



CLIM'ABILITY DESIGN: NEWSLETTER NO. 8

MAY 2022

All the latest news from
the Clim'Ability Design project!

Three times each year, we'll be publishing this trilingual newsletter on the European Clim'Ability Design project. We'll be telling you the latest news from the project, sharing technical information on the impact of climate change on the Upper Rhine region, and presenting operational solutions to help you adapt and future-proof your business.

Impact of severe heat and the search for solutions through creativity

Aurélie Roche and Amandine Amat, CCI Alsace Eurometropole

Our approach is based on several observations

For the manager of a company, it is important to **have local data to fully understand the impacts of climate change on the company**. But most of the time, climate information gives only national, if not global, insights. **90% of the companies** surveyed have already noticed that the efficiency and safety of their staff members **were affected by heat waves**. And quite often, « turnkey solutions » (e.g. : air conditioning) are favoured and **only aggravate climate change instead of adapting to it**.



Our pledge: long-lasting actions can only be defined together

We have created a **collaborative workshop format based on creativity** and enabling Upper Rhine businesses to **appreciate on a local basis the evolution of temperatures until 2100**. This information has **modified the perception of the impact of climate change** for 72% of participants, whereas they already had a very good level of knowledge.

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There are no perfect solutions to protect against the impact of severe heat. Creativity is thus a good way to think differently and find innovative solutions that have less impact on the climate. In the end, more than 600 ideas have been generated in 8 workshops. Following these workshops, **50% of participants wished to bring further their reflection**: personalised exchanges, diagnosis of the favoured climatic sensitivity of their activity, creativity sessions adapted to their internal issues...

Are you interested in the process? Do not hesitate to contact us!

A forest in search of meaning: an interview with Hannah Deville, facilitator of the Territorial Forest Charter of the Northern Vosges Regional Nature Park



Within the framework of the Forest Charter relaunched in 2018 together with Clim'Ability, the **Northern Vosges Regional Nature Park** organises the mediation between the many **actors who live from the forest and are interested in it**, in particular around climate change.

Over the last few years, climate change has received a lot of attention in the media; has the awareness of forestry and industry actors changed?

The forest covers the three aspects of sustainable development. It is a complex system that provides **social, ecological, and economic services**. A few decades ago, social issues were not so present. The forest was just a landscape, a place of mysteries which was also useful to man to produce wood.

We were less aware of the social and biological aspects than we are today. It was also a source of shelters, pastures and food, which is hardly the case today except for a little fruit picking and hunting. We may have felt then that it was a source of biodiversity... but this was unconscious. **It is only when we see forests wither away that we become aware of the loss of this biodiversity.**

What are the strategies embodied in the Forest Charter to better cope with climate change?

Today, the **Park relies on economic strategies to preserve the forest**. Contrary to appearances, this approach is not paradoxical. The wood sector is under pressure for several reasons. One of them is, for example, linked to China which wants to limit the harvest of its own forests and thus turns, among other sources, to France to get wood at attractive prices.

The **organization of a local high added value wood industry** is an answer to the potential outflow of wood logs. The aim is to create added value on a local level! Through its Charter, the Northern Vosges Regional Nature Park takes its part in this strategy by organizing **exchanges between researchers and managers of the forest and different audiences**.

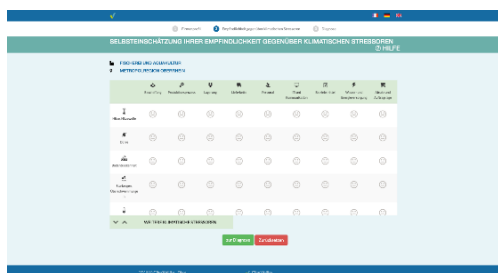
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The Clim'Ability toolbox: useful tools to prepare for climate change

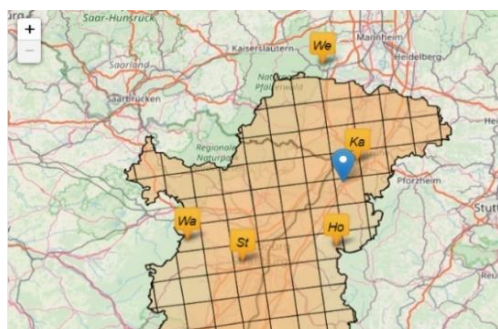
The cooperation actions which took place in the framework of Clim'Ability (2016–2019) and Clim'Ability Design (2019–2023) projects have enabled the creation of a number of tools that help us to prepare against the consequences of climate change in the Upper Rhine region. To learn more about these tools in detail, please visit our website <https://www.clim-ability.eu> where you will also find other interesting links.

While browsing our climate tools, do not hesitate to use the **Clim'Ability Compass** to help you find your bearings around. This game, with questions and answers, will enable you, in just a few minutes, to deepen your knowledge of climatic and economical aspects of climate change. In turn, this will allow you to determine your own vulnerabilities and analyse the measures you may need to implement.



Clim'Ability Diag

Thanks to the **Clim'Ability Diag self-diagnosis tool**, companies in the Upper Rhine region can determine their degree of vulnerability to various factors of climatic stress and analyse the climate-related risks and potentials. The resulting diagnosis is adapted to the development strategy of your company and helps you prioritize different climate adaptation measures.



Clim'Ability Inspector

We also propose the **Climate Inspector**. This is a set of interactive maps that picture and make the consequences of climate change in the Upper Rhine region easy to understand. Different parameters such as summer days, frost days, heavy rainfalls, winter and summer precipitations can be retrieved and displayed interactively at a municipal level. The maps are presented for three different periods, 2021–2050, 2041–2070 and 2071–2100. In addition, the user can choose between two future scenarios: « Climate protection scenario » and « Business as usual scenario ». In cooperation with the cross-border map information system « **GeoRhena** », an [online Atlas of climate change in the Upper Rhine](#) may also be consulted.

With the new device **MoBiMet (Mobile BioMeteorology)**, it is now possible to measure the thermal load in different workplaces. The MoBiMet was born from of a cooperation between the University of Freiburg and the Weather Services in Germany (Deutscher Wetterdienst) and France (Météo-France). The measurements data collected in real time allow forecast curves to be prepared that will help companies to adapt their employees' work conditions as best as they can.

Last, our Clim'Ability website also presents several **thematic sheets** to raise awareness and inform the general public about the consequences of climate change.

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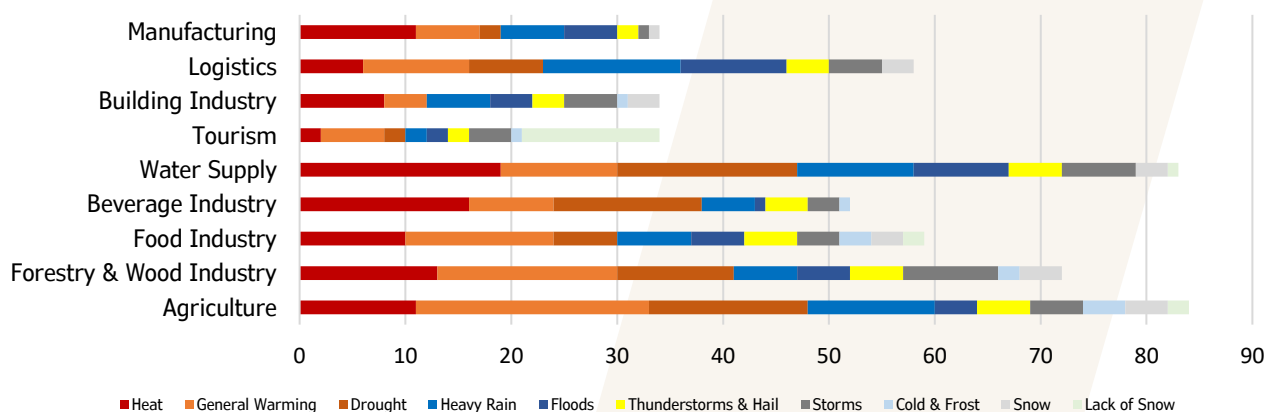
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Adapting to the climate in the business areas of the Upper Rhine region

Withing the Chair of Physical Geography at the University of Freiburg, a team has analysed **157 interviews** conducted in the framework of the Clim'Ability and Clim'Ability Design since 2016. These interviews were aimed at understanding the points of view of decision-makers from **9 business sectors** on climate risks and adaptation measures. The results of the analysis are now available and we would like to stress some **interesting trends**:

Adaptation measures per branch and climatic stressors



1. Regional companies already take many climate adaptation measures or talk about them. The number of measures identified in each sector goes **from 34** (manufacturing, building industry, tourism) **to 84** (agriculture). This shows clearly that the **climate change issue is very present, even if each business sector has its own specificities**.

2. Generally speaking, in sectors close to nature such as agriculture and forestry, food and beverages industries, water supply and treatment, the **number of adaptation measures is significantly higher than in other sectors less linked to nature**. Indeed, the business model of sectors close to nature is based on natural resources, and **extreme climatic events** such as heat waves, droughts or heavy rains have direct impacts on their activity.

3. Adaptation measures are mainly focused on climatic stress factors such as heat, drought and the general increase in temperatures, in particular in nature-related sectors. The business sectors less linked to nature use a more diversified panel of adaptation measures for extreme climatic events such as heavy rains, hurricanes, storms and hail. Looking for example at the building industry, we see that adaptation measures are balanced for most extreme weather events. This is mainly due to the fact that all these extreme climatic events have a negative influence on outdoor work.

The University is currently preparing a **scientific publication** on this topic (*Journal of Environmental Planning and Management*). In addition, the results of the study will be presented during a **workshop at the IHK Freiburg Chamber of Commerce**, scheduled for June 2022. The exact dates will be announced on the www.clim-ability.eu website.

To go further

Plants also get sunburn



Here is **one concrete climate adaptation measure in agriculture: constructions that protect plants from hail and excessive UV radiation** (to avoid « sunburn ») in a fruit farm in the Upper Rhine Region.

Since **agriculture is directly affected** by extreme weather events, it is already implementing numerous adaptation measures.

They range from **technical protective measures** to **innovative irrigation systems** or the adaptation of the sowing and harvesting schedules or the introduction of new varieties that **better resist heat and fungi**.

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They talk about Clim'Ability Design

News on the website & on social networks

THE JARDIN GLOCAL SEEN FROM ABOVE – STRATOSPHERIC BALLOON

500 years after the fall of the Dürer meteorite in the Upper Rhine region...

The complete articles are accessible at clim-ability.eu/actualites

Scientific publications & articles

- Bohnert, G. ; Martin, B., 2021, "**L'utilisation de pesticides fait-elle partie des stratégies d'adaptation au changement climatique ? Analyse exploratoire dans le Fossé rhénan (France-Allemagne)**", *Vertigo*, Vol. 21, N°3. Disponible sur : <https://doi.org/10.4000/vertigo.33711>
- Christen, A.; Matzarakis, A.; Sulzer, M., 2022, "**A Low-Cost Sensor Network for Real-Time Thermal Stress Monitoring and Communication in Occupational Contexts**", *Sensors*, Vol. 22, N°5. Available at: <https://www.mdpi.com/1424-8220/22/5/1828>

Landing game



Based on the principle of **local collective intelligence**, the Landing Game aims at facilitating the exchanges between different **actors commonly present in the Upper Rhine**. Their common goal is to clarify, elaborate and consolidate **adaptation paths to climate change**, in connection with the territories.

Find out more

Spring Sustainability Days at KIT

On the occasion of the **Sustainable Spring days of the KIT** in Karlsruhe, Clim'Ability Design led two workshops on March 30th and 31st dedicated to the "**Landing Game**". For three hours, students from different fields of study reflected and debated about the **consequences of climate change on the Upper Rhine!** Among the options that emerged was a **life-size experiment** at the scale of the KIT that integrated **urban and mobility developments, food plans** and a **new university governance!**



Coming up at Clim'Ability Design

"Spring of the Forest": 21 and 22 May 2022

Clim'Ability Design will animate an innovation workshop on the topic of the cohabitation of uses in the forest as part of the **Spring of the forest** on **May 21 and 22, 2022**. The event takes place along the regional train line from Mutzig to Salles, each station showcasing one aspect of the wood and forestry supply chain and ecosystem. Clim'Ability Design will be present in **Rothau** with the exhibition Post-Carbon Landscapes.

"What future in the European Enterprise Space?": 28 June 2022

On June 28th from 11 AM to 2 PM, Clim'Ability Design invites you to **(re)discover the European Enterprise Space** (Schiltigheim), symbol of modernity at its creation, evolving with our uses and needs, and now with climate challenges. The detailed program and registration link are coming soon on clim-ability.eu.

"Industry Night of Basel": 16 September 2022

KLYBEQ The **Industry Night of Basel** had to be cancelled, but was in fact only postponed: the event will take place on **September 16th, 2022**.
Eine Entwicklung von Swiss Life

Klybeq and its partners will of course be present, along with the Clim'Ability Design project. We will be delighted to present visitors the highlights of the research of the last two years and to give them information on future actions, in user-friendly and easy to grasp formats.

Let's keep in touch!



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Email us at climability.eu@gmail.com



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Dépasser les frontières, projet après projet / Grenzen überschreiten, Projekt für Projekt

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