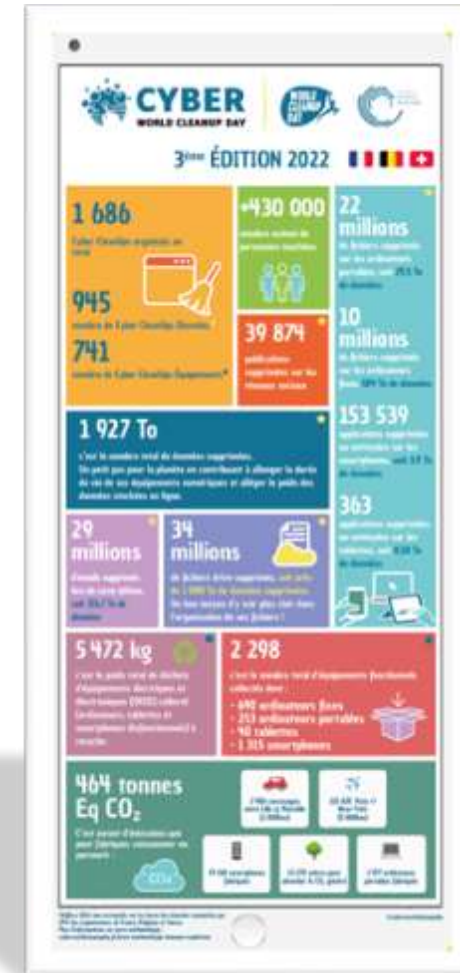
Several areas of action



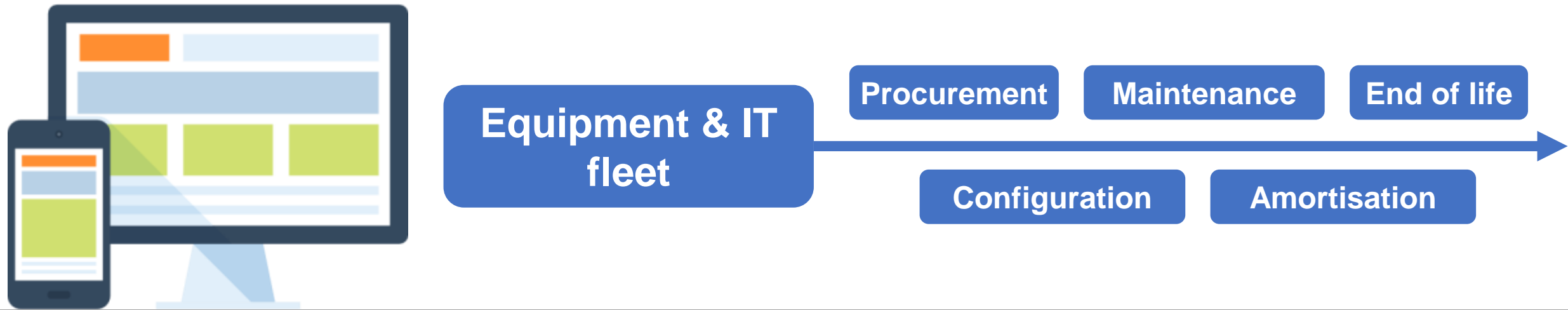
Digital uses



Digital Cleanup



Several areas of action



Digital uses




Eco-design of digital services



Ecodesigned websites

Lancer l'analyse
Vider le cache navigateur
Sauver l'analyse
Historique
Aide











































☒ Activer l'analyse des bonnes pratiques


EcoIndex 

EcoIndex	Eau (cl)	GES (gCO2e)
23.64	3.79	2.53

Nombre de requêtes	Taille de la page (Ko)	Taille du DOM
87	2845 (8663)	1606

Bonnes pratiques


Ajouter des expires ou cache-control headers		75 / 80 ressources cachées 
Compresser les ressources (>= 85%)		99.6% ressources compressées 
Limiter le nombre de domaines (<6)		10 domaine(s) trouvé(s) 
Ne pas retailer les images dans le navigateur		12 image(s) retailée(s) dans le navigateur 
Externaliser les css et les js		28 inline stylesheet(s) et inline javascript(s) 
Eviter les requêtes en erreur		0 erreur(s) HTTP 
Limiter le nombre de requêtes HTTP (<27)		97 requête(s) HTTP 
Ne télécharger pas des images inutilement		3 image(s) téléchargée(s) mais non affichée(s) dans la page 
Valider le javascript		4 erreur(s) javascript 
Taille maximum des cookies par domaine(<512 Octets)		Taille maximum = 538 Octets 
Minifier les css et js		7/67 css ou js non minifiés 
Pas de cookie pour les ressources statiques		67 ressource(s) statiques avec un cookie (Au total 25.6Ko) 
Eviter les redirections		0 redirection(s) 
Optimiser les images bitmap		Pas d'images bitmap à optimiser 
Optimiser les images svg		Pas de svg à optimiser 
Ne pas utiliser de plugins		Aucun plugin 
Fournir une print css		Pas de print css 
N'utilisez pas les boutons standards des réseaux sociaux		Pas de bouton standard de réseau social trouvé 
Limiter le nombre de fichiers css (≤10)		41 fichiers css 
Privilégier HTTP/2 à HTTP/1		5/87 ressources utilisant HTTP/1 
Utiliser des polices de caractères standards		8 police(s) de caractères spécifique(s) 


Kastor

[Run an audit](#)
[Sign up](#)
[Log in](#)
[Leaderboard](#)
[Learn more](#)
[EN](#)

[https://kashubank.fr/](#) > Frontend

Audit of responsible design of digital service
URL analysis [https://kashubank.fr/](#) realised on 11/12/23, 6:14 PM GMT


50 Ecodesign score

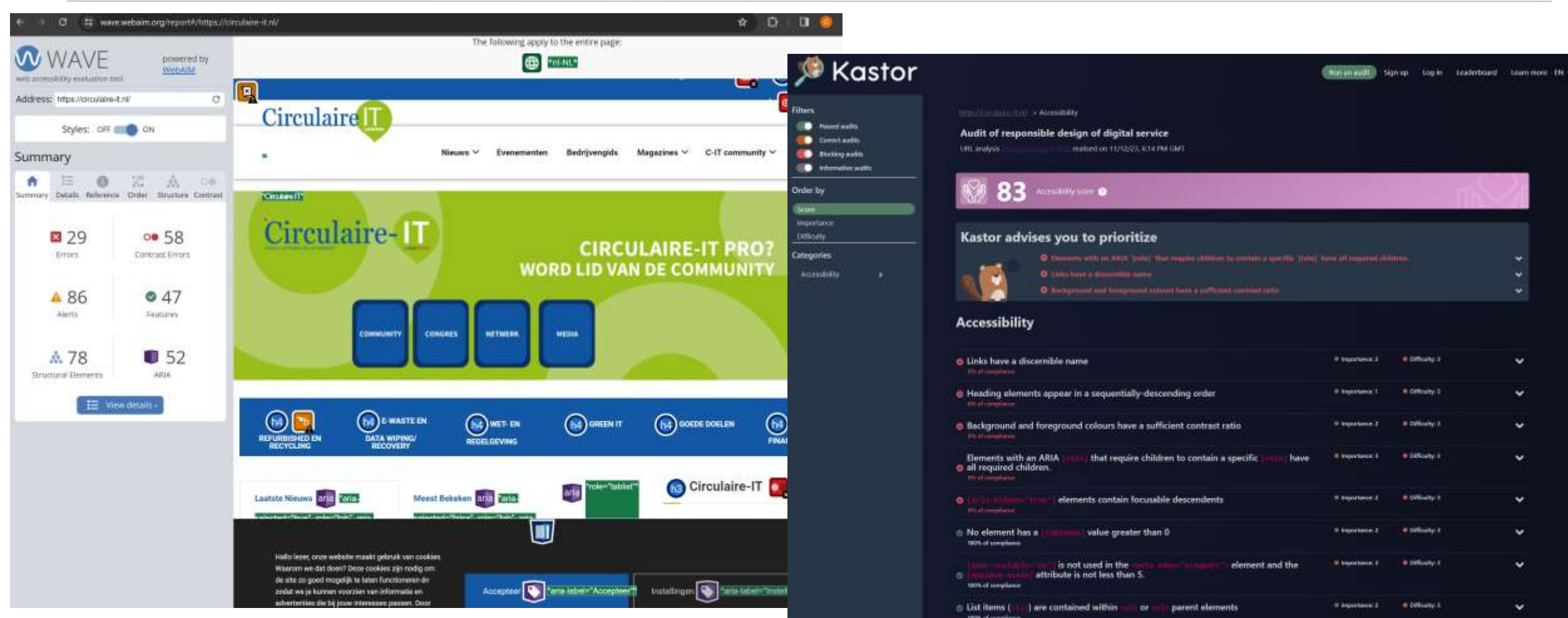
Kastor advises you to prioritize

- ⚠️ Prefer standard fonts
- ⚠️ Do not download images if they are not visible
- ⚠️ Minimize multi-formatted work

Frontend

- Reduce the impact of third-party code - Third-party code blocked the main thread for 740 ms
0% of compliance
- Serve static assets with an efficient cache policy - 14 resources found
0% of compliance
- Do not download images if they are not visible - 6 images
0% of compliance
- You should regroup your resources into a minimum of domain - 13 domains
0% of compliance
- Use video formats for animated content - Potential savings of 496 KiB
0% of compliance
- Reduce unused CSS - Potential savings of 313 KiB
0% of compliance
- Defer off-screen images - Potential savings of 534 KiB
0% of compliance
- Avoid enormous network payloads - Total size was 3,963 KiB
0% of compliance
- Property size images - Potential savings of 28 KiB

Accessible websites

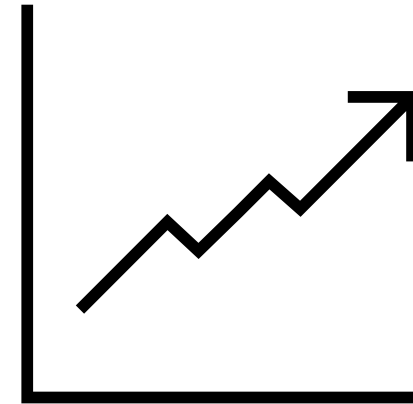


The screenshot displays the Circulaire-IT website with three accessibility evaluation overlays:

- WAVE (web accessibility evaluation tool):**
 - Address: <https://circulaire-it.nl/>
 - Summary:
 - Errors: 29
 - Contrast Errors: 58
 - Alerts: 86
 - Sequences: 47
 - Structural Elements: 78
 - ARIA: 52
- Kastor:**
 - Audit of responsible design of digital service
 - URL analysis: <https://circulaire-it.nl/> analysed on 11/12/23, 6:14 PM GMT
 - Accessibility score: 83
 - Kastor advises you to prioritize:
 - Elements with an ARIA "role" that require children to contain a specific "role" have all required children.
 - Links have a discernible name.
 - Background and foreground colours have a sufficient contrast ratio.
 - Accessibility issues list:
 - Links have a discernible name (100% of compliance)
 - Heading elements appear in a sequentially-descending order (100% of compliance)
 - Background and foreground colours have a sufficient contrast ratio (100% of compliance)
 - Elements with an ARIA "role" that require children to contain a specific "role" have all required children (100% of compliance)
 - ARIA "role" elements contain focusable descendants (100% of compliance)
 - No element has a "tabindex" value greater than 0 (100% of compliance)
 - "aria-modal"="true" is not used in the "aria-labelledby" element and the "aria-modal" attribute is not less than 5 (100% of compliance)
 - List items "ul" are contained within "div" or "div" parent elements (100% of compliance)
- eleven ways:** (Logo visible in the top right corner)

Benefits

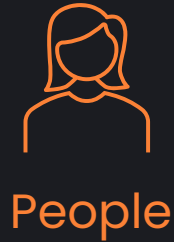
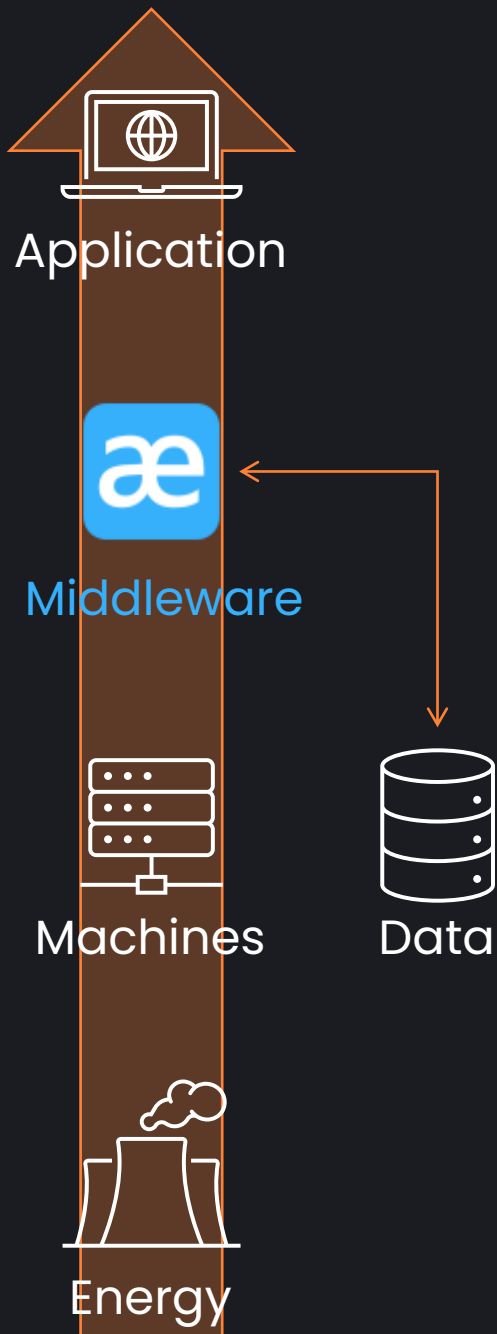
- **Improved performance:** loading speed, easier to manage...
- **Better natural search engine optimisation (SEO)**
- **Improved user experience :** improved navigation, ease of use, accessibility, readability...



➤ **More traffic, more clients, better conversion rate...**

RETHINK HOW DIGITAL SERVICES ARE BUILT

#ECODESIGN #GREEN-OPS #SUSTAINABLE-IT



Reduce complexity for **developers** and drive inclusive end-user applications



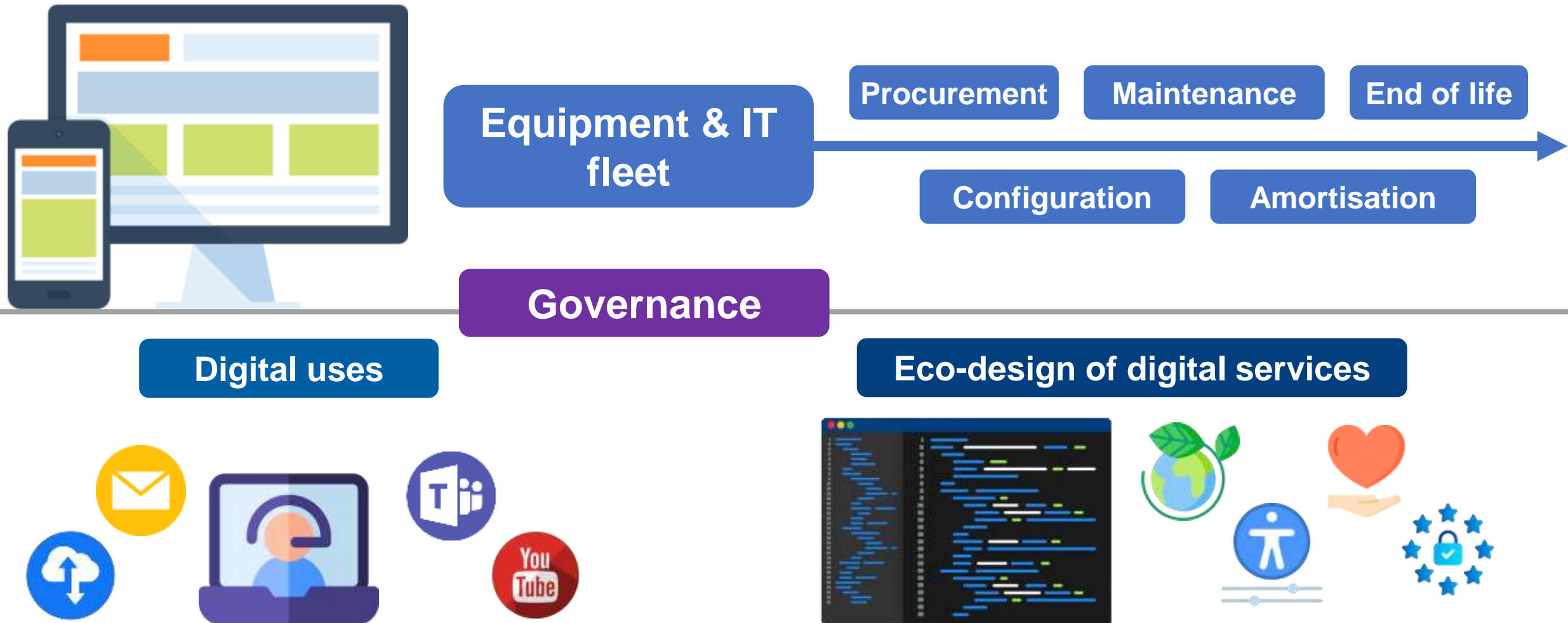
Reduce **computing power** requirements, up to 100x less machines and energy



Accelerate your **time to market** with a focused value-based approach

æonics

Several areas of action



What does the ISIT-BE offer ?



Our actions

Promote good practices



Share knowledge and expertise



Provide tools, guides and trainings



Support your Sustainable IT initiative




To serve as a reference point



Our resources



Training, tools, guides, conferences, workshops... to learn, measure and take action




ISIT ACADEMY

Through its Sustainable IT Academy, the INR wishes to offer a set of training projects aimed at the greatest number of people in order to train them in the challenges and best practices of Sustainable IT.

SUSTAINABLE IT MOOC


Faced with the climate emergency and the consequent environmental footprint of digital technology, and the imperative to rethink digital technology so that it carries more inclusive and ethical values for the women and men of the future, INR and its partners are proposing a MOOC on Sustainable IT to enable them to be informed and trained.

[AWARENESS MOOC \(30MIN\)](#) [THE WHOLE MOOC NR](#)




OUTRE

Bonnes pratiques numérique responsable pour les organisations



PRAKTISCHE GIDS

Voor de duurzame aankoop van IT



WeNR 2023

Information System carbon footprint measurement tool - A free-to-use tool

Public session open from 7 June to 15 September 2023 - reports will be provided in October

Equipments

The manufacture of equipment accounts for the vast majority of the digital footprint. The average material and insurance requirements to manufacture office equipment represent more than 70% of the environmental balance of this life cycle over an average period of use of 5 years (Source: ADEME - DDT, 2020)

The impact linked to manufacturing is an equivalence in kgCO2 given by the manufacturer, depending on the model. The duration of use allows you to take into account the total impact of the usage of this equipment and to calculate an average per post, including the impact linked to manufacturing.

	MANUFACTURING	USAGE	TOTAL	YEARLY
DESKTOP PC				
Model		Length of use (years)		
Desktop other		5	254.32	50.86
SCREEN MONITOR				
Model		Length of use (years)		
Screen other		5	340.00	68.00

[Add equipment](#)

Online Usage

Today, video consumption accounts for more than 80% of global bandwidth (Source: The Shift Project)

WEEKLY ANNUAL

THE SUSTAINABLE IT TOOLBOX

beta version | Institute for Sustainable IT

Categories

- DATA-FIT
- CONTRACTS
- ENERGY
- WATER
- WASTE
- WIFI
- WIRELESS
- WIRELESS
- WIRELESS
- WIRELESS
- WIRELESS

332 Sustainable IT tools indexed in the toolbox

Welcome to the INR toolbox that presents a list of Sustainable IT tools. Our goal for 2023 is to optimize this list to improve the methodology for selecting tools and to cover all Sustainable IT themes.

If you have any suggestions for Sustainable IT tools or would like to get involved with us to help us optimize the toolbox, please write to us: sustainable@isit.be

[Search the toolbox](#) [Go to the toolbox](#)

Explore a quickview of indexed tools in the Sustainable IT toolbox

[TEST MY SITE](#) [PRELIMINARY](#) [ECONOMY](#)

HANDBOOK OF SUSTAINABLE DESIGN OF DIGITAL SERVICES

STRATEGY SPECIFICATIONS UX/UI CONTENTS ARCHITECTURE FRONTEND BACKEND

8 Families | 61 recommendations - 516 criteria

Welcome to the Handbook of Sustainable Design of Digital Services, created by Institute for Sustainable IT.

Strategy

The project strategy stage makes it possible to determine the relevance and the challenges of the project.

Specifications

The specification stage together the elements of the project framework, the means implementation, the objectives and constraints of the project over the entire lifespan of the target product. Regardless of the type of project management: Agile or...

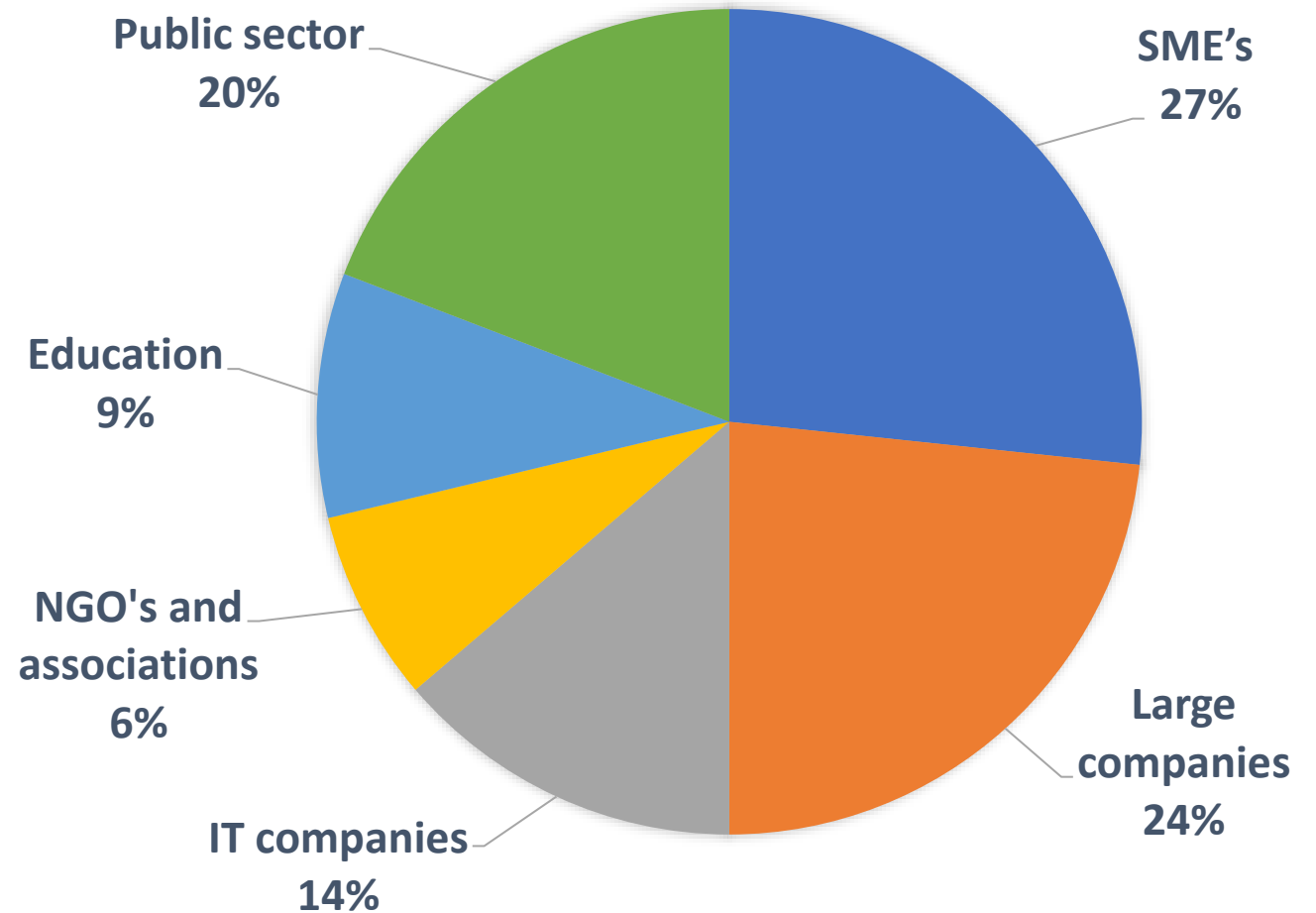
Contents

All elements of a digital service available to the end user.

Frontend

The stages and methods of designing digital services to define the best solutions for interactions with the user.

Many more services for our 250+ members



What do we offer to our members ?



Exclusively with ISIT-BE*: The Sustainable IT Roadmap tool

Coming soon



75 members in Belgium





29 members in Switzerland



Act now !

*"IF NOT US, WHO ?
IF NOT NOW, WHEN ?"*

JOHN F. KENNEDY



**BECOME
A MEMBER**

isit-be.org/become-a-member



**SIGN
THE CHARTER**

isit-be.org/the-charter



**GET
THE LABEL**

isit-be.org/the-label

**Annual signing ceremony
13 Dec 2023, Brussels**





Institute for
Sustainable IT



*"IF NOT US, WHO ?
IF NOT NOW, WHEN ?"*
JOHN F. KENNEDY



<https://isit-be.org>



contact@isit-be.org



[linkedin.com/company/isit-be](https://www.linkedin.com/company/isit-be)