

The **Collège des hautes études du développement durable – Bretagne (CHEDD-Bretagne)** is an association created in 2012 that sensitizes **responsible and elected officials** and prepares them to meet the challenges. In close partnership with the **EcoOrigin cluster**, which is close **to the companies and territories involved**, CHEDD Bretagne implemented in 2019 the **training and support program «Territories in transformation»** by clearly drawing inspiration from innovative approaches observed in Brittany.

This program is in line with the desire to help elected officials and socio-economic leaders in the territory to **take action** and to support them in the deployment of their strategy, while the challenges of all kinds, including climate issues, are strengthening.

NB/ Transformation implies a future to be built... while the transition does not say where it takes us.

This program includes:

- A first **“Vision”** component, which involves reconsidering the territory in the light of **renewable energy, local, natural, heritage and economic resources** in order to establish a coherent and proactive strategy that meets the challenges to be met;
- A **“Skills”** component: it is a question of developing collective and territorial competences, those of the ecosystems of actors that carry the projects declined from the strategy;
- and an **“Accompaniment”** component: the network of expertise of CHEDD Bretagne and EcoOrigin is put at the service of the territories according to their needs...

CHEDD is aimed at elected officials, community leaders, businesses in the territory, citizen associations, and all stakeholders. It puts into perspective the knowledge produced by researchers and experts in order to serve it to the actors of the territory in a form adapted to their time constraints and organization, on the one hand, and to their objectives of efficiency in the processes of transformation.

CHEDD makes use of awareness-raising tools such as the Climate Scan; it sensitizes stakeholders to internationally established action plans (such as the 2030 Agenda), strategic coherence standards such as ISO 37101 and ISO 37120.

It informs managers about new environmentally friendly technologies and their social impacts. It introduces them to the concepts and methodologies of a new economy integrating ecodesign, economy of functionality, circular economy, cooperative economy that merge into a symbiotic economy inspired by life, which wants, for example, that the waste disappears as it becomes a resource...

The intervention of CHEDD helps the actors of the territory to **imagine a desirable future** for their territory, to build the corresponding story to share it with the actors and stakeholders.

CHEDD gives them the opportunity to see inspiring experiments conducted in other territories with which fruitful links can be established.

The programme is not abstract; it consists of **action-training sessions** and processes inspired by a **project-based pedagogy**; it alternates between awareness-raising conferences and practical sessions inviting participants to take action.

CHEDD Bretagne organizes a cooperation between the processes of understanding the issues deployed by educational and research institutions, and the processes of **awareness and appropriation of the challenges** to be met by the different stakeholders of the territory.

Given the expertise of their network, CHEDD and EcoOrigin can draw to the attention of those responsible for industrial projects and activities relevant to the transformation of their territory, such as:

Renewable energies and hydrogen, Additive production (3D), biomaterials, low-carbon mobility

Le programme n'est pas abstrait ; il comporte des **séances de formation-action** et des processus inspirés d'une **pédagogie par projet** ; il alterne des conférences de sensibilisation et des séances pratiques invitant les participants à passer à l'action.

Le CHEDD Bretagne organise une coopération entre les processus de **compréhension des enjeux** que déploient les établissements d'enseignement et de recherche, et les processus de sensibilisation et **d'appropriation des défis à relever** par les différentes parties prenantes du territoire.

Compte tenu de l'expertise de leur réseau le CHEDD et EcoOrigin peuvent signaler à l'attention des responsables des projets industriels et d'activités pertinents au regard de la transformation de leur territoire, comme par exemple : *Énergies renouvelables et hydrogène, Production additive (3D), biomatériaux, mobilité...*

In the context of major climate, energy, environmental and health issues... Spatial planning involves new actors and applies to new scales. Focused on the **territory's endogenous resources** and supported by local actors, it corresponds to the emergence of **project territories**.

In tourism, for example, "destinations" are free of administrative boundaries because they are based on natural and cultural realities. Since 1970, the development of green tourism has required the study of tourism production systems to take into account not only the development and equipment specific to the activity such as high-level transport services (THNS), but also the parameters of living well together between tourists and permanent residents.

The issue of **clean energy and low-carbon mobility** is at the heart of the concerns of elected officials and businesses. Energy is upstream of any activity and energy choices condition the territory's ability to achieve carbon neutrality in the shortest time frame. The territories' **ecosystem-based approach** makes it possible to determine the most relevant energy mix in terms of intrinsic resources, the energy needs of present and future activities and the **skills available or to be developed**. Energy, of course, is the condition of all types of mobility which, in turn, are inherent in most activities.

The territories are therefore called by the pressure of the stakes to determine the **Energy/ Activities/ Mobility equation most relevant** with regard to their own resources, on the one hand, and the expectations of economic actors and their populations, on the other. They must also consider prosperity as an objective that will not necessarily involve calamitous environmental disorders, since the economy will be inspired by the logic of living by the paths opened by the circular and symbiotic economy.

It is in this logic and also by considering that the multiple transitions in which society finds itself driven - ecological, energy, digital, food transitions... - create a maëlstrom whose meaning is not perceived, that CHEDD Bretagne and EcoOrigin took the initiative to create "**Ar Nevez**" the **living lab of the "Territories in transformation"** ("*Ar Nevez*" in Breton means "*The Revival*" )

This living lab is under construction in partnership

- with innovative companies, such as **H2X Ecosystems** on hydrogen or SLS on additive production,
- with **higher education and research institutions** such as the UniLaSalle Polytechnic Institute or the Conservatoire National des Arts et Métiers (CNAM) pour l'Economie Symbiotique
- and with a group of experts in collective competences.

Together, through the living lab, they propose to support voluntary territories in their «transformation», an ambition that presupposes a shared vision and coherent processes.

The living lab Ar Nevez , which is linked with the **European Network of Living Lab EnOLL**, is of course very eager to maintain links and exchange with similar initiatives abroad, particularly on the issue of **low-carbon mobility**.