



SOCIAL&NATURE PROJECT

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IO.1 - GUIDE OF ACTORS

GLOBAL REPORT

Leading partner of IO.1: ITG Conseil

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TABLE OF CONTENTS

Introduction.....	3
1. Already known or future impacts of climate change on its own national territories	4
2. Actors mobilized at all levels	24
3. List of initiatives & best practices already started or in progress	39
4. Existing training materials, in each country, on the theme of the project.	52
Recommendations & guidelines.....	65
CONCLUSION ON NATIONAL CONTEXTS AND GLOBAL IO.1 REPORT.....	70
Bibliography.....	71

Introduction

This report is the result of Project's first intellectual output Social & Nature.

All the elements of this study report are the result of the most relevant research and documentation collected by all Social&Nature partners, based on the exchange and synthesis work carried out locally in all Partnership countries (France, Corsica, Greece, Belgium and Italy) during Focus Groups organized between November 2019 and the beginning of January 2020. These meetings involved some professionals involved in the Project as well as an external panel of members with strong knowledge and/or sensitivity impacting the project's theme.

Climate change is now a **priority issue** involving science, society and politics. The scientific evidence of the extent of global warming has been increasingly consolidated in recent years, as well as the awareness that climate-changing gas emissions deriving from the use of fossil fuels and the unsustainable use of land and natural resources. At the same time, the awareness has grown that it is necessary to **implement both global policies** to drastically reduce emissions and mitigate the increase in temperatures (mitigation), **and adaptation strategies to limit the impacts of climate change that will occur in any case.**

Milestones at the international level were the European Climate Change Adaptation Strategy of 2013 and the Paris Agreement of 2015 (in force since November 2016).

In this report:

1. In the first part, we tried to synthesize the **impacts already considered significant in the Partnership's countries of the effects of global warming.**
2. The second part brings **some selected examples of mobilized actors**
3. In a third part, we presented the **main actions taken at national level, at the public and then private level**, not to mention the actions of all categories of actors (NGOs, associations, professionals or not...) focusing on the more actions judged, at this stage and in all modesty for lack of sufficient hindsight to date), the most emblematic, the most impactful and the most interesting for the Project. All these initiatives are at the heart of the European Project, and are still to be promoted, developed and amplified
4. Then, in a fourth part, **some selected existing training materials, in each country, on the theme of the project.** With these contents, some training courses already available on the subject have been selected.
5. The fourth part brings **some progress recommendations and best practices for the next steps of the Project (IOs).**

We thank all the contributors to this report as well as the members of the Focus Groups who have reflected, exchanged and brought their ideas on this document.

1. Already known or future impacts of climate change on its own national territories (national, regional and local) **in economic, environmental and social / human terms.**

FRANCE (ITG):

In order to describe the state of the climate and its impacts on the whole of France, the ONERC (National Observatory on the Effects of Global Warming) has adopted indicators. An indicator is information, associated with a phenomenon, that can be objectively indicated over time and can account for the reasons for this evolution. In France, two indicators are concerned with the atmosphere: **temperatures and precipitation**(<https://www.ecologique-solidaire.gouv.fr/impacts-du-changement-climatique-atmosphere-temperatures-et-precipitations>).

Temperatures have been warming at a variable rate, with a particularly marked increase since the 1980s. Over the period 1959-2009, the observed trend is about -0.30C per decade. The average annual temperature of 13.7 degrees Celsius exceeded normal (1961-1990) by 1.8 degrees Celsius, placing 2019 as the third warmest year since the beginning of the 20th century, behind 2018 (up 2.1 degrees Celsius) and 2014 (up 1.9 degrees Celsius). The number of hot days (maximum temperature above 25oC) is increasing throughout the metropolis with regional nuances. This increase, estimated over the period 1961-2018, is often between four and six days per decade with a minimum of one day per decade on the North Atlantic coast and a maximum of eight days per decade on the southern regions. In France, the number of summer days (with temperatures in excess of 25oC) increased significantly over the period 1950-2010 (source: Intergovernmental Panel on Climate Change (IPCC).).

Precipitation has become heavier, and more erratic. Extreme daily rains around the Mediterranean are becoming more intense. They are also characterized by great variability from year to year. There is significant interannual variability in the number of occurrences of heavy rainfall at any threshold. The most extreme rain events (daily accumulation of more than 200 mm) are becoming more frequent around the Mediterranean area (Source / IPCC).

The **sectors of activity the most affected** in France are:

- **The human factor, health and well-being (housing) in France**
- **The economy as a whole:**
 - **Agriculture**
 - **Industry**
 - **Services/ transport/travel and**
- **Environment: landscape, seaside, lakes and forests, animals and biodiversity**
- **Links with the whole world / tourism.**

CORSICA (IFRTS):

Climate change impacts in France by 2100

In metropolitan France in the near future (2021-2050) :

- an increasing of average temperatures between 0,6 and 1,3°C (highest in the South-East in summer),
- an increasing of the number of days of heat waves in summer, particularly in the South East regions,
- a decrease in the number of abnormally cold days in winter throughout metropolitan France, particularly in the North-East regions.

By the end of the century (2071-2100), the observed trends at the beginning of the century will be strengthened , with in particular :

- a sharp rise in average temperatures for some scenarios: from 0.9°C to 1.3°C for the lowest emissions scenario (RCP 2.6), but up to 2.6°C to 5.3°C in summer for the scenario of continued growth in emissions (RCP 8.5) ,
- a number of heat waves that could exceed the 20 days in the South East of the metropolitan territory for the scenario RCP 8.5,
- further reduction of cold extremes,
- more droughts in a large part of the southern part of the country, which could spread to the whole country,
- an increase in extreme rainfall over a large part of the territory, but with high variability in the areas concerned.

Overseas, temperatures could rise sharply (up to 3.5°C), while rainfall will decrease, especially during the dry season. By the end of the century, it is likely that the frequency of tropical cyclones will decrease or remain the same. Average precipitation and average maximum wind speed associated with tropical cyclones could increase.

About the energy transition

The energy transition implies a rational and efficient use of all resources, including the use of natural regulations (climate, ecosystems) and resilience to climatic hazards. The energy transition affects several areas and involves different means of action.

The fields concerned

- thermal renovation of buildings;
- the adaptation of transport and land-use planning;
- the production, storage and use of energy;
- the preservation and restoration of ecosystems;
- the circular economy;
- the least dependence on scarce resources.

Embarking on the ecological transition means adopting a new economic and social model, a model that renews our ways of consuming, producing, working and living together.

We deliver the results of the latest climate simulations of the French community

The latest simulations carried out by the French climate community within the framework of CMIP-5 confirm the results published in 2007 by the IPCC (Intergovernmental Panel on Climate Change). The human activities are the main causes of the increasing of the global average temperature of 0,6°C observed from the second half of the 20th century.

Evolutions on the planet

Evolution of the temperatures on the planet

For the most moderate greenhouse gas concentration scenario (RCP 2.6), the French simulations indicate that global warming would stabilize as early as 2100 at a value close to 2°C compared to the pre-industrial period. The most severe scenario of greenhouse gas concentration change (RCP 8.5, comparable to the former A2 scenario) corresponds to an increase of 3.5 to 5°C over the whole planet between 1990 and 2090, which is consistent with the results of the 2007 IPCC report for the A2 scenario. By 2300, the climate would warm up by an additional 6 to 7°C.

Evolution of the rainfalls

The French simulations show that rainfalls will be impacted. They will intensify in high latitudes and most equatorial regions, while they are expected to decrease in subtropical latitudes. However, the results obtained by region differ according to the models, particularly for the evolution of the African or Indian monsoon..

Evolution of the sea ice

According to some models, the arctic sea ice could disappear in summer from 2030. Although, even it happens, it could reform at the end of the century according the most moderate scenario. In Antarctic, the ice cover declines until the end of the 21st century, and moreover that the scenario lead to highest emissions.

Some websites in France :

<http://www.drias-climat.fr/> - the futures of climate, information portal

<http://www.ademe.fr>

<http://www.umr-cnrm.fr/> - National Centre for Meteorological Research - UMR 3589

We also provide some national data by sector in terms of impact:

- **Construction** : Construction is the biggest energy consumer among all the economic sectors . It's 42,5 % of the final energy consumption of France, nearly 28% of greenhouse gaz emissions That's why the sector is concerned by the climate change impacts.
- **Transport** : Total French emissions amounted to 380 million tonnes of CO₂ in 2007, of which 132 million tonnes were from transport. Transport is a sector that is a major emitter of CO₂

and GHGs. The trucks GHGs emissions represent **27%** of the transport sector emissions (i.e. around 8% of national emissions). While France is broadly meeting its Kyoto Protocol commitments by reducing emissions of the six main greenhouse gases from 1990 to 2005, the increase in emissions in the transport sector was 25%. This sector must therefore make a significant contribution to the overall reduction effort.

- **Waste** : Activity in this sector will be strongly impacted by the Grenelle Environment Round Table, but with two contradictory trends: the search for better flow control (saving water and raw materials, reducing liquid, solid and gaseous waste), which, if successful, will lead to a gradual reduction in the main activity (wastewater treatment, waste collection and disposal by storage or incineration, etc.), and the search for a more efficient use of water and raw materials, which, if successful, will lead to a gradual reduction in the main activity (treatment of wastewater, collection and disposal of waste by storage or incineration, etc.), which will lead to a reduction in the use of water and raw materials).
- **Tourism** : this significant sector takes a 3 to 4°C warming scenario as a scenario (Insee). Climate change must be approached according to a twofold problem: on the one hand, the question of "adapting" human activities to probable or possible changes, and on the other hand, the question of "mitigating" emissions of greenhouse gases (including CO₂), which are the main cause of this climate change. These two aspects of the climate problem are linked. Namely that education would decrease and ski resorts below 1,800 metres would be at risk. Water shortages would become difficult to manage under the pressure of tourism, depending on location and season. Coastal erosion, although limited today, would threaten the seaside tourism model.
- **Agriculture** : it will account for 20.5% of greenhouse gas emissions in France in 2012, including emissions related to agricultural activities other than energy use (18.2%) and emissions related to energy consumption (2.3%).
In example, the National Observatory on the Effects of Global Warming (ONERC) has set up impact indicators that are markers allowing to measure some impacts of the climate evolution in France :
 - the date of grape harvest takes place two weeks earlier than 20 years ago in Champagne
 - In Alsace grapevines , the dates of the bud-break and flowering dates have moved forward of 15 days, the one of veraison time of about 23 days since the early 1980s
 - in Mirecourt (Vosges), the wheat seedings are now one month earlier than in 1970
 - the flowering date for apples has been advanced by an average of 7-8 days since the late 1980s, and by 10-11 days for pears.

At a regional and national level

The construction of the Regional A21 is based on the experimentation of micro-regional A21s, the principle being to test the implementation of local approaches with voluntary territories, and on the basis of these experiments to propose a method and tools, based on expectations and concrete needs identified, which will enable the construction of the Regional A21. It is a bottom-up local development approach, from local to regional, and top-down, from regional to local, which ensures regional coherence by providing a framework for the approach.

In the agenda 21 framework at a micro-regional level, the **local authorities** can implement the **territorialized action plans** integrating the principles of **this agenda** (as defined during the Rio de Janeiro Earth Summit in 1992). This perspective is in line with the search for sustainable solutions to limit and reduce the effects of climate change on economic, social and human life.

Thus, the Environment Office of Corsica (OEC), regional actor within the framework of reflections and actions to deal with the impacts of climate change, assists volunteer local authorities in the initiation of their Agenda 21, in order to elaborate:

- a **territory diagnosis**, targeted on 6 axes of the Climate Plan and OEC attributions (energy, travel/transport, housing, waste, biodiversity, heritage) and a seventh axis at choice for the local authority. Indeed, climate change impacts have repercussions on this identified axis as priority.
 - a **strategy and actions programme**, fundable and achievable in 2/3 years, around this 6 axes proposed by the OEC and a **programme of actions**, which can be financed and carried out over 2/3 years, around the 6 axes proposed by the OEC and the additional axis chosen by the local authority.
- Each local Agenda 21 has a collaborative space facilitating exchanges between the different actors present on the territory.

Thus, the action programmes were able to develop tools for each of the axes to respond to the issue of sustainable development and climate impacts.

On the subject of **energy** and **sustainable housing**, we will mention ecological meetings, info-spaces on future housing, awareness in schools or training courses associated with consular chambers. Different actors are involved in the theme (OPAH, Organisation Programmée d'Amélioration de l'Habitat), the "Aghjasole" association, which brings together the know-how of island professionals from the MDE and ENR (Architects, design office, craftsmen, installers, megawatt and renewable energy producers), the Chamber of Trades and Crafts.

On the subject of **waste**, awareness campaigns for the individuals and professionals of the sector as the hotel-café-restaurant sector. Flyers, or even a video (corsicativ.net) have been produced to raise awareness of the publics including in schools. Associations have joined the information and awareness raising process. For example, "A Risnascita", which sets up environmental education programmes, participates in local sustainable development, organises work camps for young volunteers and produces educational tools.

In the commune of Bonifacio, a flyer on the sorting of glass have been edited (http://www.oddc.fr/catalog_repository/uploads/46/Brochure_TriVerre.pdf)

The climate change having an impact on **biodiversity**, local actions driven by the OEC, regional partners and by associations , have made possible, for example, to promote local agriculture or to take a new look at the development of agriculture based on the traditions of the past.

Driven by the agroecology association of Balagne « Una Lenza da Annacquà », three markets of local producers take place every weeks in Lumio, Belgodere and Santa Reparata . Thus many producers in the Balagne region who practice organic farming and are committed to quality labels (AOC, Casgiu Casanu, etc.) can offer their products for direct sale.

In the same way in the framework of education for sustainable development, an animation was organized by the CPIE Corte Centre Corse during the fishing festival. This awareness-raising operation for schoolchildren in Balagne is part of the prevention system against invasive fish species set up by the Local Biodiversity Observatory, as the Codole lake is particularly exposed to the introduction of exogenous species.

Also worth mentioning is the action taken to reclaim traditional orchards. An initial study was carried out in the municipality of Aregno in order to recall the history of the orchards of Aregno (almond, olive and orange trees), to draw up a general inventory of the current orchards and to define the stakes (economic, cultural, human, etc.) of the reappropriation of these crops by the population.

In the same logic, the heritage has not been left without a rest. Outreach was conducted in schools, combining classroom activities and field work led by the CPIE of the Corsica centre.

Micro-regional initiatives have thus made it possible to promote solid, operational approaches that invite many actors to join and that reach individuals, young people and professionals.>.

Days of exchanges, studies, guides, articles, etc., have opened a breach to raise awareness both of the impacts produced by climate change on different themes and of possible actions that make sense and are effective.

All this work and these actions benefits in the regional politics implemented and do not remain at levels of principle but are well on the way to being operational, even if it is necessary not to lower one's guard, as the problem remains fragile.

In other hand, the signing of a framework agreement between the CNFPT (National Centre for Territorial Professional Training) and the Ministry of Ecology with the aim of developing a training offer adapted to territorial agents working in the technical and sustainable development fields, based on territorial job references.

- A national development project presented in September 2010, where the CNFPT sets for itself ambitious objectives in sustainability.
- Numerous regional initiatives have been taken in this area, particularly in the fields of regulation; noise abatement; wastewater treatment; waste collection, treatment and management; treatment of green spaces, etc.

We will come back to the training part, but we would like to point out the agreement between the CNFPT and the OEC and the overall outcome in relation to climate change, sustainable development and green growth.

- An agreement of objectives and means 2012/2015 has been signed between the Corsican Delegation of the CNFPT and the Corsican Environment Office, the aim of the collaboration being the implementation of a service offer in line with the CTC and CNFPT's sustainable development guidelines.
- An action plan of the PRD has been implemented (2011-2015), including several strategic axes:
 - Reduction in travel by staff and trainees, notably by relying on territorialisation (more frequent use of public transport and car-pooling): improvement of the carbon balance
 - Integration and dissemination of the notion of sustainability in the content of the training services of the entire training offer: a better qualification on the theme of sustainability; eco-responsibility.
 - Awareness and support of the communities in the implementation of the sustainability projects, territorial public operators tend to become sustainability ambassadors: Corsica intends to position itself as a model of sustainability in the Mediterranean.
 - The CNFPT's stated ambition to position itself as a model of eco-responsible establishment: reduction of the ecological footprint of buildings and activities, reduction of management costs, etc...

The signed agreement and the implemented action plan are in line of a regional strategy for sustainability for Corsica, constituting a pilot project of an experimental and evolutionary nature. « **L' Agenda Corse 21/ Corsica Vint'Unu** » has been approved by the Corsican Assembly in July 2011 ; it is developed around 2 complementary components : A regional Agenda 21 (development of the Regional Strategy of sustainability for Corsica, jointly with the PADDUC (Development and Sustainable Development Plan for Corsica) and an experimental system for the period 2011/2013 (dissemination of good practice , micro-regional A21, implementation of an « eco-responsible administration », agreement of the green growth trades , tools experimentation as green taxes , multi-activity, funds for sustainability , eco-social conditionality of the grants...). See the previous development and the point 2 “good practices”

- The collaboration between CNFPT and OEC will enable to promote the new green trades, in the key sectors in the field of sustainability: energy, travel/transport, sustainable housing, waste, biodiversity. It also aims, in view of a wider cooperation with national and regional observatories to pool the good practices and to better define the operator's profiles as well as the employers expectations in term of recruitment.

- OEC will be associated by the CNFPT to the definition of modules likely to be provided as part of integration and professionalization training courses.

The set of this actions and impulses, the coordination of actors obviously follows the climatological problem with the aim of countering the harmful impacts.

GREECE (IASIS & MCE):

AGRICULTURE

Agriculture is a strong economic area in Greece, which unfortunately will be affected in the future by the climate change. In more detail, the climate of Greece will become drier due to the decrease in rainfall by 20-30% in the summer and by 10% in the winter. This does not mean that there will be no more agricultural production in the country, it just means that the quantities produced and the sort of crops that the ground can support will be affected. According to most scenarios, the most negative impact should be observed in Southern and Eastern Greece as well as in the islands. The areas of Thessaly and Central Macedonia (the main agricultural areas of Greece) will suffer a decline in agricultural production (Kartalis, Kokkosis, Economou, Santamouris, Agathagelidis & Polydoros, 2017)..

TOURISM

Another heavy industry in the Greek economy is tourism. The news for tourism are not all negative. First, the decrease in the number of days that will need energy for heating, will reduce the costs for tourist facilities in winter destinations. So, the impact of climate change on tourism mainly concerns:

- the increasing of the temperature and increasing of the incidence of combustion.
- the increasing of the energy requirements for cooling.
- the decline in water resources and consequently problems with water availability, especially in Greek islands.
- raising sea levels that will affect tourism infrastructure in coastal zones.
- the increasing of the number and intensity of the forest fires.
- the increase of more extreme weather events.
- the changes in the landscape (coastal erosion, habitat degradation).

(Kartalis et.al., 2017)

BIODIVERSITY

Greece has a high biodiversity of plant and animal species and is one of the most important biodiversity centres in Europe. The climate change and the increasing of temperature that it causes, affect the cycle of seasons, an effect that is expected to continue even if greenhouse gas emissions are reduced due to their long-life span. The increase in temperature has a serious impact on ecosystems as:

- The natural processes, such as species reproduction and migration, are modified.
- The duration of the growing season is modified.
- Changes in migratory bird communities occur.
- Most species of amphibians and reptiles are in danger of not having suitable habitats by 2050.
- Over 50% of the flora species are estimated to become more vulnerable by 2080.

Also, the marine aquaculture will be impacted by climate change. The climate change is estimated to affect aquaculture in Greece and to change the temperature, precipitation, concentration of dioxide carbon in the marine environment and at the sea level. (Papoutsoglou, 1990).

FOREST ECOSYSTEMS

Forest ecosystems occupy about 65% of the land area of Greece (forests 25%, meadows 40%). The forest ecosystems will be primarily damaged by depletion precipitations and high temperatures will prevail during the dry season, while they are already at increased risk of catastrophic fires (Giannakopoulos, Le Sager, Bindi, Moriondo, Kostopoulou, Goodes, 2009). According to a WWF Hellas survey conducted on behalf of the National Observatory of Athens (WWF Greece, 2009), forest ecosystems will become more vulnerable, especially during the period 2021-2050.

CULTURAL HERITAGE

Climate change, the expected changes in the intensity and frequency of natural phenomena are expected to affect the elements of their environment part of the cultural heritage as well as historical monuments that are directly exposed to the environment. Floods, fires, strong winds and the long-term impact of adverse climates conditions can destroy, even completely, spaces and objects of cultural heritage. To date, there has not been an adequate strategy for the protection of cultural heritage on a national level from the natural hazards and the impacts of climate change (Kartalis et.al., 2017).

COSTAL ZONES AND ISLANDS AND CITIES

Greece has a coastline of more than 16,000 kilometers, the largest of any other Mediterranean or European country. The sea level changes affect the shoreline morphology, contributes to their erosion, leads to flooding and increases groundwater salinization. With rising sea levels, coastal settlements and aquaculture are under threat, and tourism infrastructures along the coast are under considerable pressure.

HUMAN HEALTH CARE AND CIVIC PROTECTION

Several researchers have proven the impact of climate change on health vulnerability in Greece (see the Bank of Greece 2011 report). This vulnerability is mainly due to the increase number of recorded natural disasters and the related number of deaths and economic impact. Future climate model simulations point to a sharp increase in the frequency of heatwaves, forest fires, heavy rainfall and floods by 2100. Together with the impact of the socio-economic crisis started in 2008, these trends

imply that the number of impacted households will increase in the next decades, especially in large cities like Athens.

In addition, poor housing conditions may contribute to health problem. The percentage of homeowners in Greece is very high (more than 70%) but the economic crisis, the age of the housing stock (55% of the buildings in Greece were built before 1980, before the first Regulation for Buildings Insulation) and the lack of global Social housing policy lead to insufficient investment in the improvement or renewal of housing condition. Lack of good insulation, outdated technology windows/doors (frames/single glazing), lack of sun protection on southern and western sides, and inadequate maintenance of heating / air conditioning systems, result in poor performance.

The Greek Regulation on the Energy Performance of Buildings (endorsed in 2010 and recently revised) ensures minimum comfort conditions for all new and renovated buildings. However, and are vulnerable to future climate conditions.

Table: Current and expected future impact of climate change to the Greek Islands (Kartalis et.al.,

MAIN IMPACT OF CLIMATE CHANGE	CURRENT SITUATION	EXPECTED FUTURE IMPACT
Temperature increase	Temperature increase, especially at the Aegean and Eastern Ionian Sea.	Temperature increase by 1-2° C
Changes in rainfall	Decrease of rainfall.	Rainfall decrease by 14-22%.
Extreme Weather Phenomena	Increase of extremely high temperatures during the summer.	Increase of heatwave periods (temperature above 35° C) in certain islands by 10 days during 2020-2050.
Rising of the Sea Levels	Rise of the Mediterranean Sea levels by 2,6mm.	Rise of the sea level 0.25-1m by 2100. The islands mostly in danger are Lemnos, Samos, Rhodes and Corfu.

2017).

Table: Effects of climate change on the Greek cities (Kartalis et.al., 2017)

CLIMATE CHANGE DANGERS	PRIMARY IMPACT	SECONDARY IMPACT
Raise of temperature	<ul style="list-style-type: none"> • Groundwater depletion • Water shortage • Drought • Boosting fuel 	<ul style="list-style-type: none"> • Increased energy demand for cooling • Increase in energy prices • Impact on the health of the population
Extreme Weather Phenomena	<ul style="list-style-type: none"> • Floods • Fires • Landslides 	<ul style="list-style-type: none"> • Material damages
Rising the Sea Levels	<ul style="list-style-type: none"> • Coastal floods 	<ul style="list-style-type: none"> • Material damages

Athens is the biggest city of Greece, and the one that will be most affected by climate change, due to its suffocating structures.

ITALY (ENAIIP):

Climate change in Italy

From the beginning of the last century to today, the average temperature of the Earth has increased by 0.7 °C having severe effects on our health. When the temperature rises above 38 °C the thermal regulation capacity of our body decreases. Elderly people find it hard to endure the great heat. When the temperature rises, even by a single degree, pathogens multiply more quickly and lead to an increase in the spread of malaria, yellow fever, intestinal diarrhoea, typhoid, cholera and other pathologies. Higher temperatures, especially in winter, few drops of rain and droughts make the presence of pollen and other allergens more persistent. Allergy sufferers, asthmatics and people with cardiorespiratory problems are in difficulty.

The global changes effects have also been studied in Italy, thanks to the information collected by the National Agrometeorological Database, Hydrographic Services and the Air Force. The data show that:

TEMPERATURES Between 1865 and 1996,

- the maximum increased by 0.6 °C in the north and by 0.8 °C in the south
- the minimum has increased by 0.4 °C in the north and by 0.7 °C in the south
- maximum and minimum temperatures have increased especially in winter

RAINS

Rains have been declining in the central-south by 1930. Between 1951 and 1996:

- it rains less, especially in winter
- rainy days decreased by 14%
- they are shorter but more intense, with a greater risk of floods and landslides

- drought increases in the north in winter, in the south in summer

SEA LEVEL

Sea level has been increasing, since 1900, by about 0.2 mm per year and recently by 0.7 mm per year

AREAS AT DESERTIFICATION RISK

47% Sicily

31.2% Sardinia

60% Puglia

54% Basilicata

Source: Vincenzo Ferrara, "Climate evolution and impacts of climate change in Italy" (summary of ENEA's contribution to Italy's Third National Communication to the UN-FCCC), ENEA, Special Global Climate Project.

GREENHOUSE EFFECT AND GLOBAL HEATING

The NATURAL greenhouse effect allows the Earth, thanks to the atmosphere, to have a temperature compatible with life. If not, the average temperature would be around 19 °C below zero! The greenhouse effect of NON-NATURAL origin depends on the increase in the concentration of gas and compounds from human activities in the atmosphere.

The concentration of CO₂ and other greenhouse gases has increased significantly since the beginning of the Industrial Revolution. The current concentration of CO₂ in the atmosphere is the highest of the last 420 thousand years. Fluorinated and chlorinated hydrocarbons (CFCs) did not exist until the 1950s and have since spread and contributed to the growth of the greenhouse effect, causing the ozone hole.

All industrialized countries banned CFCs in 1987 with the Montreal Protocol. It is necessary to REDUCE EMISSIONS in the greenhouse gas atmosphere to control the increase in temperature.

Think about that Italian households produce around 27% of the greenhouse gas emissions produced in Italy: 18% for domestic use, 9% for transport.

ECOLOGICAL FOOTPRINT AND BIOCAPACITY

The ecological footprint measures the total area of land and sea required to produce the resources and energy that we need and to assimilate our waste. Biocapacity, on the other hand, is the actual ability of the planet to provide the resources necessary to support our lifestyle.

BIOCAPACITY OF ITALY

on average each Italian has 1.1 hectares (11,000 m²) available

ECOLOGICAL FOOTPRINT OF ITALY

on average each Italian consumes 5 hectares (50,000 m²)

We would need 4.4 "Italies"



(Source: Living Planet Report 2010, WWF)



The wounded nature rebels. We are witness, even in Friuli Venezia Giulia, of exceptional meteorological phenomena: whirlwinds, violent storms, storms and floods are natural events, but they are aggravated by incorrect and non-far-sighted management of the environment. Man intervenes with deforestation, cementing, changing the rivers flow, thus changing the balance of the territory. And to think that an Italian law of 1992 establishes that a tree is planted for every child born.

➤ *Climate change in Friuli Venezia Giulia*

The analysis of climatic data collected by the regional network and processed by ARPA FVG-OSMER shows, as a more evident trend, the increase in the average temperature in FVG. Compared to an average annual temperature of 12.6 °C, which was the norm in the thirty years of reference (1961-1990), significantly higher values have been reached in recent years, with the peak of 14.6 °C in 2014.

During the period 1961-2016, the average increase in temperature was 0.3 °C every 10 years, with a tendency to accelerate in more recent decades.

Over almost the whole region, in the spring and summer from 1961 to 2015, the rainfall trend was negative, with a consequent decrease in rainy days.

The extreme events, caused by the heating of the summer quarter, also increased, i.e. the number of days wherein the maximum temperature exceeds the 30 °C threshold and the number of nights exceeds the 20 °C.

The number of very hot days has gone from around 30 in the 1990s to almost 50 in the last five years. Similarly, the number of very hot nights (tropical nights), those in which the minimum temperature exceeds 20 °C, has also increased, from about 5 nights in the 1990s to almost 15 in the last few years.

The signal of warmer winters is readable in the trend of the number of frost days, in which the minimum temperature drops below zero.

It is also interesting to detect the cryosphere which in FVG is present in the form of 1) glaciers and glacial or glacial-wrecks; 2) permanent ice caves; 3) permafrost.

In the Julian Alps, the glacial decline over the past century, especially in the past 30 years, has been extraordinarily rapid. It is related to the change in climatic conditions, in particular to the trend of average annual summer temperatures and average annual winter rainfall.



The glaciers of Mount Canin

➤ **XXI century future trends in FVG**

According to the study of trends in FVG during the winter, there will be an average increase of 1.3 °C, in the summer instead the increase may reach 6 °C in 2100 (2.5 °C in 2050). Winter precipitation will increase, especially from the middle of the century, with an increase of 20-30% by the end of the century.

The average number of days of heatwaves per season will double in the next thirty years, while in 2071-2100 the plain will also have 40 days in the year in which summer temperatures will be at least 5 °C higher than the annual reference average.

In the future, most of the summer will be affected by heatwaves, causing serious consequences for human health, crops and livestock, on glaciers and the most vulnerable ecosystems. A further indicator of thermal stress is the number of days on which the maximum temperature exceeds 30 °C and the number of nights on which the minimum temperature exceeds 20 °C. Hydro-climatic events, with extreme rainfall capable of causing floods and erosion, are expected to increase substantially only from 2071-2100.

The region FVG could experience an increase in temperature for the end of the 21st century up to 5 °C in winter and up to 6 °C in summer, with strong thermal stress, associated with heatwaves and the number of hot days and nights. Precipitation will increase in winter, with very intense rainfall events and decrease sharply in summer, with the region drying up in summer. As a consequence of atmospheric heating, the sea temperature of the FVG is expected to rise to 3 °C at the end of the century. The greater evaporation, due to heating and the lower contribution of water from rainfall and rivers, leads to an increase in salinity of about 1.

The pH of the sea will drop to 0.3, with consequences for the entire ecosystem. The average sea level should be over half a meter higher at the end of the century, with an impact on coastal areas.

The cryosphere of the FVG, already extremely reduced over the past century (-82% on the surface and -96% on the volume) will contract rapidly. The Equilibrium Line Altitude (ELA), which now stands at around 2700 meters above sea level, will rise above 3000 meters around 2030, to reach 3400 meters before the end of the century.

Changes in the climate of the FVG in the "business as usual" scenario would have serious repercussions on many regional socio-economic sectors, such as water resources, agriculture, ecosystem services, health, tourism.

➤ *Impacts recognition in FVG*

The study of the impacts, starting from 2016, constituted valuable support for the preparation of a regional strategy for adaptation to climate change and mitigation actions. This is a work that connects the guidelines produced at the national level¹ with the specific features of the Friuli Venezia Giulia region, using the same articulation of the themes/sectors of impact.

We present, in the following, a survey of the impacts, focussing only on some aspects, of greater interest in the context of this project.

Quality and quantity of water resources and hydrogeological instability

As far as drinking water resources are concerned, the episodes of drought in the summer will increase with consequent lower availability of water and a general lowering of the levels of the water table.



Conflicts will increase due to the use of an increasingly reduced and poor-quality resource. The intensification of the frequency and duration of dry periods, moreover, could increase the dry periods especially of torrential waterways and therefore lead to dramatic changes in habitats and an increase in the concentration of pollutants.

The increase in thermal energy in the atmosphere will lead to floods with negative consequences both on the state of water bodies and on the ecological state of aquatic environments.

Desertification, land degradation and drought

In Friuli Venezia Giulia the impacts are related to the loss of soil and the degradation phenomena that will be borne above all by the mountain belt, the Magredi, the Karst plateau, the low Friuli plain and the coastal belt, also subject to gradual salinization. The lowering level of aquifers will also favour the phenomenon.

Biodiversity and mesofauna

Soil is one of the habitats with the greatest biodiversity and population density. 1000 invertebrate species can coexist in a single square meter of beech forest, a single gram of soil can host millions of

¹ National Climate Change Adaptation Strategy (SNACC, 2015); National Climate Change Adaptation Plan (PNACC, 2017); "Impacts, vulnerabilities and adaptation to climate change" Working Group of the National System for Environmental Protection (SNPA).

individuals and hundreds of species of bacteria.

Climate change hurts soil biodiversity and fertility. The intensification of extreme events induces on the one hand erosion or leaching, which translate into a mechanical loss of the habitat, on the other prolonged drought phenomena that put a strain on its biological resistance.

Climate change and greenhouse gas emissions act negatively with other drivers of global and local change, such as the fragmentation and degradation of habitats, the invasion of alien species, pollution and changes in land use. The loss of biodiversity will have repercussions not only in the ecological, but also economic and social spheres, due for example to the worsening of water quality, the decline of pollinators, the increase in hydrogeological risk and soil degradation. Friuli Venezia Giulia will be strongly affected by the impacts in both the Mediterranean and the Alpine regions.

Marine resources

The marine environment is a precious heritage that must be safeguarded and restored to maintain biodiversity and preserve the diversity and vitality of the seas and oceans. In the regional context, the macro impacts relate to the alteration of the characteristics and chemical-physical processes and the alteration of ecological communities and trophic networks, in the northern Adriatic with its lagoons. In the fisheries sector, the consequences are evident especially for shellfish farming.

Climate changes are at the origin of several biological phenomena, such as:

- modification of habitats
- the appearance of new animal and plant species, including algal cells potentially toxic to humans, new parasites and invasive species and new alien and thermophilic indigenous species at the expense of the autochthonous component with a cold nature (see Gulf of Trieste and Laguna of Marano and Grado);
- population-based settlement of species once considered infrequent.
- generalized changes in the structure of sea flora and fauna.

Health

The increase in summer temperatures and heatwaves can add the risk of insolation, heatstroke, sunburn and erythema, but also aggravate mental and cardio-respiratory diseases, and damage from exposure to UV rays. The most exposed people are children, the elderly, people with chronic diseases and professional categories who work outdoors.

Catastrophic events such as floods also not only lead to an increase in deaths and hospitalizations for wounds, gastroenteritis or poisonings but can also cause heart attacks, cardiomyopathies and post-traumatic stress disorders. Climate change also favours the spread of infections transmitted by biological vectors, such as the tiger mosquito, the leishmaniosis and the tick.

The tiger mosquito, identified in Italy for the first time in Genoa in 1990, can transmit 22 different viruses to the fauna. These include infectious agents that are dangerous to humans, such as Dengue viruses, Chikungunya and West Nile Virus. Other mosquito species are also invading our country at a

fast pace.

Ticks are expanding both in Europe and in Italy. They can become vectors of TBE tick bite encephalitis and Lyme disease borreliosis.

In Friuli Venezia Giulia the first cases of encephalitis appeared in 2003 and already in 2016. 87 cases were reported, of which 3 invalidating and 3 with a fatal outcome.

In Italy for Lyme disease the endemic centers are Veneto, Friuli Venezia Giulia and Trentino.

Forests

In the region, the wooded area occupies 300 thousand hectares, of which about 93% in the mountains and 7% in the plains. There is an extraordinary variety of forest types.



The forests of the region represent a patrimony of almost 45 million cubic meters of wood, which gives work to 11th forest companies. The impacts will, however, touch areas of interest involving different sectors: from nature conservation to the landscape, from the woodworking supply chain to tourism, from health to soil protection and the prevention of hydrogeological instability. Forest fires, summer fires caused by lightning, are already a major problem in the region, which may worsen with climate change.

Agriculture and food production

A third of the regional territory is destined for agricultural or pastoral uses. Climate change will change the crop landscape and landscape of these areas. The increase in temperature will allow both the introduction of species and/or varieties typical of warmer climates and the increase in areas destined for autumn-spring instead of summer crops.

The decrease in rainfall and the lower water availability will lead to the replacement of some species



with others. The greater need to resort to irrigation will lead to the abandonment of some land no longer suitable for cultivation. The agricultural productivity will decrease with an increase in production costs to restore the physical-chemical conditions of the soil. There could also be negative repercussions in the livestock sector, particularly in the livestock sector, with an increase in mortality, an increase in costs and a drop in yields. Global warming, in viticulture, causes a reduction in the production and maturation of the grapes with high alcohol levels and poor organoleptic quality.

Tourism

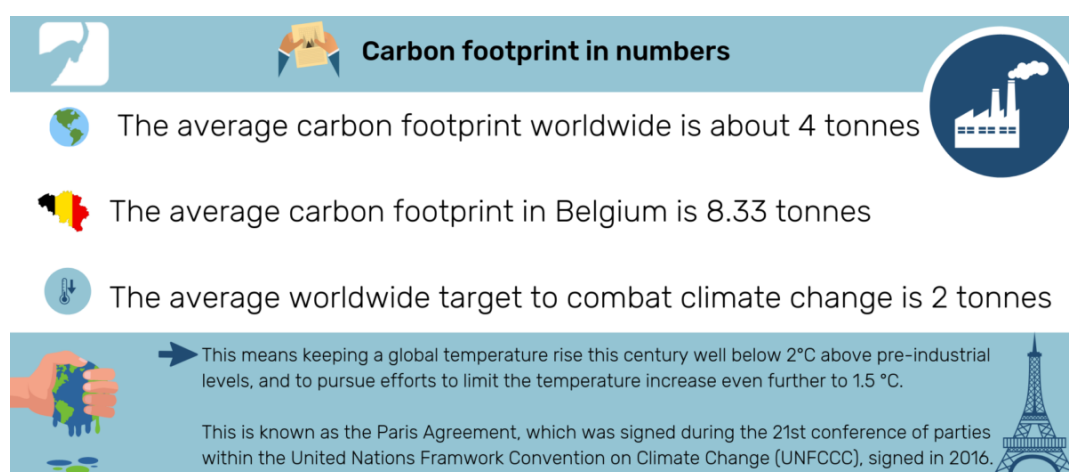


Tourism is a sector particularly sensitive to environmental changes triggered by climate change. The most affected types of tourism will be seaside tourism, with a reduction in space due to rising sea levels and a decrease in attractiveness due to the increase in summer temperatures and heatwaves and mountain winter tourism, which may suffer a significant impact due to the drop in snowfall.

BELGIUM (UNESSA):

“Climate change, primarily the result of the widespread use of fossil fuels, represents the greatest environmental threat for humanity. Although the impacts already have, and will have in the future, a disproportionate effect on the poor populations of developing countries, developed countries will not be spared. To prevent dangerous climate change, it is necessary to reduce greenhouse gas emissions by 80% in industrialized countries by the middle of the 21st century” (Greenpeace)

Carbon footprint is a tool which measures the total amount of greenhouse gases produced directly or indirectly by human activities. This tool is essential to understand the gravity of the situation and especially the magnitude of the change necessary to maintain the level of global temperatures' change to less than 2°C.



Source:

<https://engibex.com/world-earth-day-our-planet/>

TEMPERATURE

According to the "Climate Vigilance" report published in 2008 by the Royal Meteorological Institute (IRM) of Belgium, the average annual temperature increased by about 2 degrees between 1833 and 2007.

A significant increase in the annual number of heat waves was observed in the mid-1990s. On the other hand, the frequency of cold waves decreased significantly in the early 1970s.

The general increase in minimum temperatures during the 20th century is also responsible for extending the longest period of the year with no frost days. In fact, the last day of frost at the end of winter tends to be earlier and the first day of frost near winter tends to be later.

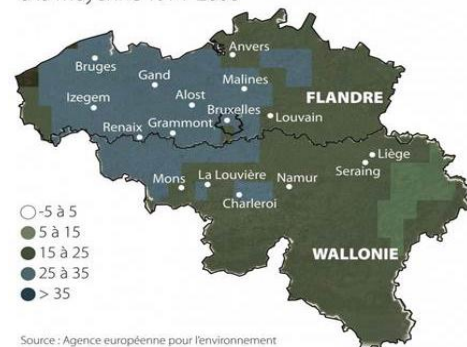
All the projections indicate an increase of temperature in all seasons (from 1,5C° to 4,4C° in winter and from 2,4C° to 7,2C° in summer by 2100)

RAIN PRECIPITATIONS

Precipitations are expected to decrease in summer (-25% 2100) and increase in winter (+22% by 2100). Decrease average precipitations in summer, combined with an increase of evaporation should lead to a drop of more than 50% in the minimum flow of rivers by the end of the 21st century. This results in an increased risk of water shortages

Les risques d'épisodes pluvieux intenses

Evolution (en %) des épisodes de forte pluie en hiver sur la période 2071-2100 sur la base d'un scénario d'émissions élevées par rapport à la moyenne 1971-2000



by
of

COASTAL REGION

Climate change expose coastal regions to three main types of impact: floods during storms, coastal erosion and loss or movement inland of natural wetlands. Other expected impacts are a rise in groundwater level and the salinization of soil and groundwater.

Since the plain on the Belgian coast stretches only 2 to 4m above sea level, it is one of the most vulnerable European countries in terms of flooding. Sea level could rise by 60 to 90 cm by 2100, or even by 200 cm depending on the most pessimistic scenario.

Les risques de submersion sur la côte belge

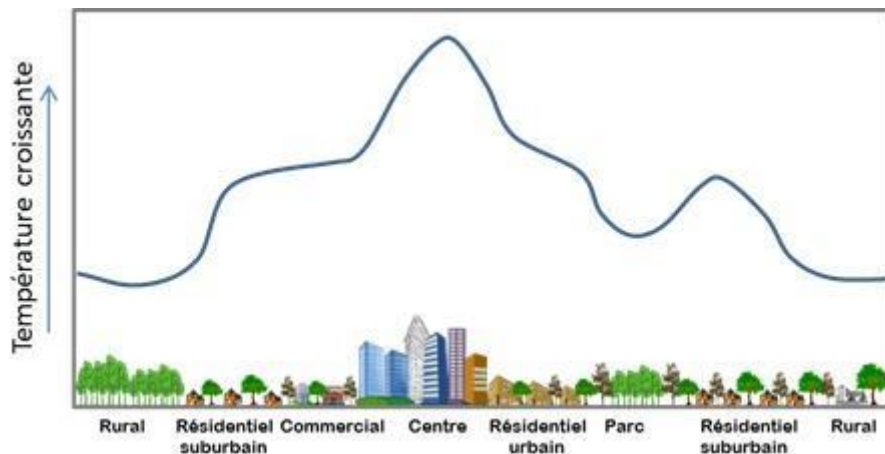
Zones à risque d'inondations jusqu'à 6 m au-dessus du niveau moyen actuel de la mer



In addition, the rise in water temperature also has other impacts, particularly on fish populations living in the North Sea. More and more warm water fish migrate from the South while other commercial species such as cod leave for the North.

URBAN ZONE

According to the Royal meteorological Institute, an increase of number of Urban Heat Islands is expected, especially in Brussels. This increase is notably linked to the progressive urbanization of the Region. A heat island, with an average value over the 1961-1990 period of 2.5 ° C in the center of Brussels was calculated. The size of the urban heat island gradually decreases towards the periphery.



Source: Environment. Brussels

These urban heat islands can be explained by the replacement of green and permeable soils by impermeable buildings and coverings. In addition, the multiplication of vertical walls increases the surface collecting the solar radiative flux. The use of dark colored materials for roads and buildings results in greater absorption of incident solar energy. It can be explained as well by the more concentrated human activities in the city.

The increase in temperatures linked to the heat island is likely to cause disturbances in terms of comfort and health, as well as in terms of energy consumption (air conditioning) and associated nuisances (energy consumption and related air pollutant emissions).

Nocturnal heat islands have a bigger impact on human health, since - especially in hot weather - warmer night city temperatures are likely to limit the relief effect after a day characterized by temperatures high daytime.

BIODIVERSITY

According to WWF, from 25 to 75% of the species present in our country could see their populations decrease in a more or less important way. The beech trees in the Soignes forest are already threatened: the impact of heat waves, droughts and floods is felt on the roots of the trees, which are therefore much more fragile in the event of storms. Climate change is putting additional pressure on biodiversity: species must adapt or are forced to migrate or perish, while sometimes new species from the south settle and develop in Belgium. Those impacts are due to increases of temperature but also pollution of the air, waters and soils as well as destruction of habitats.

Climate change has also an impact on bud hatching which occurs 5 to 15 days earlier than 50 years ago and yellowing of the leaves in falls start later. These phenological changes have impact on interactions between species.

HEALTH

Climate change may affect human health in many ways. A rise in the frequency or intensity of heat waves increases mortality and morbidity rates; conversely, a fall in the number of very cold days in winter decreases the rate of mortality due to cardiovascular problems. Air quality is also affected:

heat promotes the formation of ozone and extends the season during which allergenic pollens are released etc. Extreme events such as floods and storms also cause their share of deaths and injured. The actual impact of climate change on the health of a population depends largely on its vulnerability, which in turn depends to a large extent on the standard of living, access to care and capacity of this population to adapt to new climate conditions. In Belgium, a study by the Scientific Institute of Public Health has shown that the 1994 summer heat wave, associated with high tropospheric ozone concentrations, caused 1,226 additional deaths in six weeks (of which 236 related to persons under 64 years old). The heat wave in 2003 caused in Belgium the death of an additional 1,300 people of 65 years of age or above. When the average daily temperature is higher than twenty or so degrees, it is primarily the heat which explains the rise in the mortality rate, ozone playing a smaller but additional part. Heat waves caused an increase of preterm deliveries as well. the risk of preterm delivery is 8.8% depending on a heat wave occurring within 6 days.

Over the past decade, the number of people with Lyme disease has grown rapidly in Belgium: from less than a hundred cases to almost a thousand per year. The number of ticks, vehicles of the disease, increases when the winters are mild. Climate change is therefore likely to play a role in the increase in the number of people affected by this disease.

2. Actors mobilized at all levels to fight against the negative effects of climate change

FRANCE (ITG):

France is not alone and registers its mobilization approach in connection with the EU and the UN, mobilizing public national stakeholders, private national stakeholders and other organizations or groups (NGOs, associations, networks, etc.).

Firstly, at international level, greenhouse gas emissions have no borders, which is why these two strategies need to be brought about on a global scale. The first international treaty to avoid dangerous anthropogenic impacts on the climate was adopted in 1992 in Rio de Janeiro, in the form of the United Nations Framework Convention on Climate Change (UNFCCC), which recognizes three principles:

- **A precautionary problem:** scientific uncertainty about the impacts of climate change does not justify delaying action.
- **A common but differentiated responsibility:** all emissions have an impact on climate change, but the most industrialized countries bear greater responsibility for the current concentration of GHGs.
- **A key to the right to economic development:** actions to combat climate change must not adversely affect the priority needs of developing countries, which include sustainable economic growth and the eradication of poverty.

Since 1995, the 195 FCCC member countries have put at the end of each year for the **Conference of the Parties (COP)** at which major commitments to combat climate change must be made in the form of a global agreement. **This is the whole point of COP 21 (in 2015 in France), and then the other COPs that have already followed, and which have resulted in a first universal and binding climate agreement to keep the global temperature below 2°C.**

At European level, France is in line with the Objectives of the European Union and fully subscribes to the European Guidelines on Water and Adaptation to Climate Change.

At the national level, France wanted to take a significant part in the global effort to combat climate change and has set several deadlines. At its national level, **France has committed to:**

- Reduce GHG emissions by 20% compared to 1990.
- Increase the share of renewable energy in final energy consumption to 23%.
- Improve energy efficiency by 20%.

For 2030: Reduce our GHG emissions by 40% from 1990 levels.

For 2050 - Factor 4: Divide by 4, or decrease by 75%, our GHG emissions compared to 1990 levels.

These incremental targets allow for a realistic path to meet the 2050 targets and failing to adjust the levels of effort to be provided. Indeed, it is important to start actions and actions on mitigation and adaptation to climate change, which will then have to be intensified.:

- **some are applicable quickly and at a reasonable cost** (e.g. putting in place more efficient equipment and therefore less energy-intensive for heating, lighting, etc.).
- **others involve more structural reforms and a longer time** to accompany change or implement (e.g., the creation of urban heat networks powered by geothermal energy, the creation of new public transport networks such as Greater Paris, which can take 10 to 15 years between foreshadowing and effective start-up).

(Source: <https://www.valdemarne.fr/newsletters/plan-bleu-du-val-de-marne/acteurs-et-strategies-pour-lutter-contre-le-dereglement-climatique>)

The main actors in France can fall into three main categories:

a) Public national actors:

- **The state and its structures** such as state agencies that depend on ministries (such the **Ministry of Ecological and Solidarity Transition**) or are independent (e.g. **ADEME Agency: Environment and Energy Management Agency**)

- **Local authorities** (cities), such as the French regions (for example: the **Ile de France region**, the largest region in Europe), major cities such as **Paris, Lyon or Marseille**,
- b) **Private national actors**, as “green” & “sustainable” investors/firms such as large companies and others (wind turbines, insulation, new energy... such as **ENGIE, EDF ENERGIES NOUVELLES, SUEZ ENVIRONNEMENT...**), “green” investing and banking firms, such as banks and funds (for example : **BNP PARIBAS, SOCIETE GENERALE...**)
- c) **Others: associations** (such as: **ASSOCIATION RÉSEAU ACTION CLIMAT**), **foundations** (such as **GROUPE FONDATIONS ET CLIMAT** with a leading role for women in the fight against climate change and environmental protection) **and other NGO**.

The role of certain **political parties**, the **social networks of individuals and citizens** in France concerned with environmental and climate concerns, **trade unions and think tanks** or other **lobbying organisations**, which are very present to raise awareness of the climate emergency in the country, should also be ignored. The role of the **younger generations** is also to be seen positively in this national and collective approach to awareness, then to change behaviour and actions.

CORSICA (IFRTS):

We will mention the main regional and local actors directly impacted by climate and environmental issues who have worked in the Agenda 21 process and who are involved in the analysis and search for solutions on the socio-economic and human aspects related to climate and the environment.

ADEME - <https://corse.ademe.fr/>

The Environment and Energy Management Agency (ADEME) is a public organisation of industrial and commercial nature, placed under the joint supervision of the Ministry of Ecological and Solidarity Transition and the Ministry of National Education, Higher Education and Research.

Missions:

ADEME participates in the implementation of public policies in the environmental, energy and sustainability fields. In order to enable them to progress in their environmental approach, the Agency provides to the companies, local authorities, public authorities and the general public with their advisory and expertise abilities. It supports furthermore to the projects funding, to the implementation research, and this, in the following fields: waste management, soil conservation, energy efficiency and renewable energies, air quality and noise control.

Fields of intervention

The **priority axes** are the following:

- Construction;
- Sustainable production and consumption;
- Renewable energy and materials;
- Sustainable territories and cities:

Accordinging **4 additional missions:**

- know (supporting research and innovation);
- Convince and mobilize;
- Advising;
- Support to achieve.

Within the regional Directorate, 10 people (engineers, managers, administrative and legal manager, communication officer) work for the Corsican territory.

ATC Corse - <https://www.visit-corsica.com/>

The Corsica Tourist Agency is the Public Establishment of Industrial and Commercial Character of the Territorial Community of Corsica in charge of the tourist policy. Created by law, it defines and implements tourism strategy.

4 key missions are implemented at the service of Corsican tourism:

- Foster the assets of our island in France and abroad Communication campaigns, offensive actions on the Internet, advertising operations, hosting of journalists, tour operators, travel operators, ATC makes every effort to attract tourists.
- Develop and enhance the tourism offers supports to project leaders, financial supports, consulting, support, this mission consists in making the tourist offer competitive in order to better welcome our visitors.
- Constantly monitoring, analysing the progress of tourism in our island Occupying and brand studies, regular consumption behaviour studies make the Observatory of Tourism a real decision support tool to better adapt the tourism strategy in regard of the market trends.
- Coordinate the different tourism stakeholders of our island tourist offices, professionals, carriers , consular chambers , marinas , training actors , as many partners of predilection who act alongside the ATC in order to build together a dynamic tourism policy.

SYVADEC - <https://www.syvadec.fr/>

Syvadec is the Corsican Public Waste Recycling Association. It is the public establishment of waste recovery in Corsica. Its main mission is to recycle waste sorted by the separate collections of its member communities or its recycling centres and to treat non-recoverable residual waste.

It implements the waste management politic in Corsica through a regional project of waste treatment, PPGND previously established by the Community of Corsica. Created on 13 July 2007, it exercises its competence in place of the member inter municipalities.

The strategic objectives for the period 2016/2020 is based on 4 axes:

AXIS 1: MODERNIZE AND FINALIZE THE INFRASTRUCTURE NETWORK AND ENSURE THE SAFETY OF THE TREATMENT PROCESS:

To do so, SYVADEC forecasted within its Multiannual Investment Plan to build 7 recycling centers, 7 composting facilities, 4 additional transfer docks and to complete the treatment process with 2 ISDND.

AXIS 2: ADAPTING THE VALUE CHAIN AND THE SERVICE TO MEMBERS' OBJECTIVES

SYVADEC has implemented a major program to increase the value added on its infrastructures and to create the conditions necessary for member communities to increase their sorting performance. To do this, SyvadeC's objectives are to increase recycling, create and consolidate the bio-waste recovery sector, optimize the textile sector and set up more incentive-based contribution methods.

AXIS 3: OPTIMIZE SERVICE QUALITY AND CONTROL COSTS

Thus:

- * Strengthening service to communities and households
- * Continuously improve the environmental quality of infrastructure
- * Optimize all costs

AXIS 4: DESIGN AND DISSEMINATE THE TOOLS TO REDUCE WASTE AT SOURCE

For the period 2007-2015, SYVADEC has carried out a programme of waste reduction actions in collaboration with numerous actors to intervene throughout the region and raise the awareness of a large target group on an ad hoc basis.

In the 2016-2020 programming, SYVADEC has refocused its prevention actions around 4 flagship actions to offer sustainable support to train the actors involved.

- For the children: Eco Scola Project
- For the members: large-scale composter distribution program
- For the public: a significant operation for waste reduction week.

OEC - <https://www.oec.corsica/>

The Corsican Environment Office (OEC) is a public establishment of an industrial and private nature (EPIC) with legal and juridical personality and financial autonomy. It was created by Article 57 of Law

n° 91-428 of 13 May 1991 on the status of the Territorial Community of Corsica (CTC).

The missions of the Environment Office of Corsica are very broad and transversal. Its statutes confer on it the task of driving and coordinating all regional policy in terms of the environment and sustainable development, ensuring the protection, enhancement, management, animation and promotion of Corsica's heritage.

Its fields of intervention are conservation and management of the land, sea spaces, , plant and animal species, balance of nature, fire prevention, the fight against pollution and noises , communication, environmental awareness and education.

As a financial partner of the communes and communities of communes, associations and State services, the Corsican Environment Office is also a technical partner with a highly qualified staff. OEC is chaired by an Executive Councillor appointed by the Chairman of the Executive Council. The Board of Directors of the Office is composed of 29 members, including the President and 17 elected representatives appointed by the Assembly of Corsica.

OEC organised in 7 technical services, 3 supports services and a general secretariat currently has 165 members of staff.

OEC leads with its partners the implementation of environmental regional politic in the following fields :

- Conservation and management of the spaces and balance of nature, conservation of fragile spaces both on the coast and in the mountains, which are essential elements of sustainable development policy.
- Protection and management of island and endemic plant and animal species.
- Protection of aquatic environments and water resources, protection of marine environments, fire prevention.
- Fight against pollution and nuisances and waste disposal and wastewater treatment. The OEC is responsible for developing and contributing to the implementation of a waste recovery and reclamation policy and for promoting the development of clean and economical technologies.
- Promotion of life quality (water quality, landscapes quality, territory enhancement...).
- Information, communication, publications, and awareness-raising of all audiences and the school population on environmental and sustainable development issues.

The OEC thus endeavours to collect data and studies relating to the island environment and to raise the awareness of local authorities on this point:

- Contribution to the preservation and enhancement of rural and urban built heritage.
- Encouraging local authorities to develop and take account of the environment in their planning documents, in which the OEC will act as an adviser.
- Contribution to the implementation of pluriannual programmes: CPER, PO FEDER, FEADER, FEAMP....

The OEC associates conventional frameworks with the PNRC, which specifies the actions that the latter must carry out in its areas of competence (paragraph 4, article 57 of the Law of 13 May) :

- The OEC participates in the definition and implementation of intermunicipal strategies and policies for micro-regional development.
- The OEC participates in the monitoring of micro-regional development plans by helping to find the necessary balance between economic development and the protection of the environmental and ecological heritage.

Furthermore, the OEC is also in charge of the regional AGENDA 21 approach on which we rely on. The OEC is involved in all actions aimed at the ecological preservation of the Mediterranean. The aim of the Corsican Environment Office is to achieve the environmental and nature protection objectives set at territorial level and in accordance with international treaties, Community action programmes in the field of the environment and the legislation in force.

GREECE (IASIS & MCE):

At all levels (national, regional and local) to fight against the negative effects of climate change (with their precise references) and, if possible, quantified impacts.

Public bodies

In 2016, the Greek national strategy for Climate Change (ΕΣΠΚΑ-NAS), initiated by the Greek Ministry in charge of environment in 2014, was endorsed by the Law.

Key objectives of the NAS are to:

- establish and enhance the (short-term and long-term) decision-making procedure regarding adaptation issues.
- link adaptation with the promotion of a sustainable growth model through the implementation of regional/local action plans.
- promote adaptation actions and policies in all sectors of the Greek economy, with emphasis on the most vulnerable ones.
- create a monitoring, evaluation and updating mechanism for adaptation actions and policies; and
- build adaptation capacity and raise public awareness.

Some specific actions were decided for 15 sectors (Agriculture, Tourism, Health, etc.)

The Law also validated the creation of the National Climate Change Adaptation Committee (NCCAC) as coordinator of the Strategy and advisory mechanism body for adaptation policy monitoring,

evaluation and planning. The NCCAC is chaired by the Ministry of Environment and Energy and comprises representatives from all competent ministries (Environment and Energy, Economics, Internal Affairs, Economy & Development, Tourism, Infrastructure & Transport, Health, Maritime Affairs & Insular Policy, Rural Development & Food, Education, Research & Religious Affairs, Culture and Sports, National Defence). The NCCAC also includes representatives from the Union of Greek Regions, the Central Union of Greek Municipalities, the Hellenic Meteorological Service, the Association of Industries, NGOs and academics specialising in climate adaptation issues.

- **Concerning Health**

The previous mentioned Law of 2016 on national adaptation to climate change strategy, states health as one of the main priorities. The Hellenic Centre for Disease Control and Prevention focuses on communicable diseases that are directly linked to climate change. Some important examples are analysed in the national adaptation strategy, including extreme weather conditions, air pollution, diseases transmitted via vectors and increased incidence of allergies due to climate change.

The Ministry of Health issues circular instructions on public health measures to be adopted in the event of extreme weather (e.g., floods, forest fires), as well as instructions to protect public health and reduce harm from severe heat and heat waves. It also issues regulations and circular instructions to face growing threats of disease outbreaks, as rising temperatures linked to climate change increase infectious disease occurrence and spread.

- **Civil protection and extreme weather events:**

Concerning for specifically civil protection: The National Civil Protection Plan "Xenokrates" (Ministerial Decision no. 1299/2003) sets the national framework for overall effective risk management planning and provides for the development of hazard-specific plans at the local, regional and national levels. In accordance with "Xenokrates," at the national central level, the General Secretariat for Civil Protection issues National Plans for all kinds of natural and manmade disasters. All ministries, decentralised governmental authorities, and local government authorities should design their plans based on the national plan. The General Secretariat of Civil Protection is the general coordinator of the planning. In case of emergency, the General Secretary for Civil Protection, the regional authorities and the local government authorities are in charge of coordinating all operational forces depending on whether the disaster is general, regional, or local.

- **Regional level**

At regional level, each of the 13 Greek Regions had to develop a Regional Climate Change Adaptation Plans, based on the analyse of potential effects of climate change in the Region and the analysis of the "climate vulnerability" of the various sectors in the area.

(See: Climate Adapt - <https://climate-adapt.eea.europa.eu/countries-regions/countries/greece>)

Civil society

It is a fact that in Greece, there are a lot of organisations and movements, dealing with the important issue of climate change. Further below, follows a short –yet representative- list of significant actors, which are mobilized basically in Greece with the aim to act against the climate change or to raise awareness on this essential topic.

1. Appliance Recycling Company → <http://www.electrocycle.gr/>

The Appliance Recycling Company has developed in Greece, since 2004, an organized system for the management of old electrical appliances, including all appropriate technical infrastructure. Small appliances can be left at the collection points in stores that sell electrical and electronics, in super market chains etc. through the Collection Bins. Large appliances can be collected from the citizens' houses, after they had communicated with the local council for recycling.

In 2018, the recycled electronic devices reached 54,000 tonnes. Significant is the evolution in the field of recycling lamps. Quantities for 2017 were up 10% and are projected to reach 190 tonnes, equivalent to 1,150,000 lamps in the next years. It is also important to mention that in 2016 Greece has succeeded in being at the 7th position in Europe (in the 28 Member States of the EU), regarding the proportion of waste electrical appliance collection for recycling, in order to be again available as new electronic devices in the market. Moreover, the collection points for old electrical appliances are constantly increasing and more bins are being placed in retail stores, municipalities, businesses and organizations. All types of collectibles today exceed the 14,000, the majority of which are in retail stores.

The Company, thanks to the constant communication with the Greek citizens, has managed to raise awareness about recycling electronic devices. In addition to its media campaign every year, it maintains a lively dialogue with the general public, both on social media and through recycling activities in central cities throughout Greece, aiming to protect the environment and to create a better tomorrow for future generations.

2. Arcturos → <https://www.arcturos.gr/en/>

Arcturos is a Greek non-governmental and not-for-profit ecological organization founded in 1992 to protect wildlife with field research, scientific research, public awareness raising, environmental education and volunteering to protect wildlife. Among the species that they help are the wolves, bears, shepherd dogs, jackals, otters, roe deers and the chamois goats. Arcturos implements national and cross-border programs for the protection of mountain ecosystems with the aim of fully managing Protected Areas and providing specialized interventions in the natural environment. During the 28 years of Arcturos' service, the organizations contribution is significant. Most specifically, the team of Arcturos:

- helped the processes to ban circuses with animals in Greece.
- put an end to the phenomenon of the dancer bear.

- has opened and operated special wildlife sanctuaries for former captive bears and wolves in Nymphaeum and the Florina Agapidia respectively.
- is involved in the Mediterranean program to tackle the use of illegal poison baits.
- is upgrading deforested forest areas, which are 150,000 to date.
- has developed an Emergency Response Team for the protection of wild animals.

3.Fridays For the Future, Greece →

<https://www.fridaysforfuturegreece.org/?fbclid=IwAR3JCfQavka6LK7OEVrqkeM9Q7ZxAvawiU73d9BF0qiuhrTRIURxsgZhmqc>

The school strike for the climate, also known as Fridays for Future (FFF), is an international movement of school students, which was established in Sweden by activist Greta Thunberg. In Greece, the movement started on March 2019. The students take time off from classes on Fridays, in order to participate in demonstrations to demand action from political leaders to prevent climate change and for the fossil fuel industry to transition to renewable energy. In Greece, some of the statements that the FFF movement has is:

- ❖ To keep temperature rise below 1.5 ° C, compared to pre-industrial levels.
- ❖ to ensure climate justice.
- ❖ to comply with the best scientific studies available so far.

The movement is active in over 20 cities throughout the mainland of Greece and many islands of the Ionian and Aegean seas. For example, on the 20th of September 2019, students from all over Athens gave a dynamic presence to a huge march, prompted by the World Day Against Climate Change. The demonstration took place in downtown Athens and was completed with the participation of approximately 600 students. The process ended in front of the Greek Parliament. The students marched, in order to raise awareness among citizens and politicians to take action against climate change. Moreover, “Fridays For the Future Thessaloniki” protesters and students staged a sit-in to protest about the climate change and its impacts in front of the City Hall in Thessaloniki.

4.WWF GREECE → <https://www.wwf.gr/>

For over 50 years, WWF has been promoting responsible solutions to the most critical environmental problems, through an integrated approach, partnerships and total transparency. Since 1991, WFF Greece has been fighting against the greatest environmental challenges in Greece, such as wildlife loss, forest fires and overfishing, unraveling bad legislation and environmental crime. WFF Greece is also making legal interventions, by designing solutions far from polluting. conscience of citizens and governments. The organization’s vision is to build a future where man and nature coexist in harmony. Its goals are:

- To protect of biodiversity
- To fight daily to protect ecologically sensitive species and areas.
- To improve the management of the natural environment.
- To reduce the human “footprint”
- To promote sustainable solutions

In Greece, WWF has more than 11.000 supporters and has completed more than 300 environmental actions.

ITALY (ENAI):

Forum Italiano dei Movimenti per l'Acqua www.acquabenecomune.org/

The Italian Forum of Movements for Water was born in 2006. It brings together territorial committees, social organizations, unions, associations and individual citizens who fight for water for the common good, its public and participatory management in a holistic vision; or a 360 °C battle that starts from the aquifers and reaches our taps. We have chosen to fight to defend a primary common good as a paradigmatic of all common goods, within a context in which movements and social struggles claim an alternative to the neoliberal system based on the exploitation of nature and our lives.

Banca Etica www.bancaetica.it/

Banca Etica offers a different banking experience, offers all the main banking products and services for individuals and families or organizations and businesses. It started the business in 1999, starting from the bottom, thanks to the commitment of many people and organizations who took steps to set up a credit institution inspired by Ethical Finance. The founding principles are transparency, participation, equity, efficiency, sobriety, attention to the non-economic consequences of economic actions, credit as a human right. To pursue its goals, Banca Etica has developed a Manifesto and developed various "ethical guarantee" tools to ensure the effective possibility of responsible use of money. With the savings raised, it finances organizations operating in four specific sectors: social cooperation, international cooperation, culture and environmental protection. A verifiable and public figure: Banca Etica is the only bank in Italy that displays all the loans disbursed on its website.

CeVI www.cevi.coop/

CeVI is a non-governmental organization (NGO) founded in 1984 to operate for human promotion, for fairer international relations and sustainable, equitable and respectful of global differences. It operates in the areas of education, awareness and promotion of development programs. Right from the name, the International Volunteer Center (CeVI), it was decided to focus on associations and volunteering, to build responsible participation, free and accessible to all, and on cooperation, as an opportunity for meeting and exchange mutual knowledge and values. Among the latest projects, there is "Cities and sustainable management of water and natural resources", funded by the Italian Agency for Development Cooperation - AICS. The project aims to contribute to greater knowledge

and awareness of citizens regarding the 2030 Agenda by promoting changes in behaviour and active attitudes to reduce the anthropogenic impact on the environment. CEVI develops networks and promotes information campaigns, to raise awareness, empower, involve and mobilize people, groups, schools, institutions, on important issues that transversally affect international cooperation activities, educational programs, training and communication.

The Campaigns are designed and implemented in collaboration with other organizations, national and international networks to implement changes at the local and global level. The two most significant campaigns in recent years are those for raising awareness of Global Citizenship Education, the Right to Water and the Right to Food Sovereignty.



PLANT THE FUTURE! is dedicated to protecting and preserving common goods from privatizations and has launched a collection of signatures to modify article 810 of the Civil Code. Common goods are a wealth for all citizens: natural ones such as air, water, parks, but also some infrastructures or structures that risk privatization or defacement.

Laboratorio Regionale di Educazione Ambientale (LaREA) www.ea.fvg.it

The Regional Environmental Education Laboratory (LaREA) is an ARPA FVG structure that carries out its institutional activities in the context of educational processes for sustainable development. Active since 1997, LaREA joined ARPA FVG in 2000, supporting the Friuli Venezia Giulia Region in the implementation of environmental education guidelines and strategies, particularly as regards the National System of Information, Training and Environmental Education (INFEA). LaREA deals with educational planning, teacher and educator training, design and management of educational tools (exhibitions, exhibits, etc.), experimentation with new multimedia and educational contexts. As part of the National Environmental Protection System (SNPA), it provides its contributions to the definition and development of the SNPA's educational processes.

BELGIUM (UNESSA):



<https://www.amisdela terre.be/>

"Friends of the Earth experienced and offer a new art of living in simplicity. The association is committed to societal transformations to allow living beings to evolve in harmony and equity." Their actions revolve around three themes: a living Earth, a simpler life, a non-violent economy.

Their action is based on the observation that the degradation of our natural environment and growing social inequalities are the consequences of the mode of development of our Western societies. Daily actions are therefore important when they are in their entirety. Any individual or

collective approach can therefore influence the course of things on a certain level. The responses to environmental and social crises will therefore not come from above but from citizens. Continuing education actions are implemented by volunteers organized in 10 local groups in Wallonia and Brussels.

CNCD



<https://www.cncd.be/>

The CNCD-11.11.11, the dome of more than 80 civil society organizations and some fifty groups of volunteers committed to international solidarity, is redoubling its efforts to promote concrete alternatives for a just and sustainable world, through its three missions: the financing of development programs in poor countries via Operation 11.11.11, the coordination of advocacy platforms to encourage political decision-makers to adopt policies consistent with the objectives of sustainable development; and the organization of mobilizations citizens and education campaigns for global and united citizenship.

In 2019, Operation 11.11.11 thus raised the record amount of € 1,860,601. Nearly 200 development projects have been financed in around 40 developing countries. Education for global and inclusive citizenship aims to change values and attitudes, both individually and collectively, with a view to achieving a change in society.

As coordination, the CNCD-11.11.11 promotes awareness campaigns, information, and mobilization of the population, with its member organizations. These campaigns revolve around themes such as North-South relations, access to economic and social rights, food sovereignty, citizen engagement in the face of elections and climate justice. They rely on information, facilitation, or political advocacy tools and on the organization of events.



<http://www.klimaatcoalitie.be>

The Climate Coalition is a national association which brings together more than 70 Belgian civil society organizations (environmental NGOs, development cooperation, unions, youth councils, citizens' movements) around climate justice. They are lobbying political decision-makers for strong measures and they are mobilizing a large audience for a fair and climate-friendly society. The activities of the organization are coordinated and implemented by the working groups. The Advocacy WG is the central space for daily monitoring of the climate agenda. He prepares positions and recommendations to decision-makers and is in direct contact with the political world. The action GT reflects on action strategies and is responsible for the organization of joint actions and mobilizations. It also keeps track of citizen initiatives and international actions.

Main actions are:

- Job4Climate: Investing in sustainable jobs: good for people and the environment!
 - Put your bank on the right track (2017): a national campaign that called on banks to abandon their investments in the fossil fuel industry and to invest on sustainable sources of energy.
 - Claim the Climate (2/12/2018): Biggest protest for climate justice in Belgium with more than 100 000 citizens.
 - From mobilization to political action (2020)
-



<https://www.greenpeace.org/belgium/fr/>

GreenPeace works to protect the earth, air, water, and everything in it. They fight against the destruction of the oceans, forests and climate, and it is paying off. They succeed in stopping environmental crimes and forcing big business to take responsibility.

GreenPeace actions in Belgium revolve around changes in farming methods, preservation of the environment (forests, sea, ...), citizen mobilization against polluting companies and the government, support for initiatives citizens, mobility projects, ...

They also raise awareness through publications on food and meat consumption, green energy, air pollution, urban mobility, ...



<https://www.ecoconso.be/>

Écoconso encourages behaviors and consumption patterns that respect the environment and health. Eco-consumption is part of the objective of "sustainable development", that respects natural resources and shares them equitably among all human beings, present and future. So that our planet can meet the needs of our children and their children ... Their themes are: food, housing, cleaning products, energy, zero-waste, citizen participation, sustainable markets, ...

Their main actions are:

- Provide population with concrete, accessible, relevant, credible information on the interest and possibilities of eco-consumption
- Promote eco-consumption behaviors in individuals
- Foster structural changes favorable to eco-consumption with communities
- Provide information, awareness, and support services for eco-consumption

In 2018, their website was consulted around 1 500 000 times. They published 124 web articles and they animated more than 100 workshops for 3400 people in total.



Maison du
Développement durable <https://www.maisondde.be/>

The “House of sustainable development” is the result of a collaboration between the City of Ottignies-Louvain-la-Neuve and the Catholic University of Louvain-la-Neuve. It is a place to support the transition to a more ecological, more equitable, more convivial society, locally & globally. They organize workshops, thematic exhibitions, multi-disciplinary forums & debates, moments of artistic expression, exchange opportunities and the provision of a critical and systemic information on SD issues. Two directions are proposed: - Change our relationships with nature, the economy and society and move towards prosperity without growth. - Share the values of equity, ecology, responsible citizenship, and democracy.

3. List of initiatives & best practices already started or in progress

FRANCE (ITG):

Reducing the risks associated with climate change requires **two complementary areas of action & initiative**:

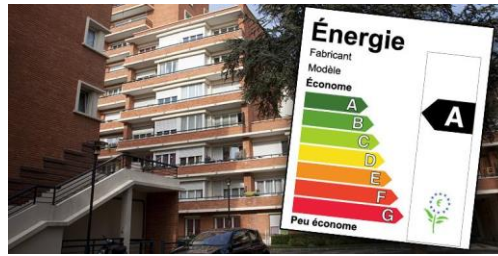
- a) **Mitigation** is a strategy to **reduce sources of GHG emissions** and/or increase "carbon sinks," i.e. organisms, such as forests, that trap CO₂ and prevent it from dispersing into the atmosphere.
- b) **Adaptation to climate change** represents all the adjustments made to limit the negative impacts and maximize their beneficial effects. The objective of the adaptation strategy is to reduce exposure and vulnerability to climatic hazards. Adaptation actions involve, for example, moving housing away from flood-covered areas, or thinking about buildings differently by allowing them to be more suited to longer and warmer summers etc.

Mitigation therefore addresses the causes of climate change while adaptation is about impacts. **These two strategies are inseparable**: without a drastic reduction in greenhouse gas emissions (mitigation), there is a risk of reaching a critical threshold beyond which adaptation could become extremely difficult, if not impossible. The more effective the mitigation, the less costly it will be to adapt.

We would like to develop **two types of concrete actions in France mixing both approaches above**:

- a) **Mitigation initiative & adaptation example: energy reductions in cities / label of energy balance for transition for sustainable flats, houses and real estate**

Local authorities seek to create the right conditions for more sustainable mobility and travel. Thus, in its development projects, it promotes alternative modes of travel to the car: safe paths for pedestrians, development of the network of bike paths, creation of green flows, creation of lanes dedicated to public transport... It also has a strong policy to develop public transport in the territory. But, **housing or development real estate projects are a key priority because** it supports must address the challenges of energy transition and climate improvement. In France, the **energy label** of a house or apartment supports the balance of its energy consumption. **With the climate label, it is one of the two elements that constitutes the energy performance diagnosis (DPE)**. The award of this label is now **mandatory** to buy or sell a real estate property. This label sums up the situation of the good, with what it has positive and what it has to be improved.



Source : <https://www.valdemarne.fr/le-conseil-departemental/developpement-durable/lutter-contre-le-dereglement-climatique/la-sobriete-energetique>

b) Other mitigation initiative example: Farms initiative in favour of climate (The Life Carbon Dairy Project)

Carbon? We are not insensitive to it! Dominique Raccurt, who manages, with two brothers and a nephew, a beautiful herd of Montbéliardes and 400 hectares of meadows and crops. Located in a vulnerable area on the edge of the Lyon metropolis in the Ain, the Gaec du Pontet maintains woods, hedges, has sown grass strips, converted to simplified farming techniques, is part of a methanization unit project... And this year tackles its carbon footprint through the **Cap'2ER carbon diagnosis of the Life Carbon Dairy program**. This "Automated Calculation of Environmental Performance in Ruminant Breeding" tool assesses livestock's carbon footprint, i.e. its greenhouse gas emissions and its contribution to maintaining biodiversity. The tool is based on the method of analyzing life cycles and calculates the impacts of herd management on the environment: fuel oil, electricity, food, fertilizer, building... But also the positive impacts: biodiversity, hedgerows, meadows... The results are analysed, compared to those of the network and commented on by the advisors. "The Gaec du Pontet is very good at storing carbon through their long-lasting meadows and hedges and woods. It also achieves a nice autonomy of 67% in protein through the production of alfalfa and protein intercultures! The farm could further reduce its carbon emissions by better streamlining herd management and cow feeding," explains Camille Olier, the breeding consultant for the Ain Council Breeding Association, "this diagnosis raises awareness greenhouse gases and gives them levers to act to reduce them. It is a different approach to livestock farming. Our discourse is reinforced by the balance sheet: the more carbon efficient the operation, the more profitable it is! »



Better ageing cows: a good calculation to save carbon and euros! On this farm, the diagnosis proposed to reduce the age of the cows at the first calving, to individualize their ration, to let the cows age longer... This would reduce its carbon footprint by 14% and save more than 23,000 euros

per year. "These technical and economic advice are more cost-effective, more cost-saving for us! This leads us to produce more milk per cow and less methane on the farm! Dominique confirms, "I also learned from this analysis that our GAEC feeds 3,533 people a year in animal protein, it's extremely rewarding to realize it! The sector is committed to the climate (The Life Carbon Dairy Project). The main players in the dairy sector, farmers, dairy companies, dairy control companies, Chambers of Agriculture and the Institute of Livestock met to launch the low-carbon dairy farm programme, which extends a first large-scale experiment, Life Carbon Dairy. Reducing greenhouse gas emissions per litre of Milk of French origin by 20% over the next 10 years is the ambition of this initiative carried out by CNIEL with the scientific partnership of the Institute of Livestock.

Source : <https://agriculture.gouv.fr/reduire-sa-facture-et-ses-emissions-de-carbone-en-elevage-laitier>

CORSICA (IFRTS):

In this paragraph, we will list some good practices developed in our territory, in particular those that seem to us to be the most illustrative of an environmental approach.

A) River maintenance - Etudes et Chantiers Corsica- Courriel : ec.corsica@gmail.com

Summary of practice: The association « Etudes et Chantiers Corsica » (ECC) is in line of an association created in 1995 the purpose of which was the development of natural areas and socio-professional integration. Today, the main objective of ECC is to participate in and strengthen a regional policy of job creation of economic and social interest. To this end, the association "Etudes et chantiers" has opted for the creation of ACI (Atelier et Chantier d'Insertion) specialised in the maintenance of sensitive natural areas and the restoration of the built heritage in Haute-Corse. The ACI is one of the means to develop, in partnership with local authorities, economic, social and solidarity cohesion. The Commune of Sorio is the host and base authority of the ACI.

In order to enable people in difficulty to prepare their return to employment, by joining the ACI, Etudes et Chantiers œuvre :

- the development of the training process from the worksite so that it can be a support for progress and skills acquisition,
- the implementation of skills validation procedures in partnership with training centres (AFPA, CFPPA, ID Formation) and training for the SST certificate,
- the implementation of Work Assessments (EMT).

Employees are also trained in "key skills". The objective of this training is to support people in difficulty in acquiring or consolidating "key skills", to enable them to communicate better, to train, to manage situations in their professional life and to increase their employability.

In order to reconcile the economic viability of the structure with its missions of social integration and utility, Etudes et Chantiers mobilizes local authorities to develop partnership agreements.

The work is divided in the Community of Communes of Nebbiu (intervention area: Aliso river) into two sectors: torrent area/ mountains and plain area. Each sector is divided into four sections. The works are classified into small, medium and large and are determined as follows:

- "Big works" – natural barriers and big felling.
- "Medium works" - intermediate felling.
- "Small work" - small cleaning.

Background and Implementation: while taking into account the application of the Public Procurement Code, this good practice is based on the construction of a partnership relationship with the local authorities for which Etudes et Chantiers carries out this type of work, within a development dynamic, at the service of the territory and its inhabitants.

Public : Personnes en parcours d’insertion et Salariés

Association DEFI

Pollution control and waste management

The Porto-Vecchio City Hall, in partnership with the integration association DEFI (Développement Environnement Formation Insertion), the Syndicat Intercommunal de Traitement des Déchets de l'Extrême Sud de la Corse (SITDESC) and the Syndicat de Valorisation des Déchets de la Corse (SYVADEC), has set up door-to-door glass collection for the town's cafés, hotels and restaurants.

This operation is complementary to selective sorting by voluntary contribution and will make it possible to reduce the collection of household waste by 30 to 40%, thereby reducing the financial cost to the community. A meeting to present the scheme to professionals was held at the cultural centre.

In Porto-Vecchio, this service was very well received by professionals in the sector during the trial period. Forty-nine establishments have already joined the scheme, and specific containers are collected daily. Collection is currently limited to the city centre, the navy, the 4 roads district and the immediate outskirts of the city but could be extended in the future. Ten tonnes of glass have already been sent to a recycling plant (in Béziers).

The non-profit association DEFI, is part of a social and solidarity economy. It is already operating successfully in the Ajaccio community of communes and the project has been taken over by the town of Antibes. Indeed, for the past nine years, DEFI has been involved in the collection of glass from the Ajaccio region. This integration project currently employs five people who go door-to-door in 180 establishments - hotels, bars, and restaurants - in the Ajaccio region to collect the glass and group it in containers located near the railway station. The Capa (urban community in the Ajaccio region) then sends it to the mainland for treating.

Since its existence, DEFI has enabled more than twenty people in difficulty to find short-term employment within this structure. Of the five people employed, two are on permanent contracts. These contracts give these employees, who are sometimes far from the world of work, the opportunity to regain their self-confidence.

Background:

- Responding to the ecological and economic challenge of sorting
- Collective mobilisation to make the best use of all the waste management tools set up in the micro-region
- Development of local employment through this integration workshop-workcamp.
- Accompanying people who encounter difficulties with vocational integration/reintegration into employment.

Dissemination:

To enable this workshop-workshop, which does not seek to make a profit, but simply to balance its operating budget, to carry out a sustainable action, partnerships and grants are numerous. These include: the Capa, the State through the Directorate of Labour, the Ademe (Agency for Development, Environment and Energy Management), Secours Catholique, the Corsican Environment Office, as well as the staff of cafés, hotels, and restaurants.

The association's objective is to perpetuate and extend its actions throughout the island's territory.

Results

- Implementation of an action acting for the environment, developing a solidarity economy and participating in the synergy of local actors
- Raise awareness to eco citizenship
- In the region of Ajaccio, DEFI has collected in 2011 more than 375 tons.
- Upon the end of the workshop, the reintegration rate is 80%.

Maison de l'emploi: Ressourcerie CAPA : communauté d'agglomération – Emploi vert**Summary**

In order to reduce the volume of waste while promoting sustainable development that will bring progress to the region, the CAPA (Communauté d'Agglomération du Pays Ajaccien) conducted a technical feasibility study to test various prevention, sorting and recovery actions.

Favouring the creation of a resource centre, CAPA wanted to ensure that environmental, social and economic concerns were taken into account, in the interests of good governance.

Under the aegis of CAPA, the MDE - Maison de l'emploi d'Ajaccio et du Pays Ajaccien - has thus created a local resource centre and waste recycling plant. This initiative was awarded the 2012 Social Innovation Prize for its project "Ressours'Innov; innovating for social resourcing" for networking integration players around the recovery centre CAPA project.

The Maison de l'emploi has worked in partnership with the ARACT (Regional Association for Working Conditions) and the CRESS, to structure, coordinate, train and support the structures of Integration through Economic Activity in the co-construction of a resource/recycling centre on the territory of

the Communauté d'Agglomération du pays Ajaccien, which wished to become heavily involved in a project to create such an establishment.

Indeed, this channel for collecting, treating, and managing reusable waste is a sustainable development tool that is built in partnership with local authorities and public authorities, and which integrates the 3Rs concept (Reduce, Reuse and Recycle waste). The result is a professional channel for the collection, treatment, and management of reusable waste.

The Maison de l'emploi has worked to network the players in the field and mobilise them to develop their activities. The challenge is to build on the structures and players already present, strengthen and support them, without adding an additional player to the local fabric. Through this project, we find the added value of the partnership built since 2006 around the Maison de l'Emploi, a real territorial engineering tool.

The CAPA Recovery Centre collects items that people wish to dispose of for repair and resale on a non-profit basis. Its relationship with the users of the waste collection service and its clients allows for social ties to be forged, solidarity to be created and exchanges to be held on social and environmental concerns. Animations and documents on waste reduction are regularly produced and distributed by the recovery centre staff.

Thus, this eco-citizen tool is used to fight against waste, as waste is given a second life. It encourages the reuse of used clothing, extends the life of capital goods by repairing, donating, exchanging or acquiring second-hand products by reducing the production of waste by about 3.6 kg, per year and per inhabitant. Beyond that, the resource centre makes it possible to develop a solidarity-based economy by promoting eco-citizenship awareness-raising initiatives.

Objectives

- Collecting and recovering waste to resell objects of reuse (user clothing, capital goods) at low prices
- Raising public awareness of eco-citizen actions to reduce waste (choice of consumption, maintenance of objects, second-life products, sorting, etc.)
- Building social bonds
- Developing a solidarity economy / creating and activating new solidarities
- Fighting waste by extending the life of objects
- Reducing the overall production of waste and related materials

Results

- Implementation of an action acting for the environment, developing a solidarity-based economy and cooperating transparently with everyone
- Raising Awareness of Eco-citizenship
- Development, in the daily life of households, of the concept of "second life" of everyday objects; development of new reflexes of "consum'action" around giving, exchange, "second-hand product"
- 2012 Social Innovation Award for this project : « Ressources'Innov ; innover pour se ressourcer

socialement»

- Networking of those involved in integration around the recycling/recovery project

Dissemination

- Improving the management of waste from economic activity
- Encouraging major retailers to recycle 10% of their WEEE (Waste Electrical and Electronic Equipment).
- Develop the network of mobile waste collection centres and communicate on existing recycling channels.

GREECE (IASIS & MCE):

1.EcoVillages (Ecological villages) in Greece → <https://ecovillagegreece.wordpress.com/>

The EcoVillages in Greece were developed quite late, compared to other countries around the world. In 2006, the Greek areas of Evia, Larissa and Pelion became the first successful efforts to create ecological and sustainable settlements. An example of an EcoVillage is the one of Anavra in Magnesia (Central Greece). This village succeeded, after systematic effort, not only to stand up, but also to become a model of growth.. With percentage zero unemployment and with an average age of 40 years, the population doubled within the last 15 years. The infrastructure of the settlement is exemplary (newsbomb.gr, 2013):

- Wind farm with 20 wind turbines,
- Three winter parks, where 25,000 animals are being housed during the winter (when the village is excluded because of the snow) 25,000 animals.
- A modern slaughterhouse.
- Two-floor car park of 60 seats.
- Fitness center with the latest technology.
- Football and basketball courts.

Anavra has evolved into a model eco-rural settlement, being Greece's first settlement that fully covers its needs for energy through renewable energy sources. At the same time, the standard of living of the residents is one of the highest in Greece and is one of the few mountainous rural villages of Greece whose population is increasing (Manessi, 2015).

2.Wind Farms in Greece → Source: Wikipedia:

https://en.wikipedia.org/wiki/Wind_power_in_Greece

https://el.wikipedia.org/wiki/%CE%91%CE%B9%CE%BF%CE%BB%CE%B9%CE%BA%CE%AE_%CE%B5%CE%BD%CE%AD%CF%81%CE%B3%CE%B5%CE%B9%CE%B1%CE%97_%CE%BA%CE%B1%CF%84%

[CE%AC%CF%83%CF%84%CE%B1%CF%83%CE%B7 %CF%83%CF%84%CE%B7%CE%BD %CE%95%CE%BB%CE%BB%CE%AC%CE%B4%CE%B1](#) (Greek Wikipedia)

Greece is a country with a large coastline and huge islands. As a result, strong winds mainly affecting island and coastal areas give particular importance to the development of wind energy in the country. The exploitable wind potential is estimated to represent 13.6% of the country's total electricity needs. Greece has extremely rich wind potential in several areas of Crete, of the Peloponnese and the Aegean islands. In these areas there are also more wind parks (wind turbine arrays). The wind farms are designed in such a way, in order to coexist harmoniously with the landscape of each region. The technology of wind turbines has made their operation virtually silent.

Wind parks also exist in a number of islands, such as the *Manolati-Xerolimba Wind Park* in the island of Kefallinia. Two more wind farms have already been created on the same island: the *Agia Dynati Wind Park* and the *Imerovigli Wind Park* at the administrative boundaries of the Municipalities of Argostoli and Pylareon. With the operation of the three wind farms, the Prefecture of Kefallinia supplies the country's electricity grid with a total of 75.6 MW of electricity. In addition, five more plants are in the licensing process. The island's electricity and peak demand (August) is 50MW. The correspondence between the power that Kefallinia gives to the grid and the power it consumes is extremely encouraging for the spread of wind power and many more islands in the territory.

Table: Wind Energy Capacity (MW) in Greece

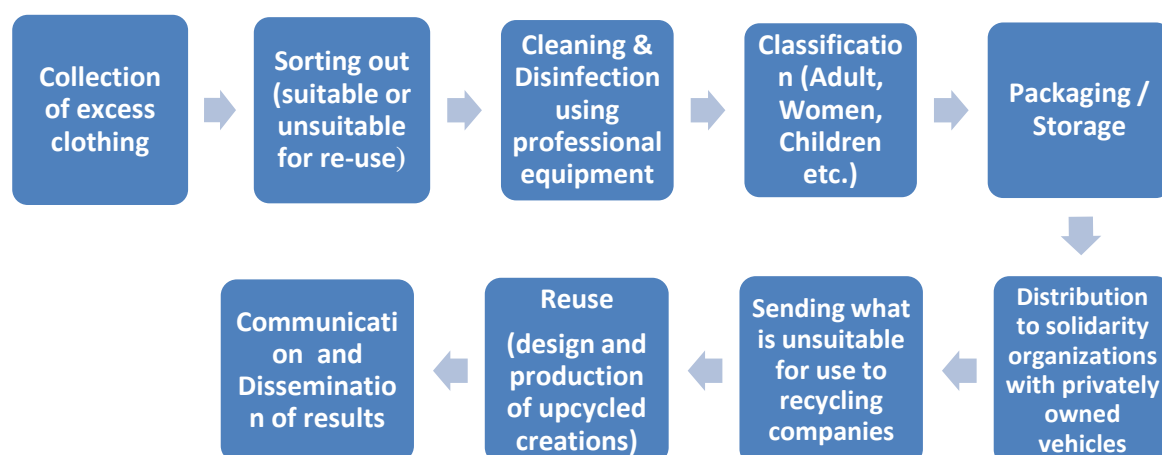
<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
985	1,087	1,208	1,634	1,749	1,865	1,980	2,135	2,374	2,651	2,844

(Source: EWEA Staff, 2017)

3.Fabric Republic → <http://www.fabricrepublic.gr/en/>

Fabric Republic is an innovative clothing management system, which is focused mainly on today's social needs, sustainability and sustainable development. Most specifically, Fabric Republic is an integrated clothing management system. However, many people wonder; What does an integrated

clothing management system mean? Further down, an illustrated diagram of the process of recycling and re-using clothes is available.



The organization's aim is the optimization and modernization of cyclical management of excess clothing. Moreover, their vision is the collective development of social and ecological consciousness for a Zero Waste reality. Fabric Republic offers significant and multiple benefits to the environment and, of course, to the society. First of all, there is an active contribution to the social economy of clothing. There has also been noticed, through the organisation's actions, a significant decongesting of the waste system and, also, an important reduce the overuse of natural resources. Let's also not forget the assistance Fabric Republic offers to the society. Some major examples are the donation of clean clothing to other solidarity organizations, the employment of socially vulnerable people through the Housing and Reintegration Program of Fabric Republic and, of course, the raising awareness activities and campaigns of the public.

The first year's results of Fabric Republic's actions were amazing. Firstly, 12,937 kg were offered to recycling companies. Furthermore, 21,252kg were offered to solidarity organizations all around Athens. Finally, the beneficiaries of this initiative are estimated to be more than 25,000 and the lower emissions of CO2 are calculated to be approximately 150,000kg.

4.Solar water heaters → https://en.wikipedia.org/wiki/Solar_water_heating#Mediterranean

One important contribution to the environment and energy saving efforts is the use of solar water heaters by the 30%-40% of the Greek households. Greece is the third country in Europe and the ninth in the world, regarding the regular use of solar thermal power. Statistics show that if Greece did not have a large number of solar water heaters, it would be needed to cover the solar energy that offers a 500MegaWatt power station. More specifically, the installed solar water heaters have already saved 1.1 billion kWh, as much as a conventional 200MegaWatt power plant. Without the solar water heaters, there would be a significant power shortage, especially in isolated Greek islands, where the electricity faces frequent power outages, especially during the summer touristic season.

In addition, a solar water heater emits one ton of carbon dioxide per year. It may - as has been said - be a rather unsightly installation on roofs and rooftops, but at the same time it is a true proof of ecological consciousness as thousands of Greeks have preferred it.

So, in Greece, a country where it is sunny most of the year, the solar water heaters are quite valuable, as they produce renewable energy in large quantities without damaging the environment.

5. "Together We All Can" Movement (Oli Mazi Boroume) → <http://www.oloimaziboroume.gr/>

Since 2011 "Together We All Can" is a movement that, since 2011, plans and implements actions, which cover a wide range of areas, including the environment. The movement began in continuation to a big campaign about social issues and the environment, supported by the Greek Television Channel SKAI. Today, Channel SKAI is also the main supporter of the movement and advertises its activities and demonstrations. The movement is also in a constant communication with the citizens, through its social media accounts, where it seems to be active, as it has a YouTube Channel, Twitter and a Facebook page.

The movement, thanks to the thousands of the volunteer that participate in these actions, organizes environmental protection activities, such as tree planting, irrigation and cleaning. The goal of "Together We All Can" is to continue the effort for social and environmental development and to foster a spirit of teamwork, so that all the citizens can continue to work together. "Together We All Can" has also made significant steps towards the raising of the public's awareness, since:

- In 2013 and 2014, 580 forest protection volunteers applied to help at the "We Can All, Together" activities.
- The volunteers of "Together We All Can" have planted 2,800,700 trees since 1989, when SKAI started organizing such kinds of operations.

Moreover, the movement frequently invites various Greek celebrities, in order to further raise the awareness of the public and persuade citizens to take part in environmental protection activities. For example, in March 2019, Sakis Rouvas, a famous Greek singer, participated at the student's tree planting activities, where he planted 8,000 small trees with students. The area that was reforested had been destroyed by fires in the summer of 1995 and 1998 and no natural regeneration was possible.

ITALY (ENAIIP):

Fridays For Future ITALIA www.fridaysforfutureitalia.it/

Fridays For Future is a global movement that recognizes the Climate Emergency and requires a safe path to stay below + 1.5°C. The requests are summarized by the acronym: FU.TU.RO!

Publish a newsletter, have a blog and work on social networks:

Instagram - @fridaysforfutureitalia; Facebook - Fridays For Future Italia; Twitter - @fffitalia; YouTube - Fridays For Future Italia; Telegram - @fffitalia; Spotify - Playlist For Future
It has a radio channel: the Voice of Fridays For Future aired every last Friday of the month at 10 and 14 on the frequencies of LifeGate Radio!

Kallipolis <https://kallipolis.net/>

Kallipolis is a social promotion association with legal personality. Born in 2006 to improve the livability of human settlements both in Italy and abroad, with particular attention to transition and developing countries, Kallipolis recognizes itself in the United Nations Habitat Agenda goals. The association puts the most vulnerable groups at the centre of its attention, betting on the ability of urban environments, which are already the engine of the planet's development, to also become spaces of freedom and equity. Kallipolis, through his work, wants to help build cities:

- INCLUSIVE: accessible to all and attentive to the most vulnerable;
- GREEN: committed to reducing the environmental impact of the human activities that are generated in them (waste, transport, energy production, consumption of resources);
- HEALTHY: that allows every citizen to be able to lead a healthy and safe lifestyle;
- ATTRACTIONS: that can offer job, culture and training opportunities for everyone;
- PARTICIPATE: able to listen to the needs of its inhabitants and to build answers with them;
- RESPONSIBLE: careful to preserve resources and opportunities for future generations;
- RESILIENT: ready to face the consequences of climate change.

Legambiente FVG www.legambientefvg.it/

Legambiente Friuli Venezia Giulia is based in Udine and was born in the late 80s. It is an association for social promotion (APS) which joins Legambiente Nazionale, the most widespread Italian environmental association; and it is present with 11 territorial circles covering a large part of our region. It works to foster an eco-compatible development model based on a balanced relationship between man and nature and the sustainable use of natural and human resources, promoting lifestyles and political choices based on the protection of human health, biodiversity, the territory and the landscape.

BELGIUM (UNESSA):



<https://www.reseautransition.be/>



Le Portage Salarial



“A movement of citizens who come together to imagine and build the world of tomorrow.”

There are more than 100 Transition initiatives in French-speaking Belgium. Launched in 2006, the movement supports these citizens to help them meet the major challenges they face, starting at the local level. By coming together, citizens are able to propose new innovative solutions, share them and improve them collectively. Based on the observation that we must act quickly, without waiting for governments to finally come to an agreement and take action, a first group of citizens was created in 2006 in Totnes in Great Britain on the initiative of Rob Hopkins, a permaculture trainer. The project was a great success and the movement quickly spread around the world. Today, there are more than 4,000 Transition initiatives in more than 51 countries, including Belgium.

Different actions can be carried out depending on the needs of local groups. For example, there are activities about urban agriculture, workshops about how to reduce our own carbon footprint, local consumption and local economy, eco-village project, support network, ...

KLIMAATZAAK



L'AFFAIRE CLIMAT <https://affaire-climat.be/>

In 2014, a group of 11 concerned citizens decided to act against the inadequate Belgian climate policy. They thus created a non-profit association and initiated legal proceedings against the competent authorities. Subject of the lawsuit: to remind Belgium of its responsibility in the fight against global warming. Since then, 58,586 concerned Belgians have already joined the action and have become co-applicants.

The non-profit wishes to condemn the governments for negligent climate policy. They require a reduction in greenhouse gas emissions on Belgian territory by at least 42 to 48% in 2025 and by at least 55 to 65% in 2030, each time compared to the year of 1990 reference. In 2050, zero emissions must be a reality. Indeed, science recognizes that these reduction percentages are necessary to avoid dangerous global warming of + 1.5 ° C.

the dispersal between regions and the federal state of environmental jurisdiction has often been an excuse for inaction. The judiciary could compel this cooperation. It has already been 6 years of legal actions and procedures. Even if the conclusions are not yet those desired by the Climate Case, these remedies make it possible to control "political time". The citizens are directly involved, the press relays these questions. Politicians cannot ignore the issue. Legal action puts the climate and the environment at the forefront of the political debate.



<https://youthforclimate.be/fr/>

The Youth For Climate movement is a movement built around the mode of action of the school climate strike. It is part of a dynamic and international movement of middle and high school students leaving their school on Fridays or Thursdays to take part in demonstrations in favour of action against global warming. The school's first climate strike was launched by Greta Thunberg on August 20, 2018 in front of the Riksdag (Swedish Parliament).

The movement started in Belgium in January 2019 at the initiative of Anuna De Wever and Kyra Gantois, two Flemish students. The movement quickly gained momentum, the first Thursday there were 3000 students in Brussels, 12,000 the following Thursday and 35,000 the following Thursday. The protests took place every Thursday for 20 weeks and spread to many other cities across the country.



<https://www.callup.be/>

Call up is a collaborative platform for citizen and transition projects. This makes it easier to meet around citizen projects. There are more than 100 projects gathered in the platform. There are transition projects about art, agriculture and permaculture, renewable energy, health and nutrition, eco-tourism, education, local currency, collective gardens, transport, zero waste, grouped housing,

...

4. Existing training materials, in each country, on the theme of the project.

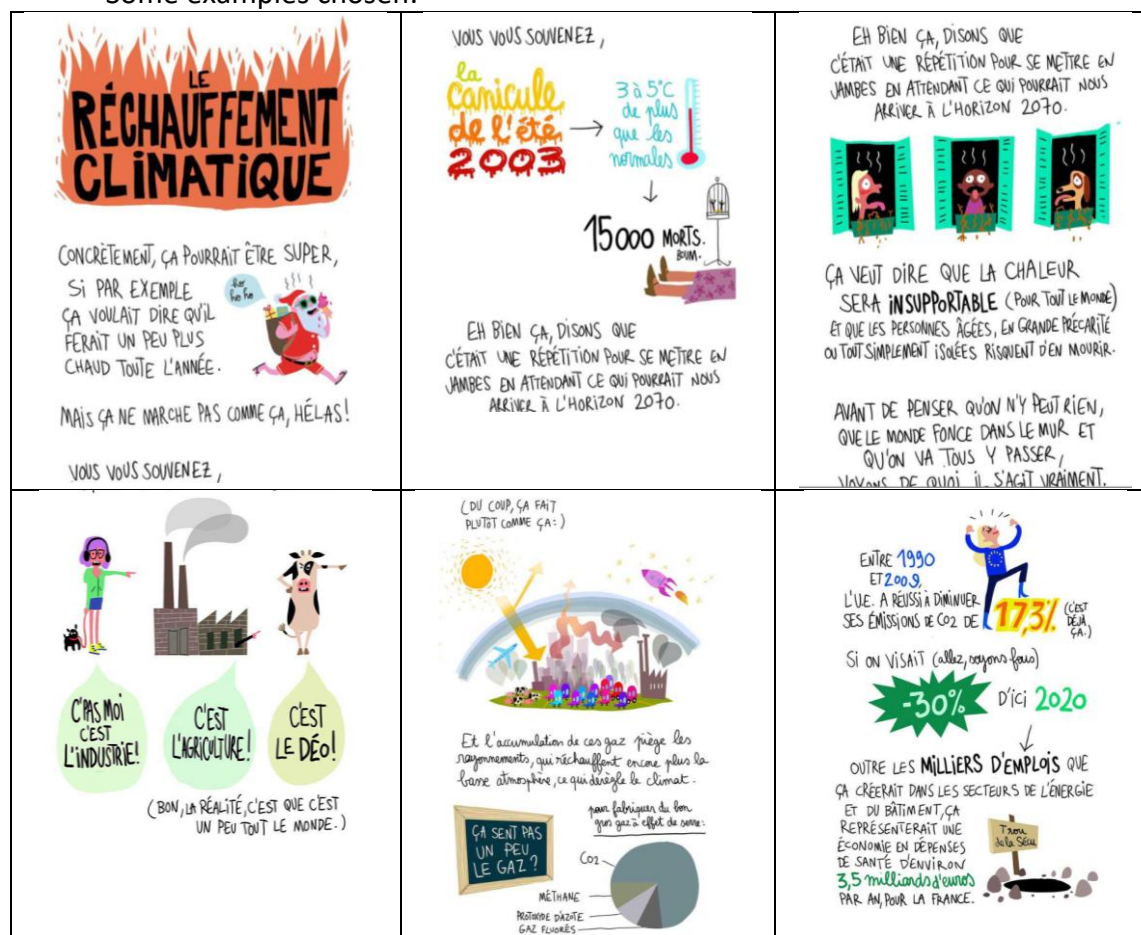
FRANCE (ITG):

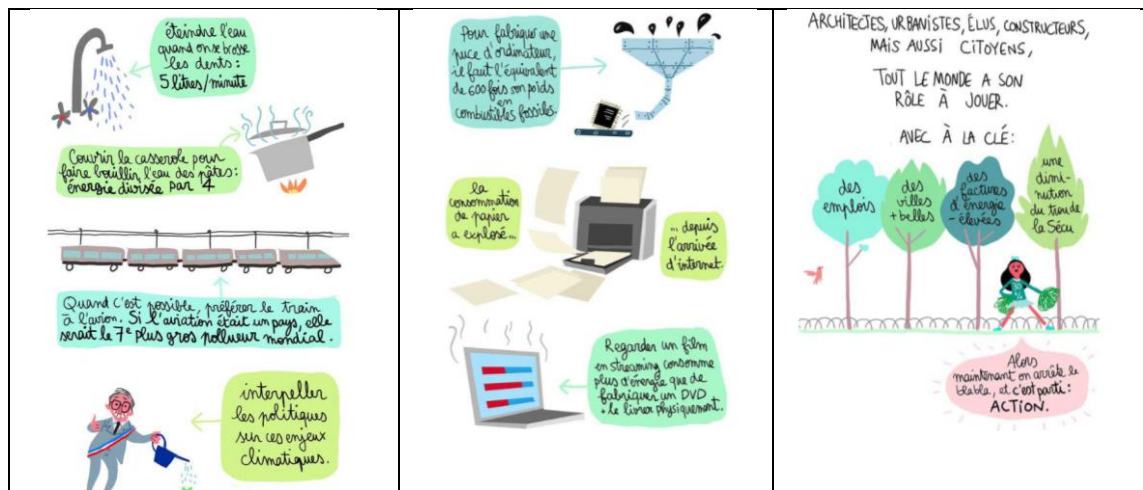
In France, there are already many supports, of all forms, about climate. Here are some examples particularly chosen in the context of the study of this European project:

a) Des bandes dessinées issus d'une initiative de la Région Ile de France et sur le dérèglement climatique :

<https://www.institutparisregion.fr/environnement/changement-climatique/comprendre-le-changement-climatique-en-2-min.html>

Some examples chosen:





b) Video materials as educational resources for categories of young people and young adults



<http://www.iau-idf.fr/savoir-faire/nos-travaux/environnement/changement-climatique/comprendre-le-changement-climatique-en-2-mn.html>

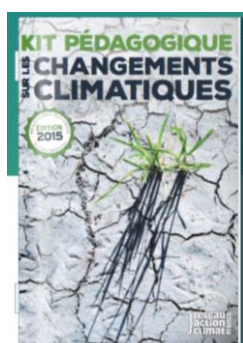
http://www.francetvinfo.fr/meteo/climat/video-rechauffement-climatique-a-quoi-ressemblera-la-meteo-en-2050_764845.htm

c) Training kits for school students in the form of 12 challenges and games to combat global warming accompanied by a quiz on learning simple everyday gestures, to share with family or in class : some examples:

Source : <https://www.maif.fr/files/live/sites/maif-fr/files/pdf/particuliers/services-au-quotidien/solutions-educatives/stop-au-rechauffement.pdf>



d) **Training materials** ([Climate Action Network Association](https://reseauactionclimat.org/association/)) such as a Climate Change Educational Kit is a turnkey awareness and training tool on major climate issues.



<https://reseauactionclimat.org/association/>

e) **Action sheets/recommendations** (source : [ADEME](https://www.ademe.fr/etude-acteurs-francais-ladaptation-changement-climatique-a-linternational)) : <https://www.ademe.fr/etude-acteurs-francais-ladaptation-changement-climatique-a-linternational>

	<p>Documents to download</p> <ul style="list-style-type: none"> - recueil-fiches-actions acteurs-adaptation ademe-afd-onerc.pdf (PDF — 12.59 Mo — 19/09/2019) - rapport-etude-acteurs-francais-adaptation-international-2019.pdf (PDF — 6.07 Mo — 19/09/2019) - synthese-etude-acteurs-francais-adaptation-international-2019.pdf (PDF — 720.91 Ko — 19/09/2019)
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CORSICA (IFRTS):

At a regional and local level, training programmes are built and disseminated in the territory. They are in the Agenda 21 training manuals to be found on the OEC website. (https://www.oec.corsica/Guida-di-i-mistieri-e-di-e-furmazione-di-l-Ecunomia-Verde_a8.html)

We provide the principles and logiques of it.

Training is an integral and important part of the Corsica 21 strategy. This component must provide all stakeholders with the keys enabling them to implement and pursue the operational objectives of the approach undertaken.

With this in mind, the implementation of "Corsica 21 training" actions supports and complements the various existing systems in the region, which are never in competition with each other.

The Corsican Environment Office and the regional delegation of the CNFPT have concluded an agreement of objectives and means, covering the period 2011/2015, setting the basis for reciprocal relations between the two structures. This agreement, through the cross-fertilisation of areas of expertise in Sustainable Development, training and network dynamics, has made it possible in particular to consolidate the environmental skills of local civil servants and to place the CNFPT's regional delegation in an approach resolutely oriented towards Sustainable Development.

This rapprochement has been formalised around an action plan validated in February 2011, based on 5 priorities:

1. Reduce the trainees and the staff travels by relying on the territorialisation.
2. Promote the dissemination of the concept of Sustainable Development in the content of training services.
3. Support territorial civil agents to become agents of Sustainable Development.
4. Contribute to making the CNFPT a model of eco-responsible establishment.

The Corsica 21 trainings

They will complement the actions already initiated in the framework of this convention, and in support of the current offer of the CNFPT and other training organisations. They can be broken down into 3 distinct segments, relating to the nature of the target audiences and the differentiated objectives:

1. « **Corsica 21** » project **engineering training courses** addressed to the stakeholders of each micro regional agenda 21. This first block of training aims on one hand to provide the strategic keys for a good implementation of the microregional project, and in another hand to identify good practices to be duplicated in its territory, through the following modules:
 - Implement a micro regional Agenda 21.
 - Communicate on its Agenda 21.
 - Set up a sorting squad in its territory.

- Uniting around its approach and forging partnerships.
2. Trainings **addressed to the agents** of the local communities, offices and agencies, in order to train agents to large orientations of the Corsica 21 approach on the specific themes, identified as priorities. This segment refers on the one hand to the roadmap of the Sustainable Development Strategy of the Corsican Regional Authority (April 2011), and more particularly to the objective of setting up an "Environmental Management System". On the other hand, it must guarantee the proper implementation of the objectives of aid conditionality.
 - Set up an Environmental Management System in its organization.
 - Integrate the criteria of the sustainability in the public procurement.
 - Integrate the criteria of conditionality in the public grants.
 3. **Local training courses**, set up to the scale of micro regional Agenda, allowing to support the social and economic actors of each territory, and to make them aware of good environmental practices:
 - Meeting the cross-compliance criteria for aid.
 - Manage the industrial waste.
 - Manage the waste and the worksites nuisances.
 - Control the energy consumption in company.

Engineering courses "Regional Micro Agendas "

- Supporting the implementation of micro-regional agendas.
- Ensuring compliance with the guidelines of Corsica 21.
- Ensuring the launch of a first action: creating a SORTING squad on its territory.
- Uniting and creating partnerships: **Example of the social workers**

Achieving the objectives of the Corsica 21 guidelines requires the involvement of the widest possible panel of players, primarily made up of pre-existing and recognised players in the various territories. In this spirit, it is important to raise the awareness of the actors of the micro-regional Agendas 21 of the importance of mobilising actors from the associative world, who have often been the figureheads of awareness-raising and education initiatives on good environmental and sustainable practices (particularly among young people).

Public of the training:

- Actors of the micro regional Agenda 21.
- Elected representatives of communities of communes and town halls.

Objectives:

- Identify relays and create ambassadors of the Corsica 21 approach.
- Create a social animation around the Corsica 21 approach.
- Support initiatives from the associative sector.
- Benefit from the expertise and feedback of actors and pre-existing structures.

- Disseminate information and raise awareness among the largest possible number of people.
- Implement original and innovative actions.

The example of social workers:

Climate change is now becoming a scientific reality that requires the deep involvement of public and local authorities in the implementation of prevention and awareness actions for the most vulnerable populations. All territories are affected by this climate change, but in an unequal and disparate manner, both in terms of the nature of emerging risks and the frequency of events reflecting this trend. If this phenomenon is general, a micro-regional approach of the risks linked to climate change is needed, given the plurality of geographical, topographical, and environmental characteristics of the different territories of Corsica. One of the operational translations of the responses to be provided in this area is the application of the conclusions of Corsica Vint'Unu and its micro-regional variations. Nevertheless, the ambition of such a strategy must take into account all the economic and social contours of the territories, by working in particular to deploy prevention and awareness-raising actions for the most vulnerable people in terms of risks linked to climate change, including the elderly and/or people with reduced mobility.

In this perspective of projection, it is essential to identify a local actor with a privileged and long-lasting relationship with the populations concerned, and able to play a role as a "relay" for these populations, which are often geographically dispersed or even isolated. Social workers prove to be an interesting lever in this respect because of their local and micro-regional roots, but also because of the special relationships they can maintain with these populations.

In this sense, the guidelines resulting from COP 21 in December 2015, underline "the considerable role that social workers have to play in driving projects for disaster victims and survivors of climate change, including those affected by drought, floods, heat waves or cold snaps and the implementation of research for climate change mitigation, adaptation and risk reduction ».

The role of social work professionals is also crucial for taking greater account of the situation of exposure of vulnerable people in terms of risk anticipation and prevention, to support individuals and groups in post-event management, both individual and collective, or to provide support in conjunction with other disaster or crisis relief actors,

Social work can play an important role in disseminating the actions and objectives of Corsica Vint'Unu in the deepest strata of Corsican society and among those most vulnerable to climate change and the violent natural events induced by these changes. The issues raised by climate change have their place in social work training programmes to promote a fairer and more sustainable society. With this in mind, we will identify 3 main objectives related to this approach:

- *Involve social workers in the prevention and climate change action politics.*

- *Raise awareness and train social workers on good practices in translating sustainable development into responsible and eco-sustainable professional practices.*
- *Train these same workers to raise public awareness of eco-gestures and good practices in terms of sustainable development (waste treatment, energy management, etc ...).*

Programme:

- Federating energies around its micro-regional agenda.
- Identify the potential partners and their interests in the approach: expertise sources, cross-fertilization, social innovation, operational levers.
- How to set up a partnership, co-act and make an agreement.

Learning method:

- Good Practices.
- Feedback.

Duration: 1 day

Operational training "Environmental management system "

- Train the agents of the communities, agencies, and offices to the principle of conditionality of the grant.
- Train staff to the set-up of environmental management system.
- Create agencies, offices and communities of key elements of the Corsica 21 approach

Local training courses for socio-professionals

- Raise awareness and train economic actors of the territories with challenges, orientations and requirements of the micro regional agendas.
- Train and support island companies to the principles of conditionality and to the response to the new requirements of the tenders.

GREECE (IASIS & MCE):

Unfortunately, in Greece there are not so many training programs or materials addressed to adults, and especially to social workers. So, the need of developing a training course about this issue is at the utmost importance. Further down, there will be mentioned some of the existing training programs in Greece, which are either addressed to professionals or to students.

1. ClimAlt: Let's build Plan B!

ClimAlt is a free online course for young people between 18 and 30 years who are interested in environmental and climate issues (proven by educational, professional or environmental activism experiences). It consists of a 32-hour e-learning course - available from 25 November 2019 until 25 February 2020 - and a thematic supplement to the course in March 2020. The e-learning course consists of 3 main chapters (Causes-Impacts-Alternatives) divided into 7 sections and 14 lectures. Each section includes video lectures (10 hours), quizzes, readings and a task for each chapter.

2. Training programs for students and teachers in "Stavros Niarhos Foundation"

The "Stavros Niarhos Foundation" in Athens offers a variety of experiential training programs, regarding the environment, at its Cultural Centre in the South Area of the city. One of them is the program called "The climate is changing", which is addressed to high school students.

Students visiting the Stavros Niarhos Foundation's Meteorological Station are involved in meteorological experiments and observations, through special VR glasses, in order to find out how humans have influenced the climate globally and locally, and how the use of renewable sources of energy has evolved. The purpose of the training program is to familiarize students with the principles of bioclimatic planning and to raise their awareness, regarding the protection of the environment around us.

3. Climate Action by Mediterranean S.O.S. organisation

The environmental organisation "Mediterranean S.O.S." offers on its website online a complete training package for "Climate Action". The educational package includes Worksheets and Information Sheets for the students and young people and Information Materials for the educators and teachers.

4. Training Program on Energy and Climate Change

The material "Environmental Education in Primary School" was published in 1995 by the WWF Greece and the Bodosaki Foundation. It is one of the first materials released in Greece and has substantially influenced the course of Environmental Education in our country. Twelve years after the material was updated and this edition includes since today some more up-to-date environmental information. The issues addressed are: Soil, Climate Change, Water, Sea, Forest, Agro-ecosystems, Air,

Biodiversity. The material includes informative texts about the teacher and 150 pedagogical activities.

5. "TAKE IT" (2019-1-BE01-KA204-050400)

This European environmental project aims to empower individuals, enhance voluntary action, and help people understand climate change and take the necessary steps to adopt tactics related to the environment and its protection. In addition, the Take It program, which involves 9 countries (Greece, Ireland, Cyprus, United Kingdom, Romania, Spain, Portugal, Belgium, Italy) aims to create an educational guide to raise society awareness on environmental issues, which will be distributed also in organisations all over Greece.

Therefore, the main objectives of the program are:

- Create an educational guide to raise awareness and mobilize the individuals.
- Create good practices that can be applied within social services to promote awareness on climate change and the overall adverse effects of the human factor on the environment.

6. LIFE-IP AdaptInGR – Boosting the implementation of adaptation policy across Greece

The integrated project «LIFE-IP AdaptInGR - Boosting the implementation of adaptation policy across Greece» is a project supported by the EU programme LIFE on how to adapt Greece to climate change.

The project aims to catalyse the implementation of the Greek National Adaptation Strategy and of the 13 Regional Adaptation Action Plans at the current 1st adaptation policy cycle (2016-2025) and to prepare the passage to the 2nd adaptation policy cycle (2026+), through appropriate action at national, regional and local levels.

It seeks among other objective to:

- build the capacity of public authorities mandated to plan and deliver adaptation actions and policies,
- develop pilot adaptation projects in 3 Regions and 5 Municipalities in priority adaptation sectors (flood risk management, coastal zone management, forest fire protection in drought-prone areas, sustainable water management, land-use planning and regeneration),
- raise public and stakeholders awareness of climate change adaptation,
- disseminate good practice examples across Greece, Eastern Mediterranean and European Union,

This project can then provide Social&Nature with some interesting development in Greece.

<https://www.adaptivegreece.gr/>

7. CLICK FOR SCHOOLS

The project Cli.c.k for schools offers an educational kit dedicated to climate change in the Euro-Mediterranean region for children aged 11-15 and their teachers. The approach is multidisciplinary and multicultural, it is based on a partnership that mobilizes schools and organizations specialized in environmental education to facilitate direct and free access to educational resources.

Through a series of resource sheets, activity sheets and an interactive game, this educational kit available also in Greek aims to:

- provide teachers with adequate resources for understanding climate phenomena and issues in the Mediterranean region
- encourage the local involvement of students and their international openness
- bring interactive resources.

The Mediterranean Centre of Environment was part of this project, carried out by 4 educational partners and 4 Italian, Greek, Croatian and French associative partners. It was supported by the European Union's ERASMUS + program.

<https://www.clickforschools.eu/>

ITALY (ENAIIP):

In Italy, there is a lot of information material on the project issues, while training courses devoted to the target have not been carried out by now.

By five years, all the training activities financed by the European Social Fund have been including a short module on sustainability, between 4 and 8 hours of classroom. Sustainability, together with Equal opportunities, is assessed within the funded projects, in compliance with the so-called Horizontal Principles.

ARPA

Arpa FVG school for the environment annually organizes 12 courses on the environmental issues of greatest interest. The School's proposals are devoted to public administration staff, professional and professional associations and anyone interested in deepening and improving their knowledge of environmental issues and sustainability processes.

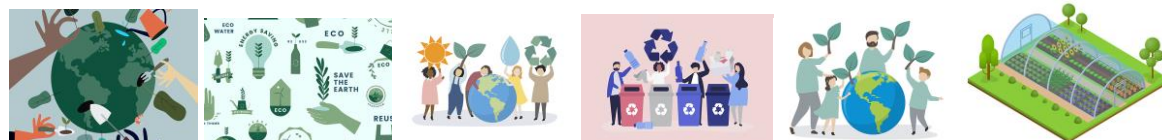
CeVI

For years, CeVI has periodically offered refresher courses for teachers and educators created in presence in Udine and online, which are recognized by the Training System for Training and Teacher Updating Initiatives - SOFIA. The methodology used is mainly based on learning by doing (for example group work, experimentation, participatory learning) where teachers are accompanied to co-design learning paths for their students. Besides, an educational kit is developed and shared to guide and facilitate the work that teachers and educators can carry out independently in the classes involved in

the project. The main topics: migration, climate change and sustainable development specifically how to decrease the environmental impact through the sustainable use of natural resources while at the same time connecting the educational processes of the school with global aspects and local institutional initiatives.

EnAIP FVG

EnAIP FVG has produced over 40 webinars on the topic, within the InreteFVG project (<http://www.inretefvg.it/>), which are now also accessible from the platform of the training Agency (enaipschool.com). Among the titles: "The circular bio-economy"; "Quality and sustainability of agri-food products"; "Sustainable food styles: vegetarianism, veganism and fruitarianism"; "Greenhouse bioproduction in Europe: intensive or agri-ecological approach?"; "Innovation and organic production: crop diversification in organic horticulture"; "The efficient use of water resources in construction"; "Less waste with Green Packaging: ideas, innovative technologies and cases of excellence"; "Sustainable tourism: cycling tourism"; "Economic and environmental advantages in choosing wood as a construction material".



LaREA

The laboratory for environmental education and sustainable development in Friuli Venezia Giulia (LaREA) annually offers educational workshops for primary school children and secondary schools. The 60 workshops planned for the year 2019/20 had it for the theme "Circular nature: mimesis and resource regeneration".

Rural Development Plan Project (PSR) – CeFAP

A temporary association, led by CEFAP, the centre for lifelong learning in agriculture and ENAIP, among the main partners, has organized a "Training catalogue of rural development" to promote the transfer of knowledge and innovation in the agricultural and forestry sector and rural areas. The aim is to encourage the acquisition of technical, managerial, environmental knowledge and the introduction of innovative and sustainable processes, with particular concern to the agricultural, agri-food and forestry operators, as well as young people settling for the first time in an agricultural enterprise. The training catalogue is based on 45 courses belonging to 8 thematic areas. The courses are held in the regional territory, in the period December 2017 - December 2020.

UNIUD- University of Udine

The University of Udine, through some researchers, joins the RUS (Network of Universities for Sustainable Development), promoted by CRUI (Conference of Rectors of Italian Universities) in 2015, a network of universities that seek to spread culture and actions of sustainability inside and outside of the same, promoting and contributing to the achievement of the objectives of Sustainable Development.

Among the actions, the annual organization of the Festival of Sustainable Development, promoted by ASviS, the Italian Alliance for Sustainable Development, which has the task of realizing the awareness of the importance of the 2030 Agenda and the 17 objectives of sustainable development. The 2020 edition, due to the Coronavirus emergency, was held in virtual mode, on the Webex platform made available by CISCO. The CSR and social innovation exhibition continue to promote moments of comparison and sharing on issues and good practices of sustainable development. The meetings and the story of sustainability from the different territories of the country, the CSR and social innovation show, were recorded in live streaming and are available.

BELGIUM (UNESSA):

There are different existing training materials in Belgium on the theme of the project. In fact, some Colleges offer a Bachelor of “sustainable development” and some Universities offer a Master of “environmental sciences and management”.

There are also other training materials more accessible to the population, offered by non-profit organizations or transition networks. Some NGO focus on specific target (children, public workers, ...)



Espace Environnement

<https://www.espace-environnement.be/>

“Espace Environnement” develops and offers training modules to municipal and territorial agents (eco-advisers, environmental advisers, land-use advisers, maintenance staff, etc.), home social workers, and childcare staff. childhood. We also train elected officials and members of local advisory committees. In a logic of transmission and increase of the skills of the actors of the living environment, the different themes and expertise developed can be declined in the form of modules or training days.

Non-profit organization offer different workshop and training in schools (some examples bellow):

- **“Ecole du climat”**: <https://ecoleduclimat.be/>

A survey of 3259 secondary 5 and 6 students found that while awareness of the climate emergency is clearly increasing among young people in Belgium, knowledge of the subject is declining. For example, almost 9 in 10 young people do not know how global warming occurs. Therefore, WWF has launched an interactive platform that prepares students to become true climate experts. All the content of the site is tailor-made for the level of the students. The playful educational tools are presented in the form of videos, quizzes, experiments to be carried out around different themes.

- **Better understand climate & development issues** (AFD, 2018). Offers for three age groups (9-11, 12-14 and 15-18 years) info sheets for students (access to education, water, agriculture and climate

change, migration and climate ...) and 1 or 2 fun and participative activities (moving quiz, forum theater, role-playing, debates ...).

- **One debate per class for the climate** (School and Nature Network, 2015). Methodological sheets to prepare and lead a debate around the climate with 8-18-year-old, using different techniques (Samoan circle, moving debate, oral jousting ...) and online resources.

- **Climate Justice case** (CNCD - 11.11.11, 2018). Brings together 18 varied tools (films, games, animations...) to tackle climate justice and threats (Drought, floods, climate refugees...) weighing on the most vulnerable countries with 16 years and over.

- **Climate education kit** (CPLC, LCFC, Profs in transition, Elyx Foundation, 2019). Proposes to mobilize, with children of 3-18 year old, through avenues of education, awareness raising to fight against global warming as well as the protection of biodiversity: display its commitment, workshops or awareness raising actions, Classes.

- **My 2050** (ed. SPF-Environment & WWF, 2016). This web tool aims to raise awareness among 15-18-year old about the challenges and the need for a transition to a low carbon society by 2050, via a simplified simulation module for emission reduction scenarios for Belgium.

Recommendations & guidelines to go further (areas or actions not yet explored) for IO.2 to IO.5.

FRANCE (ITG):

From the research and feedback of the **Focus Group in France**, the following points of recommendations can be found for the Social and Nature project, in a synthetic way.:

- **The need to raise awareness among all categories of actors:** the French case has been built slowly, after different circles of awareness: public/private, individual/group, young/adult/retired, company/association...
- **The need to involve all local territories:** countries, regions, departments, cities, neighborhoods, but also schools/businesses/networks/associations and especially families...
- **The use of all kind of multimedia media supports** to raise awareness and take action.
- **The strength of the optimist** and the refusal of resignation, to mobilize **POSITIVEMENT ALL** the actors.
- **The weight of the ADDITION of INIVIDUAL ACTIONS**, which may seem minute in the short term taken individually, but which **can be strong if taken in GROUPS and on a long term (sustainability).**

CORSICA (IFRTS):

The national context on the impacts of climate change has opened up many subjects to be addressed and is part of a strong desire for improvement on the subject by various methods declined in the regions. Agreements such as that of Grenelle on the environment have made it possible to initiate major actions in the territories. It is in this perspective that this report presents the different actions carried out within the Corsica region with operational effects in terms of practices whether they are in training, in sustainable development strategy or in social cohesion.

Agenda 21 is an illustration of this since **its territorial aims must contribute to the following recommendations:**

- **Fight climate change and protect the atmosphere.**
- **Conserve biodiversity protect environments and resources. • Foster the development of human beings.**

- **Foster social cohesion and solidarity between territories and between generations.**
- **Develop responsible production and consumption methods.**

The continuation of this project on the basis of formalized work will allow social workers to grasp the issue and participate with knowledge in the efficiency of the impacts of climate change on social, human and environmental aspects.

GREECE (IASIS & MCE):

The one and only recommendation mentioned at the Focus Group by IASIS was that they would like the training material to be translated in Greek, something that is already in accordance with the process. One recommendation would be to create an educational package in a way that it will appeal to the professionals. A way to do that is to make fun educational materials, such as quizzes or games, which have a double role; to promote active learning and also adventure learning. The same recommendation would be effective for the Learning Centre, as well. A nicely illustrated e-learning environment and with the ability to participate in learning games will provide a better way of involving in the experiencing learning and also more opportunities in reflecting on this experience afterwards.

The focus group that was conducted by the MCE consisted of 4 persons, two persons working in educational sector (professional high schools) and two experts, one in sustainable development, the other in climate change. The MCE then gathered information about the general interest of all public on climate change impacts but also on the difficulty for trainers/educators to explain to learners the complexity of the phenomenon (and to the management of this issue) and to engage learners in a real change of behavior.

In the focus groups, the participants, along with the trainer, discussed for a wide variety of issues, concerning always the training program and the environment. I would say that the main conclusions of the focus group were quite positive. All of the participants found the “Social&Nature” program really appealing, as it is in accordance with their passion about the protection of the environment.

Furthermore, the participants of the IASIS Focus Group demonstrated their need to be further trained on environmental issues and on ways of helping the vulnerable populations, that are more exposed to the negative effects of climate change. In consequence, they all found this project really useful, as it fully satisfies this need mentioned above.

They all agreed on the lack of training programs on Climate change for adults in Greece, and especially for social workers and people active on the environmental field. All these individuals, also, showed their desire to participate in other training sessions of the program “Social&Nature”, as well, and the desire to be able to have access to the “Social&Nature” Educational package and E-course, so that they can be better informed and use the tools in it. All these show the importance that this program

has for these participants and how valuable it is to them and their work with the vulnerable populations.

One of the two experts of the MCE group mentioned the present study on the state of the art regarding the implementation of the Greek National Adaptation Strategy. There is a real awareness at the national and institutional level of the importance of the issue (and the COVID19 pandemic highlight the emergency of the situation). However, there is a lack of collective and individual engagement in action on climate change mitigation and adaptation.

The IASIS group discussed about the importance of knowing and fully understanding the networks and actors, who are active in the country, region or local area, which is also one of the aims of the “Social&Nature” program. They all agreed that this is at the utmost importance, as it assists the social workers to be prepared in any extendable situation. More specifically, it helps them to know who to ask and in what way, when it comes to a natural risk.

Recommendations:

In 2019, the Greek Ministry of Environment and Energy stated that the ground for adaptation has been prepared (risks and vulnerabilities assessed, strategy developed, some projects are implemented, etc.) but that some lack are still obvious in terms of capacity building & education and training; implementation (i.e. adaptation at relevant scales, stakeholders involvement, etc.) and funding.(see:

<https://www.adaptivegreece.gr/DesktopModules/EasyDNNNews/DocumentDownload.ashx?portalid=0&moduleid=767&articleid=11&documentid=4&localeCode=en-US>)

S&N project should contribute to fulfil this gap, more specifically in the sector of social work.

- One recommendation mentioned at the Focus Group was **that they would like the training material to be translated in Greek, something that is already in accordance with the process.**
- **One other recommendation would be to create an educational package in a way that it will appeal to the professionals.**

A way to do that is:

- **to keep a simple approach of a complex phenomenon and, for that, to help social worker develop transversal competences such as critical thinking, problem-solving skills, etc. We should promote a way of thinking (how to rethink our way of living, our behavior, how to make choices, etc) more than giving specific advices.**
- **to promote learning about the causes and effects of climate change as well as possible responses, providing a multidisciplinary perspective.**

- **to make fun educational materials, such as quizzes or games, which have a double role; to promote active learning and also adventure learning.**

The same recommendation would be effective for the Learning Centre, as well. A nicely illustrated e-learning environment and with the ability to participate in learning games will provide a better way of involving in the experiencing learning and more opportunities in reflecting on this experience afterwards.

ITALY (ENAIIP):

The recommendations focus on three aspects:

- **The language to be used.** The materials must be available in Italian. The concepts to be conveyed are important but complex. E-modules written with simplicity will have to be built for non-professionals. Short sentences, with texts accompanied by many images and practical-operational indications and examples taken from the daily life of the potential recipients, should be privileged. Many of the most vulnerable subjects have low schooling, some are not Italian native speakers. An understandable and possibly pleasant and enjoyable product should be studied (This facilitates learning).
- **The medium to be used.** The online resources are precious but should be integrated with activities to be developed in the presence and with interactive materials, which allow the participants to become "protagonists" and take personal action in solving the problems and facing the situations presented. Workshop and practical activities are suggested, managed directly by the recipients, with the help of a learning mediator.
- **Study groups and individual use, remotely, should be supported by online tutors, available to clarify the steps and stimulate participation.** It would be advisable to create practical exercises, accompanied by information and advice for a responsible use of resources and concrete actions for the mitigation of environmental risks (correcting wrong behaviours and bad habits). Finally, the materials should also be usable in the presence: not everyone has a computer and an internet connection available. Besides, many favour a more "friendly" and relational way, in which to have a face-to-face confrontation, sharing ideas and difficulties and defining action strategies all together.

BELGIUM (UNESSA):

Climate change is affecting Belgium in many ways and it is urgent to act quickly. In Belgium, politics do not take their responsibilities fast enough regarding the gravity of the situation. Lot of efforts have been made by non-profit organizations and citizens initiatives as presented above.

Global warming has impacts actually and these impacts will increase in next decades. Negative consequences concern firstly vulnerable population, socially, economically, culturally, politically

excluded. Existing training materials are focusing mostly on standard academic career (high schools, Colleges, Universities). Thus, the Focus Group highlight the importance of preparing social workers working directly with vulnerable population to empower them and help them to face consequences of global warming and take part of positive actions of sustainable development. The Focus Group is then very supportive on the Social&Nature project, its program, and its transnational consortium. This national report presented a part of the multiple organizations and initiatives in Belgium active to build a more sustainable world and to reduce negative effects of climate change.

It is especially important to remind that actions against global warming should not be seen only in national consequences but in a global scale. The earth is only one and first victims of the situation are vulnerable populations in developing countries and some experts estimate that it will be more than 140 million of climate refugees in 2050.

Regarding statistics in Belgium, it is essential to maintain efforts and even develop more to aware all the population, companies, and all actors of society. It is essential to not exclude population already socially, economically, culturally, or politically marginalized and thus particularly vulnerable to impacts of climate change. Moreover, one of the aspects of sustainable development is inclusion of everybody in society. It is, thus, important to see emerged the Social&Nature project and its focus on training of social workers, teaching them to act as mediators and facilitators towards vulnerable groups, strengthening their ability to deal with the problem of natural hazards and the consequences of climate change.

Recommendations:

- **Importance of being able to have all training materials in French. Languages barriers can be an obstacle for taking part of the training.**
- **Importance of an appealing online resources center with various learning mediums and tools: quiz, games, videos, ...**
- **In support of the online center, creation of an online platform where people can share their ideas and create support groups for new local initiatives or for transnational network.**
- **Acting locally must not justify the failure to consider the global situation, its causes, and its consequences. It is important to study national context, European context but also the worldwide context and impacts of climate change in developing countries. Training supports should make realize that individual actions are also linked to global efforts and global system.**
- **Proposition to integrate a point treating about climate migration which is growing and has impacts directly on the concerned population but also on European migration politics. We**

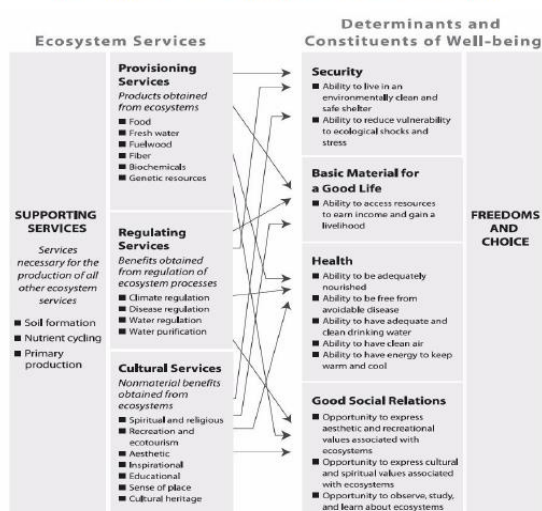
are convinced that newcomers immigrants are also a part of our target public and we should take this thematic in consideration.

CONCLUSION ON NATIONAL CONTEXTS AND GLOBAL IO.1 REPORT

As it was mentioned in this report, climate change is also affecting all countries in many ways. However, there are multiple organisations and movements of active and sensitive citizens, who fight for a better future and also a variety of good practices, regarding the protection of the environment. Furthermore, through the feedback of the Focus Groups, the need of developing a training program regarding the climate change for social workers who work with socially vulnerable people is defined as something really important. Consequently, the “Social&Nature” program is undeniably going to provide a valuable training material, something that is also supported by the feedback that was given by the participants.

For example, in Italy, the impacts of climate change are affecting Italy and the Friuli Venezia Giulia region in an evident way and with considerable damage on the environment, the economy, the well-being and safety of people. The following diagram summarizes the relationship between ecosystem services and the main effects on human well-being.

Figura 1: Relazione tra Servizi Ecosistemici e principali effetti sul benessere umano



In the box “Good Social Relations” is underlined the importance to have the **opportunity to observe, study and learn about ecosystems** as a constituent of Well Being.

The “Social&Nature” training program is going to offer vulnerable groups and social workers (the ones most affected by climate changes consequences) some valuable information and education tools to know better and face the impacts and mitigate the risks. It is a new approach that can deliver added value to the whole community, provided that the information and training materials are simple, accompanied by examples and practical proposals, to immediately

translate into action the lesson learned.

This diagram and this useful approach are fully applicable to all national European contexts.

The recommendations expressed in this report seem to us to be very important to be taken into consideration for next steps of the project.

Consequently, the “Social&Nature” program is undeniably going to provide a valuable training material, something that is also supported by the feedback that was given by the participants.

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