

# Eco-friendly websites *(doing better with less)*

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Agence Sésame

[www.agence-sesame.fr](http://www.agence-sesame.fr)

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- The concept of **responsible digital economy**
- What is **Eco-conception** ?
- The ADFINE website **case study**
- The **measuring tools and results** achieved
- Green **hosting**
- What **now** ?

The digital sector emits **4% of greenhouse gases**,  
more than civil aviation...

Nowadays for a company (or an institution) **digital sobriety is a strategic approach**, a way to **achieve efficient business activity**.

It becomes a **responsible, innovative company that is ahead of the competition**

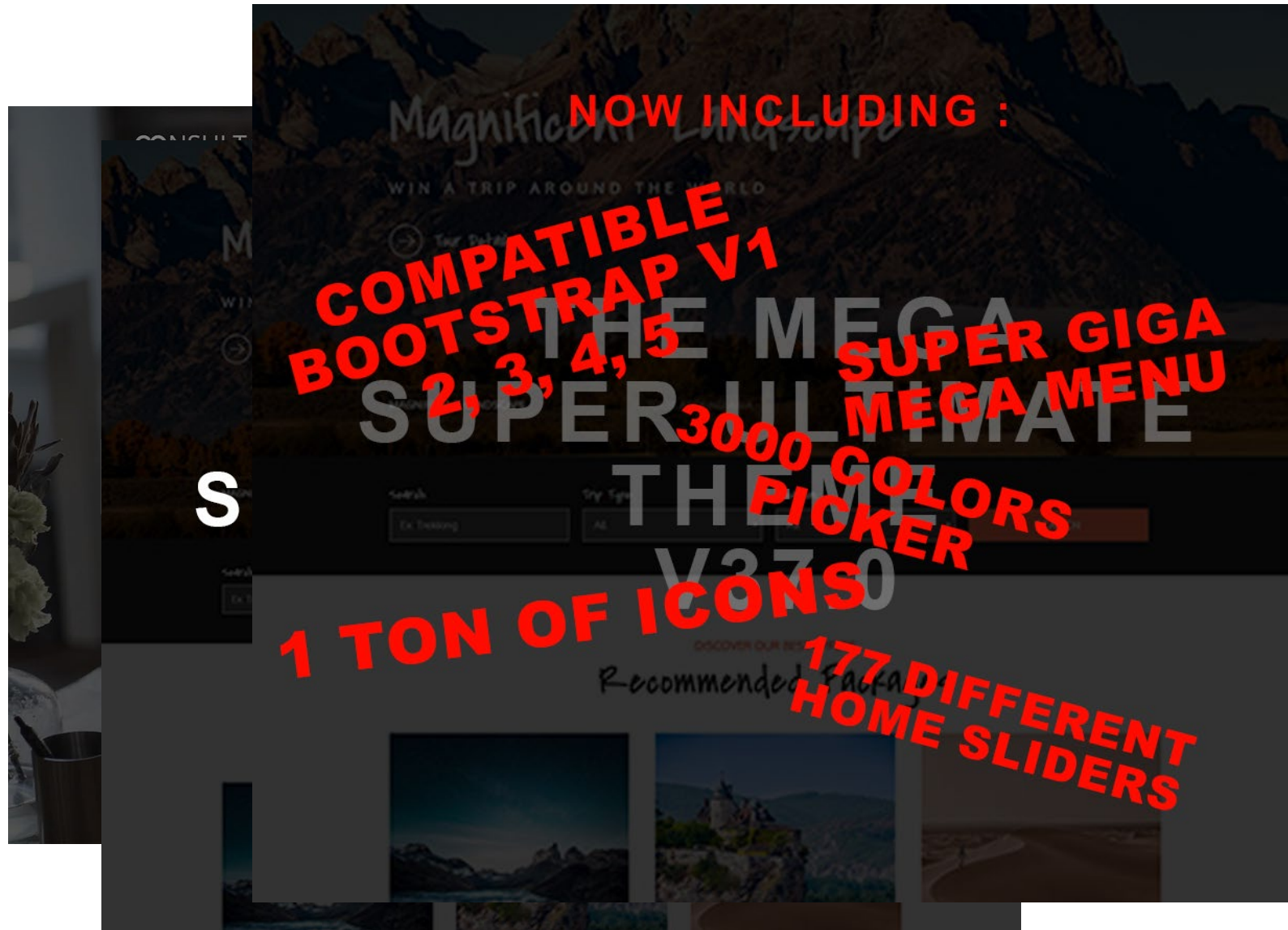
- ✓ *Eco-responsible digital approach is now, it's the future !*
  - ✓ *A particularly light CMS with DNN Software*
- ✓ *When technology influences design and ergonomic to create sobriety*

Before going into more technical explanations and in a few words -

- ✓ Optimized paths to **simplify the visitors' experience, limited number of files** on the pages, **compressed images** and **optimized code** reducing the weight of the pages, **requests to the server** therefore reduced.

Doing better with less.

- ✓ **Responsible hosting partner** that uses renewable energy, cools its data centers with natural outside air, extends the life of its servers and has a green approach certified by recognized standards.



**NOW INCLUDING :**

- COMPATIBLE BOOTSTRAP V1 2, 3, 4, 5**
- SUPER GIGA MEGA MENU**
- 3000 COLORS PICKER**
- 1 TON OF ICONS**
- 177 DIFFERENT HOME SLIDERS**

**THE MEGA SUPER ULTIMATE THEME V370**

The context of the project launch -

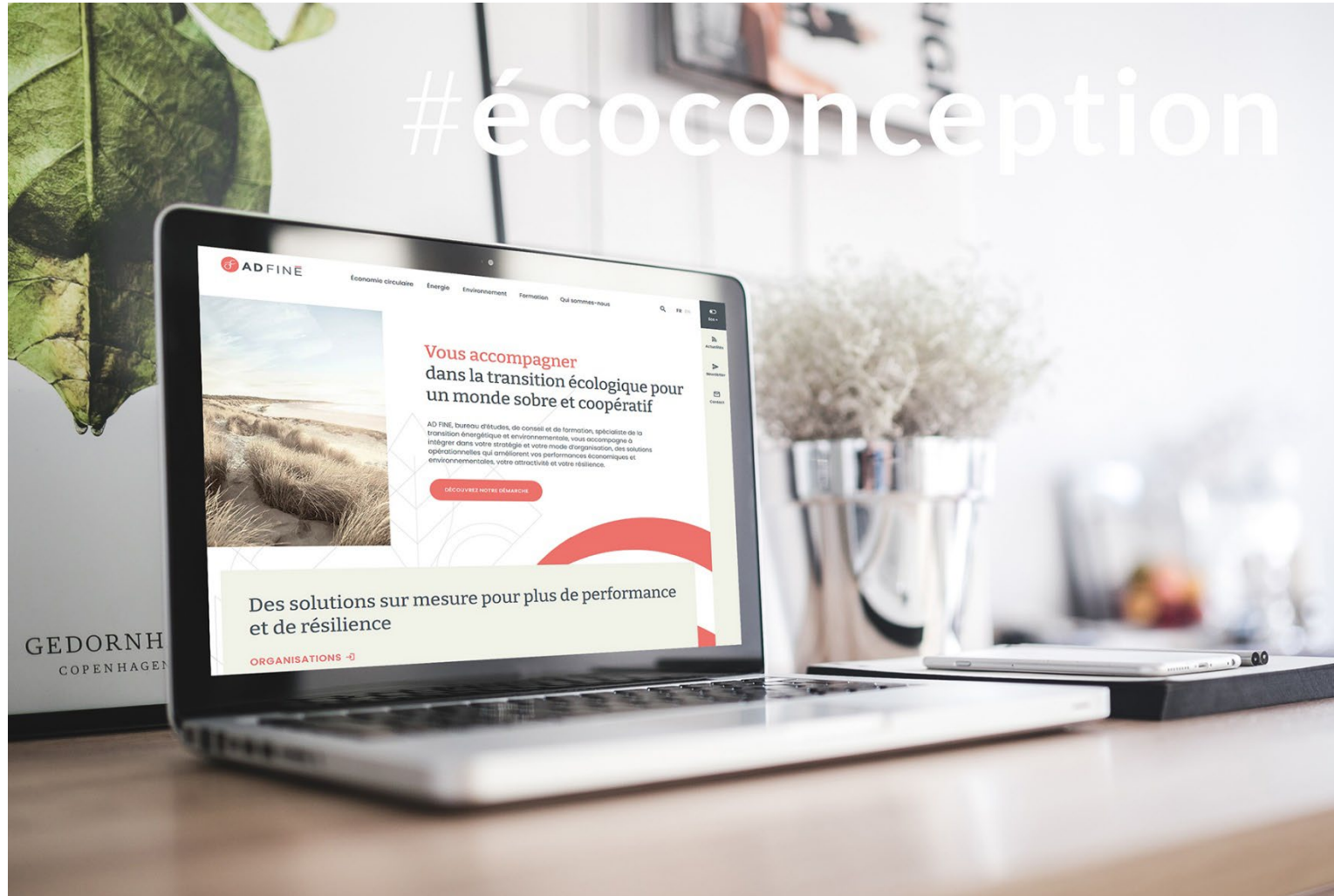
- ADFINE offers...

**To accompany you**  
in the ecological transition to a  
sober and cooperative world

AD FINE, a consulting and training company, specializing in energy and environmental transition, helps you integrate operational solutions into your strategy and organization to improve your economic and environmental performance, your attractiveness and your resilience.

- A matching sensitivity to the digital impact of our everyday actions
- A will to help each other and works through this challenging project together

## Guided tour of the website –





Our priorities in making DNN fits our needs –

- Remove JQuery and JQuery-UI (disable DNN popups)
- Load default.css only for administrators (using StyleHelper)



```
1 <%@ Register TagPrefix="fortyfingers" TagName="STYLEHELPER" Src="/DesktopModules/40Fingers/SkinObjects/StyleHelper/StyleHelper.ascx" %>
2 <fortyfingers:STYLEHELPER ID="STYLEHELPER1" RemoveCssFile="default.css" IfRole="None" runat="server">
```

- Reinject .min version of JQuery, if needed
- Use of flexible template driven modules

Use of our home-made "NB-Mod" : minimizes the number of queries to the database, thanks to the caching system

- Create bespoke skin

Careful with pre-designed themes, such as WordPress ones...

Measuring results –



PageSpeed Insights

## Analyze with PageSpeed Insights :

Get your PageSpeed score and use PageSpeed suggestions to make the website faster through this online tool.

 <https://pagespeed.web.dev/>



Performances

Les valeurs sont estimées et peuvent varier. Le calcul du score lié aux performances repose directement sur ces statistiques. [Affichez la calculatrice.](#)

▲ 0-49   ■ 50-89   ● 90-100



STATISTIQUES

Réduire la vue

■ First Contentful Paint

**1,2 s**

La statistique "First Contentful Paint" indique le moment où le premier texte ou la première image sont affichés. [En savoir plus](#)

■ Speed Index

**1,5 s**

La valeur "Speed Index" indique la rapidité avec laquelle le contenu d'une page est disponible. [En savoir plus](#)

■ Largest Contentful Paint

**1,2 s**

La statistique "Largest Contentful Paint" indique le moment où le texte le plus long ou l'image la plus grande sont affichés. [En savoir plus](#)

● Time to Interactive

**1,2 s**

La valeur "Time to Interactive" correspond au temps nécessaire pour que la page devienne entièrement interactive. [En savoir plus](#)

● Total Blocking Time

**40 ms**

Somme en millisecondes de toutes les périodes entre le First Contentful Paint et le Time to Interactive, lorsque la durée de la tâche a dépassé 50 ms. [En savoir plus](#)

● Cumulative Layout Shift

**0,001**

Cumulative Layout Shift mesure le mouvement des éléments visibles dans la fenêtre d'affichage. [En savoir plus](#)

Measuring results –



## GreenIT Analysis plugin (using EcoIndex)

➔ Install GreenIT - Analysis sur Firefox (F12)

<https://addons.mozilla.org/fr/firefox/addon/greenit-analysis/>

Calculates the EcoIndex of the website

EcoIndex <span style="color: green; font-weight: bold;">A</span>		
EcoIndex	Eau (cl)	GES (gCO2e)
79.42	2.12	1.41
Bonnes pratiques		
Nombre de requêtes	Taille de la page (Ko)	Taille du DOM
1	0	352
Ajouter des expires ou cache-control headers	✓	
Compresser les ressources (>= 95%)	✓	
Limiter le nombre de domaines (<6)	✓	1 domaine(s) trouvé(s) ....
Ne pas retailer les images dans le navigateur	✓	0 image(s) retaillée(s) dans le navigateur
Externaliser les css et les js	✗	9 inline stylesheet(s) et inline javascript(s)
Eviter les requêtes en erreur	✓	0 erreur(s) HTTP
Limiter le nombre de requêtes HTTP (<27)	✓	1 requête(s) HTTP ....
Ne télécharger pas des images inutilement	✓	0 image(s) téléchargée(s) mais non affichée(s) dans la page
Valider le javascript	–	– Analyse non supportée par ce navigateur –
Taille maximum des cookies par domaine(<512 Octets)	✓	Pas de cookies
Minifier les css et js	–	– Analyse non supportée par ce navigateur –
Pas de cookie pour les ressources statiques	✓	Aucun cookie
Eviter les redirections	✓	0 redirection(s)
Optimiser les images bitmap	✓	Pas d'images bitmap à optimiser
Optimiser les images svg	–	– Analyse non supportée par ce navigateur –
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)	✓	Pas plus de 7 fichiers css
Privilégier HTTP/2 à HTTP/1	✓	0/1 ressources utilisant HTTP/1
Utiliser des polices de caractères standards	✓	Pas de polices de caractères spécifiques

Measuring results –

## Yellow Lab Tools

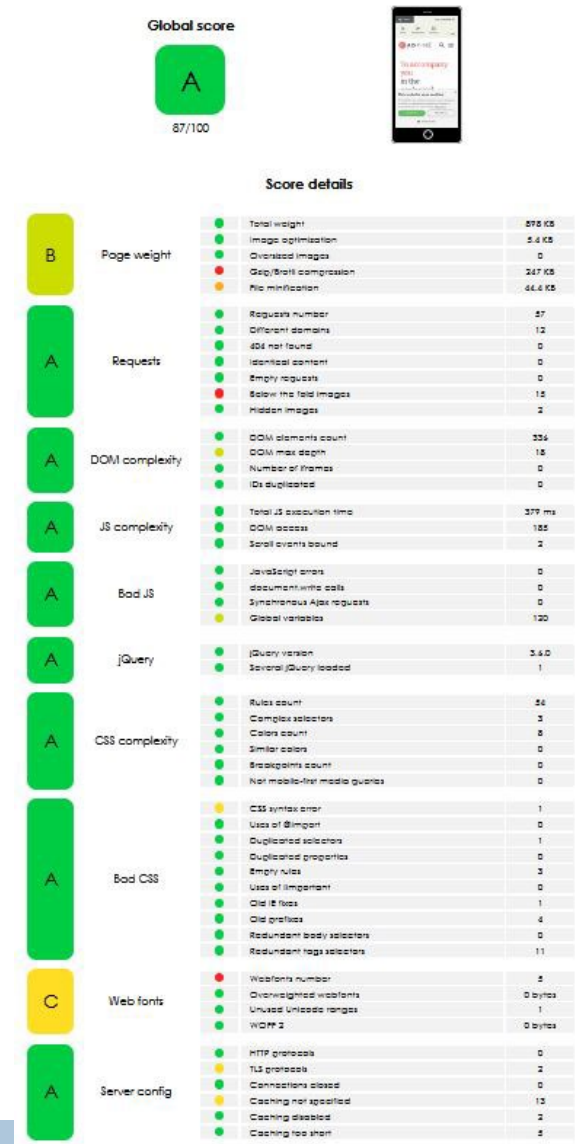
### Yellow Lab Tools



<https://yellowlab.tools/>

Tests page speed by analysing :

Page weight, Request, DOM complexity, JS complexity, Bad JS, jQuery, CSS complexity, Bad CSS, Web fonts (*careful : one font used with different formatting adds up !*), Server config



Measuring results –



## Website Carbon Calculator



<https://www.websitecarbon.com>

Calculates the carbon emissions of a website by analysing :

Data transfer over the wire / Energy intensity of web data / Energy source used by the data centre / Carbon intensity of electricity / Website traffic



## Before



Performances

EcolIndex **B**

Global score



## After




Performances


EcolIndex **A**

Global score





## Before

 Uh oh! This web page is **dirtier** than **95%** of web pages tested

 Oh my, **5.92g of CO2** is produced every time someone visits this web page.


## After


 Hurrah! This web page is **cleaner** than **75%** of web pages tested


 Only **0.40g of CO2** is produced every time someone visits this web page.




Over a year, with **±10,000** monthly page views, [adfine.fr](https://adfine.fr) produces


 **710.05kg of CO2 equivalent.**  
The same weight as 4.73 sumo wrestlers and as much CO2 as boiling water for 96,213 cups of tea


 **759 billion bubbles**  
Woah, that's a lot of bubbles!

 **33 trees**  
This web page emits the amount of carbon that 33 trees absorb in a year.

 **1,649kWh of energy**  
That's enough electricity to drive an electric car 10,556km.

Over a year, with **±10,000** monthly page views, [adfine.fr/fr-fr](https://adfine.fr/fr-fr) produces

 **47.98kg of CO2 equivalent.**  
The same weight as 0.32 sumo wrestlers and as much CO2 as boiling water for 6,501 cups of tea

 **51 billion bubbles**  
Woah, that's a lot of bubbles!

 **3 trees**  
This web page emits the amount of carbon that 3 trees absorb in a year.

 **111kWh of energy**  
That's enough electricity to drive an electric car 713km.

The choice of a French host offering an **eco-responsible approach** and **low environmental impact** is another aspect of our eco-responsible approach within our hosting policy : we have chosen **OVH Cloud**, which is **part of the European CISPE approach for climate neutral data centers**.



- <https://us.ovhcloud.com/about/company/green-tech>
- <https://en.wikipedia.org/wiki/CISPE>
- <https://www.climateneutraldatacentre.net/>





**Spread the word !**  
It's good for the planet.

# Questions?

# What to share good practice or discuss eco-conception ?



Get in touch ! 😊

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