



Climate justice : challenges and prospects for France

Jean Jouzel and Agnès Michelot

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CLIMATE JUSTICE: CHALLENGES AND PROSPECTS FOR FRANCE

Avis of the Economic, Social and Environment Council
on the report presented by
M. Jean Jouzel, rapporteur
and **Ms Agnès Michelot, co-rapporteur**

on behalf of the
section de l'environnement

Question referred to the Economic, Social and Environment Council (ESEC) after the decision from its Bureau dated 9 February 2016, in accordance with Article 3 of Amended Order no. 58-1360 of 29 December 1958 introducing the law on the Economic, Social and Environment Council. The Bureau tasked the section de l'environnement with drafting an opinion on *La justice climatique : enjeux et perspectives pour la France*. The section de l'environnement, chaired by Ms Anne-Marie Ducroux, appointed M. Jean Jouzel et Mme Agnès Michelot to be the rapporteurs.

Contents

p.5 OPINION

Preamble	11
OBSERVATION	13
I. INTERNATIONAL CLIMATE JUSTICE	12
A. Climate justice: an alarming international observation and a high social expectation	12
B. What climate justice: international responses	14
From the 1972 Stockholm Conference to the Paris Agreement on the Climate: towards acknowledging climate justice?	14
The "beneficiaries" of climate justice	15
II. CLIMATE JUSTICE AT NATIONAL LEVEL	16
A. The issue and the context of climate justice in France	16
A crisis of confidence regarding the future	16
Climatic inequalities at individual level and by activity sectors within the context of energy transition	17
B. A major challenge for public health	19
The impact of climate change on health	19
The concept of exposome	20
The "overexposure" of overseas territories to health problems linked to climate change	20
C. Women and vulnerability to climate change	21
D. Territorial climate inequalities	22
PROPOSALS	29
I. THE FOUNDATIONS OF FRENCH CLIMATE JUSTICE: FROM ACTION PRINCIPLES TO THE STATE'S INTERNATIONAL RESPONSIBILITY	29
A. Action principles for implementing national climate justice	29
Legal actions and fundamentals	30
Social justice and the fight against poverty at the heart of climate justice	32
The key role played by research	33

B. A territorial ambition which goes beyond mainland France: overseas "examples" and challenges	35
Diverse situations	35
The unique nature of overseas territories	36
The contribution of overseas territories to the national adaptation strategy	37
C. France's international commitment	37
Climate change and security	37
The State's commitment to international negotiations	40
International investment, fuelling climate justice	41
II. DEVELOPING CLIMATE JUSTICE IN FRANCE: FROM THE ENERGY TRANSITION TO AN AMBITIOUS ADAPTATION STRATEGY	42
A. New tools for public policies incorporating climate inequalities	43
Designing public policies in relation to climate justice: the role of the PNACC	43
To better incorporate social and intergenerational justice within investment projects and programmes	44
Social, financial and fiscal equalisations	45
Insurance policies	46
B. Ambitious choices for economic, social (health) and environmental development bringing about climate justice	49
Structuring economic activity in relation to adaptation	49
Committed social policies	53





Opinion

presented on behalf of the Section for Environment

**The full draft opinion has been adopted by open ballot
by 152 votes to 15 with 15 abstentions.**

CLIMATE JUSTICE CHALLENGES AND PROSPECTS FOR FRANCE

Jean Jouzel and Agnès Michelot



Opinion Executive Summary

The almost universal nature of the Paris Agreement must not hide the persistent gap between the States' significant but clearly insufficient commitments and the effort to be made between now and 2030, and beyond, to reduce greenhouse gas emissions in order that keeping global warming, in the long-term, to well below 2°C remains a possibility.

Even limited to 2°C, global warming will have consequences which our society will have to adapt to with, in the absence of measures, the risk that the inequalities between those who have the means to adapt and those who do not will increase.

The key aim of climate justice is to do everything possible to stop global warming from increasing these inequalities. It came across as a key theme during the opening of COP 21. It is a strong claim which has been coming from civil society on an international scale since 2003.

The notion of climate justice has also been used ahead of international negotiations by political leaders, in particular leaders of developing countries.

For the ESEC, who supports the fight against all forms of inequality, the key aim of this opinion is to contribute, via its proposals, to public policies which will help to limit, and if possible, to reduce social and economic inequalities caused by global warming on a national level.



✎ Climate change fuels social inequality. In order to fight against these inequalities, the fundamental principles which organise and ensure environmental protection must be drawn upon. At the same time, instruments for social justice can support a climate justice strategy as can several economic principles.

Minimal access to basic resources must be provided to those who are poorest and the adjustment rate used in public economic decision-making must be modified so that it better takes into consideration the interest of future generations.

✎ The principles of equality and solidarity are the basis of social justice. Within the context of climate change it is important to develop an integrated and coherent approach to fundamental rights linked to the protection of ecological balances which include the climate system.

For the ESEC, strategies for fighting against climate change and adaptation policies must be incorporated within policies for fighting against poverty;

In particular, policies and measures for fighting against climate change must be evaluated with regard to their advantages for the 20% poorest people;

✎ Tackling the risk of increasing inequality linked to climate change in our country requires research into different aspects.

The ESEC considers that the idea of drawing up annual reports on climate in France in the 21st century, which was carried out between 2011 and 2015 in this context, should be continued within the second phase of the National Plan for Adaptation to Climate Change (PNACC).

The development of climate services expected to play a key role in strategies related to adaptation and risk prevention linked to extreme events must be supported.

The ESEC recommends supporting research carried out on trajectories of vulnerability for the territories which are most exposed to climate risks, integrating social criteria for exposure within the research.

The ESEC hopes that overseas regions and *départements* will be encouraged to fully exercise powers in favour of environmental protection, a key factor for the resilience of concerned territories to global warming. It recommends implementing funds for climate justice geared towards supporting the resilience of territories in connection with protecting ecosystems.

Opinion Executive Summary

It is appropriate for the ESEC to carefully examine the specific conditions of overseas territories, by ensuring that solutions which are tailor-made to each territory are implemented. The ESEC calls for research into innovative solutions, taking into consideration the diversity of populations and statuses of the overseas territories.

✎ As for the IPCC (International Panel on Climate Change), it highlights that climate change can indirectly increase the risk of violent conflicts.

The ESEC recommends that the potential destabilising effect of climate change be subject to studies which are specific to each territory.

The ESEC supports the proposed appointment of a special representative for climate security, attached to the Ministry of Defence, to develop a globally cooperative approach in coordination with the adaptation strategy.

✎ International investment is a key factor for development which can weigh heavily in the implementation of environmental policies.

The ESEC hopes that a significant part of these investments will be geared towards the most vulnerable populations and in this way engage with the "climate justice" approach, which our country committed to during the Paris Conference.

Moreover, the ESEC recommends that France support a definition of investment within the investment treaties which incorporates the principles of "climate justice" and policies fighting climate change.

✎ The ESEC encourages the emergence of innovative adaptation tools and the development of public policies for climate justice.

All transport infrastructures and all public investments requesting State funding above a certain financial threshold must undergo a socio-economic assessment. The method generally consists of calculating a "net present value" or an internal rate of return for the investment when it is commissioned, giving a global assessment of the "social utility" of a project, whether positive or negative.

The ESEC recommends that the State review the socio-economic assessment guidelines for investment projects which it applies to its own financing, by supplementing the calculation of a net present value or an internal global rate of return with an analysis of the redistributive effects regarding the most disadvantaged people and by setting an adjustment rate which better takes into account the well-being of future generations.

✎ At this stage, a social planning mechanism for carbon taxation is not anticipated.

The ESEC hopes that carbon taxation may be planned socially by establishing a progressive system.

- ✎ In view of the damages which will result from climatic events, insurance has a vital role to play.

The ESEC hopes that a discussion may be carried out on the increase in deductibles which a lack of risk management plans (PPR) leads to, on the conditions for this increase, its amount, its methods and the situation of insured parties.

The ESEC supports the idea that compensation for rehousing costs for victims whose primary residence has been damaged can incorporate the natural disasters scheme.

The ESEC considers that it is becoming urgent for 2040 to prepare for reforming the cover of climate risks in general and of the natural disaster scheme in particular, both to maintain national solidarity and to allow the poorest people to access insurance.

- ✎ In all cases and in all countries, exposure and vulnerability to these risks vary depending on territorial and social inequalities. A number of diseases are emerging and are likely to evolve with climate change.

The ESEC considers that it is due to the link between climate and health that climate justice must develop in France, by relying on, what some economists call, "the double dividend between climate and health": mitigating climate change is an opportunity to improve health worldwide and boost human development.

Our Assembly therefore advises systematically incorporating aims for reducing environmental inequalities related to health into regional plans for health and the environment by introducing a global warming dimension.

- ✎ The supply of housing, the residential area and town planning are the source of a number of inequalities, as shown by studies on the consequences of heatwaves in urban settings, but they are tools which can also help ensure greater justice.

The ESEC recommends promoting new reasoning for town planning which incorporates the links between town planning and mobility in order to develop towns which use less carbon. Urbanism tools must take into consideration travel methods by relying on principles related to urban consolidation, polycentrism and social and functional diversity.

In overseas territories, the ESEC advises developing a number of projects such as scalable social housing, continuing with housing development interventions by changing the number of resources assigned to different policies and bringing about short or local procedures to help access housing at a lower cost.

- ✎ Climate justice aims to incorporate objectives relating to gender equality from a perspective of vulnerability, exposure to risks and representation during decision-making in connection with the adaptation plan and measures.

Opinion Executive Summary

With regard to "natural" disasters, the ESEC recommends generalising the collection of disaggregated data by gender to establish natural disaster assessments, this collection is vital for understanding the vulnerabilities of each gender in different economic, social and cultural contexts.

The ESEC asks that qualitative and quantitative studies on gender vulnerability be carried out, taking into consideration the realities in different territories and a more significant risk culture in overseas France..

The ESEC supports a strategy for fighting against climate change backed up by climate justice principles and objectives. It considers climate justice more generally as a goal and an expression of general interest, which must guide public policies in a cross-disciplinary way. Climate justice brings a new approach for drawing up and articulating these policies. It enables us to preserve the right to a healthy environment for everyone, including the poorest, most exposed and most vulnerable.

Preamble

The Paris Agreement which resulted from COP21 involves almost all countries. But this universal nature must not hide the persistent gap between the countries' significant but clearly insufficient commitments and the effort to be made between now and 2030, and beyond, to reduce greenhouse gas emissions in order that keeping global warming, in the long-term, to well below 2°C remains a possibility. If the challenge had not been taken up, the average global warming effect would be at least 3°C between now and the end of the century, maybe even 3.5°C, with major consequences in a number of areas, many of which would affect populations. In France, many of the summers in the second half of our century will be hotter than the summer of 2003. We still remember the sad consequences of summer 2003. The temperature difference between the average summer temperature in the 20th century and the summer of 2003, was around 3°C. It could increase to over 6°C for heatwave summers in the second half of the century. Problems related to, for example, precipitation, drought, rising sea levels and more intense storms would be exacerbated. The effects which have already been observed on human health in terms of changes in the impact and intensity of diseases would increase. Nearly all sectors in our economy would be affected and some territories - mainly overseas - could prove to be more vulnerable to these consequences, whilst others will be affected to a lesser extent or will be more resilient. We are entering another world... and it is in France. Even limited to 2°C, global warming will have consequences which our society will have to adapt to with, in the absence of measures, the risk that the inequalities between those who have the means to adapt and those who do not will increase. Moreover, the mitigation measures taken to decrease greenhouse gas emissions can have consequences for employment and economic and social development in some sectors and territories, here again they also risk increasing inequalities. This risk of increasing inequalities is highlighted by a number of studies concerning global warming, its consequences and the need to mitigate it and adapt to it. It is also at the heart of the 2030 Agenda for Sustainable Development: a significant part of the Agenda's 17 objectives incorporates different aspects of global warming.

We are generally aware of the vulnerability of certain countries and populations - who hardly contribute to greenhouse gas emissions - facing climate change, which is now inescapable. We are probably less aware of the vulnerability of our own country when the consequences of global warming and adaptation and mitigation measures to be implemented here will be significant. They could be even more noticeable for the poorest strata of society. These consequences are at the heart of our referral with the idea that the key aim of climate justice is to do everything possible to stop global warming from increasing inequalities. Beyond a moral argument, the requirement that fairness is demonstrated in the fight against climate change comes, above all, from the fact that an action "seen as equitable can lead to more effective cooperation" (source GIEC WG3 SPM AR5). International and national collective action will only be able to be agreed to on a sufficient scale if it is as equitable as possible. Even though our country is seen as one of the most equal, we can no longer delay thinking about the different effects of global warming

on our way of living, decision-making and our social, economic and cultural development. It is not just our behaviour and our model for society which is being questioned, but also our ability to live together and show solidarity in the face of changes which are going to increase and even threaten the balance of our society by risking, if we do not watch out, increasing the social divide.

OBSERVATION

Climate justice has been on the international scene for more than 15 years and it will be central to debates at COP 22. To date, there are national implementations and variations on climate justice. For this reason, our opinion, even though it is committed to a French interpretation (II), will tackle the subject's international advances and context (I).

I. INTERNATIONAL CLIMATE JUSTICE

Debates between States about the calculation methods for measuring greenhouse gas (GHG) emissions started in 2007. They demonstrate that some criteria favour some States more than others.

A. Climate justice: an alarming international observation and a high social expectation

Climate justice came across as a key theme during the opening of COP 21. In his opening speech, the President of the French Republic stated that he was speaking in the "name of climate justice" and that "we must act in the name of climate justice". These declarations echoed the unequivocal observation of the latest IPCC report: the risks which populations will have to face are unequally distributed and are generally more significant for underprivileged communities and people at all levels of development. And this report, published in 2014, states that *"people who are socially, economically, culturally, politically, institutionally or otherwise marginalised (...) are especially vulnerable to climate change and also to some adaptation and mitigation responses(...). Differences in vulnerability and exposure arise from non-climactic factors and from multidimensional inequalities often produced by uneven development processes."*

First and foremost food security can be cited which, facing the growing demand, could be jeopardised on a global level - the pressure, which varies in nature and degree, is being felt in all countries. It is therefore a major strategic challenge.

Risks linked to heat stress, extreme precipitation, floods, landslides, air pollution, droughts and water scarcity could affect people, ecosystems, goods and economies, both in urban and rural areas. These risks are amplified for those without vital services and infrastructures or those who live in poor-quality housing or in exposed areas. In rural areas, climate change will affect the availability and supply of water and so food security

and agricultural revenues. Either way, production losses will accelerate with global warming which should slow down economic growth. The effects of climate change should exacerbate the impact of poverty in the majority of developing countries and create new pockets of poverty in countries with growing inequality. And the IPCC states that it concerns both developing and developed countries - the poor strata of populations within these countries could be even more vulnerable to climate change.

Historically, Northern countries are responsible for a large part of emissions but it will be the countries in the South which will suffer most of the consequences - and that is even if this schematic presentation hides more complicated realities, such as the price which is already being paid by the Northern-most territories for global warming. The fact that the most vulnerable countries are amongst those who have contributed least to emissions is a second source of climate injustice. And this remains true to this day: in many African countries CO₂ emissions amount to several hundred kilos per year per person, maybe less, while they amount to around 20 tonnes for someone living in the United States, around 7.5 tonnes for those in the 27 other Member States of the European Union (EU) and less than 6 for a French person.

In light of this observation, climate justice has become a strong demand from civil society on an international scale with several summits held on the subject since 2003, outside of the Conferences for the United Nations Framework Convention on Climate Change.

In 2010, the International Forum for Climate Justice (a meeting of associations, non-governmental organisations (NGOs) and civil society organisations) claimed that the climate crisis was not only a crisis linked to global warming. As well as being an ecological crisis, it is a political crisis and a food and energy crisis.

From the perspective of trade unions, there are several reasons which justify the interest in the concept of climate justice, including the strong link between the current economic model and climate change. In light of this, Anabella Rosemberg, interviewed by the section on behalf of the International Trade Union Conference (ITUC), called for the economic model to be re-evaluated as it does not meet environmental and social expectations and generates injustices. In particular, the climate challenge involves a fundamental transformation in the productive model, which does not exacerbate the situation of vulnerable communities and workers.

Ethical and religious movements are also getting involved in this issue. As a case in point, Pope Francis' Encyclical highlights that an ecological approach must always be a social approach. He recognises the existence of an ecological debt between Northern and Southern countries and highlights countries' disproportionate use of natural resources. On the same theme, a meeting of religious leaders from the Muslim community in Istanbul in August 2015 resulted in the adoption of the "*Islamic Declaration on Climate Change*", highlighting that the poorest people will pay the greatest price. The Rabbinic Letter on Climate change is also worth mentioning, co-written by 300 Rabbis from different spectra of Judaism. In other religions including Buddhism, Taoism and Native American religions, criticism revolves around the unequal political system and the dominant values on which it is based, in particular consumerism and modernism. In France, representatives from six religions (Buddhism, Catholicism, Judaism, Islam, Orthodoxy and Protestantism) practised

in our country published a joint declaration during the preparations for COP 21 calling for the protection of the most vulnerable and for fighting against poverty within a binding agreement. In line with this, the seven main Masonic Grand Lodges launched a "*joint appeal to secular and humanist consciences*" which "*solemnly calls... to progress climate justice*". These are not the only examples.

Therefore, climate justice represents a social demand which has been expressed by several parts of civil society who, despite all having different perspectives, situate climate issues within an ethical, economic or social perspective but also as the responsibility of public policies.

B. What climate justice: international responses

From the 1972 Stockholm Conference to the Paris Agreement on the Climate: towards acknowledging climate justice?

International law is based upon several principles which can form the basis of climate justice. States have the obligation to prevent, reduce or control environmental damage. Activities carried out under their jurisdiction should not harm the environment. The social responsibility of the private sector and public bodies is expanding.

Moreover, global warming has become an issue of international security: the first debate on this subject in the United Nations Security Council took place in 2007 and the European Council and European Commission's initial work began in 2008.

There is a direct link between this issue and "human rights" and between this issue and the 17 sustainable development goals (SDG) defined by the United Nations Development Programme (UNDP) in 2015. Several SDGs deal with hunger, health, poverty and the reduction of inequalities, Goal 13 is dedicated to the fight against global warming.

The 1972 Stockholm Conference on the environment initiated the acknowledgement of a right to a healthy environment which would be reaffirmed by the following: "*Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being*" (Principle 1). The established relationship between the defence of human rights and the legal protection of the environment helps to envisage the development of an international society which is more respectful of the fundamental rights of each person. Climate justice can therefore find a legal basis which goes beyond the texts related to the international climate regime.

The United Nations Framework Convention on Climate Change, the founder of this regime, provides that "*Parties should protect the climate system for the benefit of present and future generations on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities*". It is therefore about taking into consideration the historic responsibility of emitters, the richer countries' ability to act and the right of each person to development. This principle addresses the consideration that, even though all the

States are obliged to protect the climate system, their obligations vary depending on their developmental level and needs.

The notion of climate justice has been very often used before international negotiations by political leaders, mainly those of developing countries, as well as by a number of civil society movements. COP 21 echoed this and, indeed, the Paris Agreement references this idea in the preamble. However, climate justice is not recognised by the States as an action principle or goal in itself or for itself. Indeed, climate justice appears in a provision dealing with "the integrity of all ecosystems", relying on the notion of "Mother Earth"; it is only recognised in terms of cultures, without clearly establishing the links between these three features. This approach does not correspond to the vision - supported by civil society movements - of a "climate justice" which would have a "restorative" aim. Incidentally, it is not presented in the Agreement as being recognised by the States.

Compared with legal action methods orientated towards reparation, the Paris Agreement clearly does not respond to the aims of corrective justice insofar as it does not propose any sanction procedures. Moreover, Article 8 on loss and damage, which is important for developing countries and small insular countries, "*does not involve or provide a basis for any liability or compensation*".

The "beneficiaries" of climate justice

The legal approach presents several advantages because, as explained by Eloi Laurent "*to transform an inequality into injustice, a theory of justice or reference to a positive law which incorporates principles of justice is needed*". Above all, it is shaped by the identification of law subjects concerned with the justice that society wishes to implement.

It can be a question of justice for certain groups of individuals or communities. International and national law (depending on the legal systems) provides for the protection of the groups of individuals who are considered to be the most vulnerable to climate change; for example, children, women,, migrants, native communities and indigenous peoples. The State must take steps to ensure that the right to a healthy environment, which includes respecting climatic equilibrium, is respected. A number of subjective rights can be associated with climate justice, such as the right to life and the right to health.

Justice for the present and future human race is also to be considered. It is mainly based on concepts which shape the right of future generations and the general interest to humanity. In the Framework Convention on Climate Change "*Parties should protect the climate system for the benefit of present and future generations*" (Article 3.1). Naturally, the content of the rights of the future human race is not defined but associating the right (or rights) of future generations with the sustainable development goals enables us to look simultaneously at the preservation of economic, social, cultural and environmental rights.

Finally, justice for nature is considered in a certain way by the acknowledgement, in international law, of the intrinsic value of biological diversity and the need to maintain ecological processes which are vital for living.

II. CLIMATE JUSTICE AT NATIONAL LEVEL

Depending on the discipline, the approach to justice will not be the same and there are conflicting positions. Depending on their current school of thought, some economists give priority to optimising the common good and others emphasise improving the lot of the poorest people. On the subject of climate justice, the question of fair contributions between households, sectors of activity or regions cannot be settled by increasing the cost of carbon. Research on economic efficiency cannot supersede social and environmental policies which are differentiated in terms of collective effort.

The ESEC considers ecological crises to also be social crises and that environmental inequalities exacerbate social inequalities. It claims that the energy transition is a way to fight against inequalities and social exclusion. Public policies must play a key role.

In previous reports, the ESEC strove to emphasise that it is down to legislators and the government to ensure territorial and social equity with regard to the measures and policies to undertake, to guarantee national solidarity in the face of major crises and risks and to clearly allocate powers and responsibilities in order to encourage the emergence of territorial responses which are adapted to climate change.

For these reasons we will deal with the context of climate justice at national level (A) before dealing with prominent themes from various perspectives: health (B), gender (C) and territories (D).

A. The issue and the context of climate justice in France

A crisis of confidence regarding the future

France is confronted by a genuine crisis of confidence regarding the future as shown in the ESEC's annual report on the state of France in 2016. Based on four significant indicators for implementing climate justice at a national level, the report concludes that France is not getting adequately prepared for its future. The carbon footprint indicator appears stable, but this stabilisation largely results from the relocation of part of our manufacturing base. Soil artificialisation is higher than the European average. The research effort, an important factor for climate justice (see part 2, proposals, of this opinion) is not up to scratch, the report highlights in this way that the state of research in France has "stalled critically". The debt indicator is more unpredictable as it is composite and does not incorporate the financial sector. However, it is useful for evaluating investment, in particular in the research needed to prepare for a society which is committed to the future. Household savings in particular could be better orientated towards investments in energy transition for example. According to Gaël Giraud, chief economist at AFD (the operator for France's bilateral development finance mechanism), the priority should be to boost debt reduction in the private sector and, when the investment has been returned, focus on debt reduction in the public sector.

From the point of view of quality of life and levels of life satisfaction, the ESEC annual report on the state of France in 2016 indicates that criteria such as material difficulties,

standard of living, health and unemployment are discriminating. There are still considerable differences between social categories.

In order to become an operational goal in the fight against inequalities and make consensus for action possible, climate justice must take social, economic and environmental factors into account. Mitigation and adaptation plans must not increase inequalities but rather help to decrease them.

Climatic inequalities at individual level and by activity sectors within the context of energy transition

From economic inequalities to social injustices

With regard to mitigation, vulnerability will differ depending on the activity sector, a number of which will be affected by the measures to be taken to fight against global warming. The forestry sector for example, will be especially affected, especially in Aquitaine which, with 1.8 million hectares, is France's main wooded area. Droughts and extreme events have an impact on the productive and non-productive uses of forests. They involve measures for managing the consequences on the sector's supply chain and therefore on the way in which the forestry industry operates.

In the field of energy, sectors dealing with energy efficiency and renewable energy must develop further whilst the fossil fuel sector must be cut back. Undeniably, changing the activity of a sector which is subject to constraints to reduce the effect of greenhouse gases, can have consequences for employment. This will also probably be the case in the transport field with a change from almost individual automobile transport - between 1.1 and 1.2 people per car during commutes - to public transport and/or car sharing.

At individual level, climate inequalities are linked to our consumption levels in view of the fact that the richest have a much larger ecological footprint than the poorest. A study on the "*Preservation of the environment, equity and access to key services*" was carried out by the Economic Council for Sustainable Development (CEDD) in May 2011. Based on the work of several economists, Dominique Bureau and François Marical indicate within the study that *"the amount of CO₂ arising from household consumption increases with the standard of living: the consumption of the 20% poorest households represents 11% of CO₂ emissions whilst 20% of the best-off households are responsible for 29% of emissions. That said, in terms of expenditure levels, the consumption of the poorest households is more intensive in CO₂ than the better off households."*

In France, climate inequalities can be considered as injustices if nothing is done to reduce them after they have been identified. Yet, our society is faced both with the fact that the richer social strata have a higher "carbon weight" than the poorest and that poverty overexposes people to climate risks. Moreover, the poorest populations are those with the fewest means for adaptation.

The interview with the GRET (Professionals for Fair Development) representative showed the link between climate and development at international level, as well as the effects global warming has on exacerbating inequalities and the vulnerability of disadvantaged people. According to the representative, its consequences are clearly established and relate to

institutions, health, loss in economic capital, social disintegration, population movements and access to basic services.

With regard to France, the ESEC report on environmental and social inequalities highlights that the results of research and studies on the relationship between the environment and social inequalities, although mainly dealing with the difference in exposure and not the difference in vulnerability, are enlightening. The report indicates that, according to the National Institute of Statistics and Economic Studies (INSEE), the socio-economic indicators of areas near industrial sites are especially unfavourable.

As shown in NGOs' interviews, the people who are most exposed to insecurity are those who are least able to deal with the effects of climate change. For ATD Fourth World, *"Living in poverty or extreme poverty, is above all being deprived of the possibility to choose. It is being forced into unsanitary, cramped conditions, or homelessness. It is being forced to not be able to choose healthier food and travel, transport and heating methods which respect the environment."*

They cannot choose their environment and are particularly exposed to climate risks with regard to health. *"Climate change also aggravates social inequalities related to health. For all climate-sensitive health risks, factors related to susceptibility which contribute to vulnerability are often linked to socio-economic factors. For example, in developed countries, poverty and limited access to green spaces increase the risk of heat- or cold-related deaths"*. Work carried out on the consequences of the 2003 heatwave confirms that poverty exacerbates consequences. The work carried out by the French Institute for Public Health Surveillance (InVS) places, in this way, the socio-professional category, degree of autonomy, underlying diseases and finally housing isolation amongst the risk factors for the death of elderly people, just below age. The utility of green spaces within the framework of fighting against urban heat islands is widely documented. It is interesting to note that they can also play a role in fighting cold weather in an urban environment.

A number of stakeholders are keen to highlight the existence of environmentally-friendly behaviours amongst the poorest people. A number of examples bear witness to this: "in many ways, people living in poverty already have ways of adapting to a lack of resources. They are particularly economical when they can reuse clothes and objects and avoid wasting water, electricity and heating. When public transport is not available, which is often the case, they walk a lot. Often, because they have had the bitter experience of not having enough, they have an aversion to the waste which is destroying the planet's natural resources."

The Act for Energy Transition: a social expectation

Civil society expects a great deal from the "Energy Transition for Green Growth Act" promulgated on 17 August 2015. This act amends several codes: energy, town planning, construction and housing, consumption and transport. A number of areas are affected: energy consumption, greenhouse gas emissions, use of renewable energy, housing and town planning and transport.

The now amended Energy Code states the ambitions for the national energy policy: fight "against fuel poverty"; guarantee "social and territorial cohesion by ensuring that

all households have right of access to energy without excessive cost with regard to their resources"; preserve "human and environmental health, in particular by fighting against aggravating the greenhouse effect and against major industrial risks".

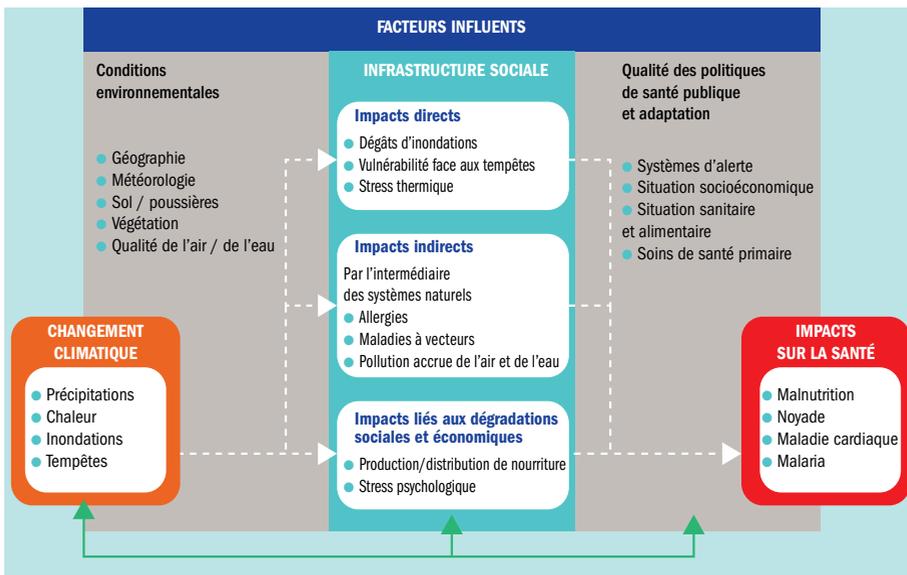
Other measures in the Energy Code provide for objectives including: (...) "having real estate where all of the buildings are renovated according to the "low energy building" standards, thanks to a policy for the thermal renovation of housing with regard, mostly, to low-income households" and, from 2017, "the energy refit of 500,000 houses per year including 250,000 occupied by low-income households(...) aiming to lower fuel poverty by 15% by 2020."

Implementing this Act requires a number of implementation decrees, the details of which will be decided, for some of them, from experimental schemes.

B. A major challenge for public health

The impact of climate change on health

Image no.1: Diagram of the different ways climate change will impact health



Source: Actualité et dossier en santé publique (ADSP) no. 93, December 2015 (High Council for Public Health's quarterly review).

"Climate change is already having an impact on our environment, in particular this manifests as global warming, an increase in some extreme meteorological events such as heatwaves, and changes in the phenology and distribution of flora and fauna. Associated with

other global environmental and societal developments, these changes can have substantial negative effects in terms of public health."

It is by examining the impact of pollution and disturbances on health that ecological and social questions can be most naturally dealt with jointly, insofar as this examination brings socio-economic inequalities related to exposure, which can often be specific to a territory, to the fore in a clear and documented fashion. The cross-linking of environmental health statistics and statistics related to standard of living and incomes establishes the link between ecological and social issues in a clear and practical way. Developing an ecological and fair society is mainly achieved by protecting health. As Eloi Laurent explains, the global challenge of the fight against global warming is not related to the existence of the Earth itself, as a terrestrial planet in the solar system, but the survival of a large number of the species which live on it. At our level, the challenge is *"the planet's hospitality for humans"*, especially those who are most vulnerable. These people, in both developed and developing countries, are threatened by the impact that rising temperatures have on health.

A number of NGOs and associations emphasise the major cost of inaction in terms of cohesion and health at both national and global level, calculated from 2006 in the "Stern Report". They rely on a number of subsequent economic studies - some carried out on a national basis, others in areas such as insurance - which confirm this cost, despite different methodologies, perimeters and results.

The concept of exposome

France is planning for monitoring and observing the state of the population's health and for identifying key determinants in particular those linked to education and living and working conditions. The Act for Modernising the Health System in France, called the Touraine Act, promulgated in January 2016 in particular provides for *"the reduction in social and territorial inequalities and gender equality and for guaranteeing the best health security possible"* (Article 1).

Health risks linked to environmental factors are now part of the idea of exposome, introduced in Article 1 of the Act. Exposome refers to all exposure, over an entire lifetime, to factors which can influence human health. The identification of health risks as well as *"actions related to prevention and information on the impact of environmental exposures on health"* will rely upon this basis.

The ESEC is committed to this approach to public health which incorporates exposure to environmental risks and takes climate factors and working conditions into account.

The "overexposure" of overseas territories to health problems linked to climate change

With regard to health, the Minister for Overseas Territories highlights the threat which infectious diseases represent in the South-West region of the Indian Ocean. The island of Réunion and neighbouring islands have experienced significant episodes of vector-borne diseases. Rises in temperature increase the risk of infectious diseases emerging or re-emerging, especially vector-borne diseases in areas which have already paid a heavy

price or areas which are hitherto unscathed. It is a question of providing operational and effective responses when global warming is accentuating the threat of epidemics.

The health strategy for overseas territories highlights, in a similar way, that they are faced with:

- *risks of latent infectious epidemics (bowel diseases, intestinal parasites, vector-borne diseases and zoonoses) stimulated by climate conditions or equipment delays in some infrastructures;*
- *health risks which spread rapidly and changes in endemic situations or expansions of areas for potential vectors' implantation which can stimulate the spread of vector-borne diseases .*

For a number of years the overseas communities (West Indies, French Guiana, Réunion, Mayotte, French Polynesia and New Caledonia) have been regularly struck by epidemics involving vector-borne diseases, in particular Arboviruses such as Dengue Fever, Chikungunya or Zika. According to WHO, French Guiana has difficulties in implementing an effective fight against Malaria, which leads to the parasite exhibiting resistance phenomena. Some of these vectors, such as the Asian tiger mosquito, have recently appeared on the European continent. It was identified in France in 2004 and its progression there has since continued.

These epidemics have a negative impact on a territory's care system which can be temporarily saturated by them. They have costly economic and human consequences, in particular because they can lead to temporary disabilities and deaths, notably amongst the most fragile populations.

The health strategy also raises the fact that other tropical diseases which are rife in overseas territories - for example Leptospirosis, Leprosy in Mayotte or Chagas disease and Leishmaniasis in French Guiana - can only prosper as a result of global warming.

C. Women and vulnerability to climate change

International studies highlight the vulnerability of women to climate change, particularly in developing countries, for several reasons. Women contribute to the family's food production and suffer directly from the effects of drought or water resources' stress. They are the first victims in natural disasters. Finally, they suffer from the consequences of these disasters for longer due to the difference in the protection of their economic and social rights with respect to men. More women than men die during disasters.

Double climate injustice is talked about by combining the issue of gender with issues related to economic, social and cultural inequalities. The differences in opportunities and possibilities for resources between men and women and between girls and boys, determine different individuals' levels of vulnerability and their abilities to adapt. This is

true for differences in gender and social categories and also between ethnic majorities and minorities in a country. Many social and economic differences will be influential.

The charity, CARE, uses the concept of differentiated vulnerability with regard to the question of adaptation. Thanks to this "differentiated vulnerability" approach, CARE has, for example, identified that the risk of being affected by natural disasters is 14 times higher for women and their children than it is for men. It seems that women are not exposed in the same way as men. Three aspects put women at a massive disadvantage when faced with climate change: their financial and social situation including unequal access to education and access to information.

There are few studies establishing a distinction between men and women to understand this vulnerability and to perceive potential inequalities regarding exposure to climate risks depending on, for example, different economic, cultural and social contexts. This general statement relates to mainland France as much as its overseas territories.

D. Territorial climate inequalities

Not all countries and all territories are subject to the same climate risks and do not have the same means to adapt to them. At a global level, global warming will weigh on agricultural production, making the situation of hundreds of millions of farmers more difficult and causing shortages. The consequences of global warming in France will be significant for agriculture, aquaculture and silviculture, and perhaps more imminently for viticulture.

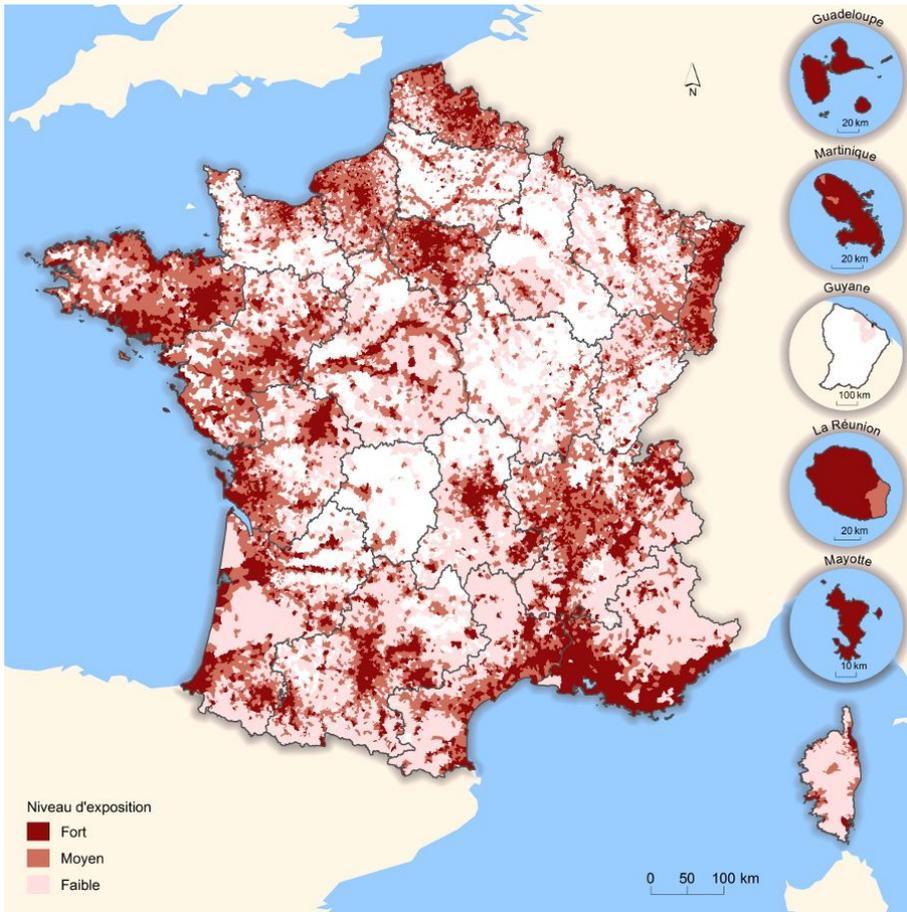
The situation is characterised by significant physical, geographic and climatic inequalities, within mainland France and between mainland France and its overseas territories which also have great diversity.

As the National Observatory on the Effects of Global Warming (ONERC) indicates "*the majority of territories have a lesser ability for cushioning the pressures associated with climate change and for territorial redeployment compared with continental areas*".

Thus, in mainland France, exposure to climate risks, analysis of vulnerabilities and development of adaptation strategies differ, not only between regions, but also according to the territories' rural or urban dimension, whether it is a mountainous or coastal area, and depending on the sectors of activity.

At national level the diversity in situations in a large part determines the level of exposure to climate risks, as the map below illustrates.

Image no.2: Population exposure to climate risks in 2013

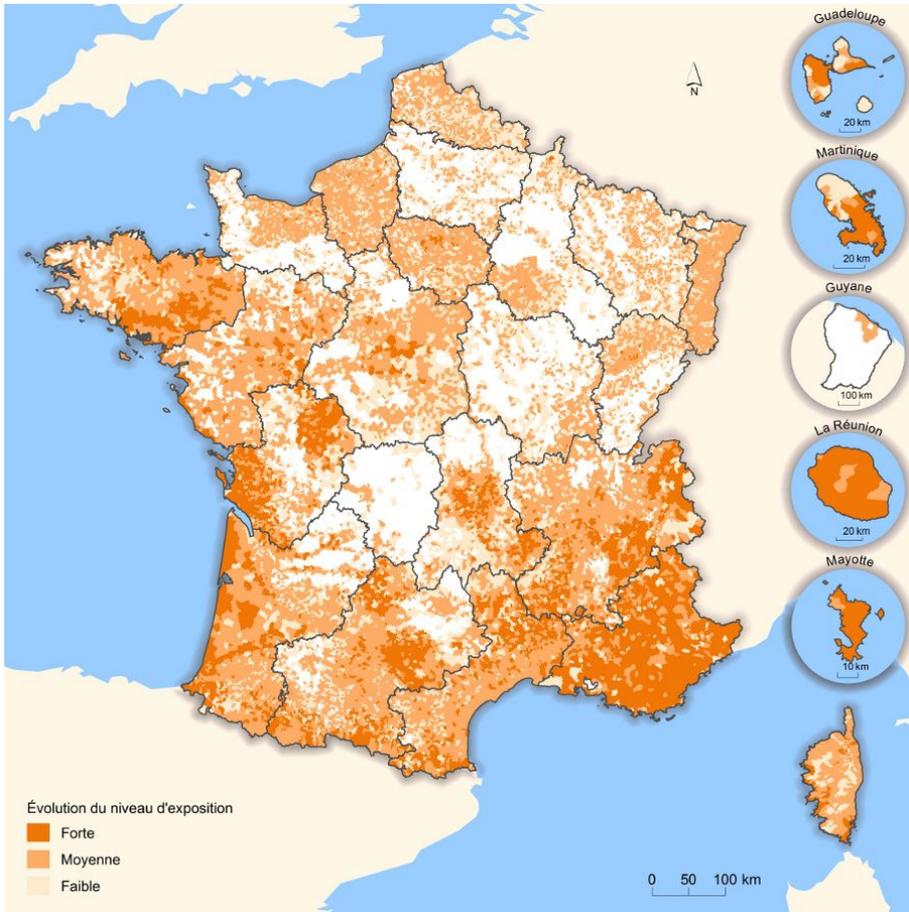


Sources: MEDDE, Gaspar, 2013 – Insee, RP, 2009 (2007 for Mayotte) - © IGN, BD Carto®, 2011.
Processing: SOeS, 2013.

The increase in natural risks caused by global warming is mainly manifested in the increase in extreme meteorological events (heatwaves, droughts, floods, marine submersions, etc.), the rising sea levels and the expansion of areas exposed to the risk of forest fires. Whether we consider a type of risk or a type of location, in both cases exposures and vulnerabilities could prove very different from one territory to another. Ongoing or imminent changes risk creating or further reinforcing these inequalities.

According to the Minister of the Environment "in 2013, 74% of French municipalities are exposed to at least one climate risk, namely floods, forest fires, storms and cyclones, avalanches and/or earthquakes (MEDDE, Gaspar, 2013). The average number of climate risks for a municipality is 1.3, but there is great disparity between the municipalities (between 0 and 5 risks)". The Minister explains that for a given territorial area, the level of exposure to climate risks depends on the relationship between population density and the number of risks identified. "This exposure is non-existent or low for 55.5% of municipalities and average for 30% of municipalities. 15.5% of municipalities, so 5,717 municipalities, are considered to be strongly exposed to these risks (...) The regions which are most exposed are Alsace, Provence-Alpes-Côte d'Azur (PACA), Île-de-France, Brittany, Guadeloupe, Mayotte, Réunion and Martinique. The regions which are least exposed are Limousin, French Guiana, Picardy, Champagne-Ardenne and Burgundy.". However, the number of affected territories is likely to increase over time, and the consequences will get worse in a general and/or differentiated way, as a result of changes on three fronts: frequency, duration and intensity of "climate extremes". Over only a few years, significant changes have already been observed in some regions as shown in the map below.

Image no.3: Change in population exposure to climate risks between 2005 and 2013



Sources: © IGN, BD Carto®, 2011 - Gaspar, MEDDE, 2013 - Insee, population census, 1999 and 2009 (1997 and 2007 for Mayotte). Processing: SOeS, 2013.

As an aggravating factor, disadvantageous changes or events could accumulate. With regard to heatwaves, floods, earthquakes, forest fires or increasing scarcity in water resources, Mr Vincent Vigié and Mr Stéphane Hallegatte observe: *"the probability of them occurring is increasing simultaneously, in other words, all of the risks which we have listed are increasing in parallel. A potential superimposition between them should thus be expected, which will strongly increase the difficulty in facing them"*.

Some areas, such as coastal areas, are more exposed to a set of risks than others, including the rising sea and ocean levels. Between now and the end of the 21st century, a 40 to 60cm rise in the sea level is expected and it could be as much as a metre. This rise could have already nearly reached 30cm by 2050 (MEDDE-DGEC, 2010). The Ministry notes

that *"this gradual phenomenon threatens the low areas in the overseas territories, Languedoc-Roussillon, PACA as well as those on the Atlantic coast between Gironde and Loire-Atlantique, and on the English Channel-North Sea coast between Lower Normandy and Nord-Pas-de-Calais. More frequent marine submersions here are to be feared, as well as worsening coastal erosion"*. Yet, coastal areas are often very rich areas in terms of ecology, but also especially populated, urbanised and equipped with significant infrastructures and a number of economic activities have developed in these areas. All these elements increase their vulnerability. Let's remember that this results from the combination of a climate risk with the presence of humans, natural environments or economic facilities on the one hand and on the other, whether the society is preparing to facing the risk or not. From this viewpoint as well, situations can vary greatly from one territory to another.

Towns are also more exposed and vulnerable in some areas than rural areas. Urban heat islands, a type of urban microclimate where temperatures are higher than the surroundings, increase the vulnerability of inhabitants to heatwaves, for example. Some solutions only make things worse: Mr Bériot, General Secretary for ONERC, recalled during his interview that *"some studies carried out on certain urban islands showed that if 20% of houses were using air-conditioning, so emitting heat into the street, the resulting temperature increase could be around + 2°C in the neighbourhood concerned"*, a very significant increase which creates imbalance.

Vulnerability with regard to questions related to water resources varies greatly from one region to another. Heatwaves have particularly noticeable effects in towns. And the experience from the 2003 heatwave shows that disadvantaged neighbourhoods were affected to a greater extent than privileged neighbourhoods, for obvious reasons. Thus, Seine-Saint-Denis was particularly affected. Moreover, this heatwave seriously hit older people, regardless of their gender.

Mr Bériot stressed the differences between territories' vulnerability facing the effects of global warming (climate extremes, water resources, etc.). Some parts of a territory can see their real estate, infrastructures and economic activities severely threatened whilst other are relatively sheltered from these threats. Production areas such as agriculture, viticulture and aquaculture are particularly affected by climate change as they depend on water resources. In that regard, one of the avenues for adaptation in agriculture, developed by ONERC (see the table in Appendix no.3), is improving capacities for storing and transporting surface water. In the mountains or on the coast the tourism sector can also be greatly affected: decrease in snowfall threatening winter sports resorts, reduction in the coastal area by the sea which, over time, will have a very noticeable impact, etc..

Another convergence must be highlighted. An ESEC opinion on adaptation to climate change recalled that *"Among the six groups of territories identified by our Assembly in a 2013 report and opinion reducing territorial inequality and land planning use, some of these combine climate vulnerability and situations of inequality and concentrated poverty: the overseas territories above all, but also Nord-Pas-de-Calais, Languedoc-Roussillon, Corsica and Provence regions. The existence of solidarity funds must be made known (solidarity funds for territorial communities, emergency funds for overseas territories) but these must increasingly be deployed*

preventively, as the National Office for Water and Aquatic Environments (ONEMA) has already done and not only in the event of natural disasters".

All in all, situations involving overlapping economic and social vulnerabilities are encountered in some areas, for example, in the mountains, in rural environments or coastal areas, affecting poor populations who, due to their low incomes and/or age, are not able to adapt to climate change.

Overseas territories are particularly exposed to climate change and are already facing its effects: submersion phenomena, acceleration in the erosion of coasts, seawater intrusion in freshwater tables, increase in the frequency of extreme meteorological events (storms and cyclones) and in the temperature of water. These different phenomena, in addition to acidification of the seas and oceans and the expansion of dead zones in the sea, have a direct impact on ecosystems, in particular coral formations. In addition, they will affect activities in coastal areas concerned and in particular very low areas such as atolls. For some territories, these questions will arise within a context of strong demographic growth, or even very strong (up to a 150% population increase between now and 2040).

The consequences for biodiversity are also significant: climate change will contribute to its deterioration in the overseas territories, in particular on the coastline, atolls and reefs, as stated above. However, biodiversity provides considerable services to the populations and economy of these territories. For example, according to the first results of the 2011-2015 National Programme of Evaluation of the Economic Value of Services Provided by Reefs and Associated Ecosystems, carried out by the French Initiative for Coral Reefs (IFRECOR), an organisation attached to the Ministries of Ecology and of Overseas Territories, the annual contribution from coral reefs to the GDP of New Caledonia is estimated at 100 million euros, notably for the tourism and fishing sectors. It has been estimated that nearly 20,000 jobs depend on the services provided by the reefs. In all of the overseas territories, by reducing the extent of the damage caused by extreme natural events (floods, tsunamis and cyclones), reefs and mangroves generate annually between 500 and 700 million euros in savings. The increases in temperature linked to climate changes increase biological invasions which have a serious impact on the highly endemic and fragile biodiversity in these territories, which are mainly islands.

Stakeholders in the fishing sector in particular, can expect, depending on the areas, significant species migrations, a loss in biodiversity and a fall in biomass for some fish stocks and marine species.

The question of housing, its quality and the sector's contribution to GHG emissions in the overseas territories is another subject which is a major concern. Energy performance of homes in particular is a very significant economic, social and environmental challenge in island territories. The growth in the consumption of electricity, massively reliant on fossil and carbon resources, is much higher there than in mainland France. It is accentuated by the development of the use of air-conditioning, which could increase. The construction and housing sector is thus the second largest energy consumer in overseas territories. For example, in Guadeloupe it was estimated that the sector made up more than 85% of the

total energy consumption in 2008. Yet, there have not always been thermal regulations adapted to the climate and lifestyles of these territories, as was the case in Guadeloupe.

The question of housing becomes all the more significant when examined from the point of view of adaptation policies, from the perspective of coastal erosion phenomena. These should increase in the years to come. Climate change can already be seen in Guadeloupe, where some local authorities are faced with rising sea levels and a changing coastline which is slowly transforming their coastal area. Rehousing is being considered but implementing this requires resolving the difficulties linked to determining rehousing areas and adapting the supply of rehousing to the needs of the local populations beforehand. This discussion does not exonerate authorities from their responsibility when it comes to anticipating changes in the coastal area and the consequences related to the choices for its use and the town planning and development policies which they implement.

Freshwater resources are also threatened by climate change which in some cases accentuates phenomena partly caused by poor management of these resources. According to the figures in the Plan "*Towards sustainable water and sanitation management*" jointly presented by the Ministries of the Environment and Overseas Territories in May 2016, 25% of housing is not supplied with drinking water in some overseas areas. For some authorities, the price of water and sanitation reaches €5.30 per m³ when the national average is €3.85. In Réunion, 50% of drinking water resources come from subsurface water. Yet, drilling is mainly carried out in coastal aquifers. The advance in "saltwater", due to seawater intrusions in the groundwater, is already a proven threat. In Mayotte, it is through the importance of an informal settlement without access to a drinking water network that the issue of the right to water is raised within the context of particularly strong demographic growth.

Taking into consideration the diversity of territorial situations from the perspective of exposure to climate risks of economic, social and environmental situations, the ESEC is committed to making recommendations which aim to maintain and develop existing equalisations.

Within this opinion, the ESEC endeavours to consider the change in public policies in a way which allows this diversity of situations to be incorporated in concrete recommendations aiming to limit inequalities in vulnerability to climate change while taking into consideration territories' mitigation and adaptation abilities. The ESEC supports the fight against all forms of inequality. The main objective of this opinion is to contribute to public policies which will help to limit, and if possible, to reduce social and economic inequalities caused by global warming on a national level.

PROPOSALS

I. THE FOUNDATIONS OF FRENCH CLIMATE JUSTICE: FROM ACTION PRINCIPLES TO THE STATE'S INTERNATIONAL RESPONSIBILITY

France is faced with complex challenges related to climate justice which rely on the most adapted and innovative legal principles, applied in a cross-disciplinary manner beyond any sectoral approach.

In order to develop an ambitious strategy which is also fair for everyone and in particular for the most disadvantaged people and territories, it is important to give action principles for climate justice (A) on which public policies and the actions of the private sector and, more generally, of civil society will be able to rely. This "strategic" support is vital for implementing national objectives for climate justice. It helps to provide guidance for a territorial goal (B) directed towards taking into consideration the disparities between exposures to climate risks and adaptation abilities. Finally, and this is the third branch of national climate justice, the engagement and the responsibility of the French State on the international scene must be considered in terms of carrying out a joint objective within the international community to fight against global warming and its consequences, in particular for the poorest people (C).

The ESEC considers climate justice to be an aim which must provide joint guidance for mitigation and adaptation strategies in a context of climate change in a way which contributes to limiting environmental and social inequalities and fosters consensus for action.

A. Action principles for implementing national climate justice

Climate change sustains social inequality. Therefore, in order to fight against these inequalities, it is necessary to work on reducing environmental damage and to rely on the fundamental principles which coordinate and ensure its protection (1).

At the same time, the instruments for social justice can support a climate justice strategy (2). As Ms Rosemberg explains *"Very often, climate questions are presented as scientific evidence which would lead to a particular type of action, as if the policy choice was finally reduced to objectives to meet and did not include the ways to reach these objectives. The idea of climate justice addresses the question of action methods. Climate action is not a choice, but climate justice is"*.

Finally, the ESEC considers that, in order to build a future which respects equality in the context of global change, a society must support research efforts geared towards solutions, not just related to mitigation and adaptation, but also related to reducing vulnerabilities and inequalities caused by exposure to climate risks (3).

Legal actions and fundamentals

Founding principles in environmental law: foundations of climate justice

Environmental law is based on a series of concepts and principles which all seem to be inspired by the new expectations of a society facing natural and technological risks - risks which are becoming more intense and/or frequent due to global warming. Thus, the prevention and precaution principles are based on a relationship to risk. The prevention principle - developed in other fields of law - applies when the risks are proven. As for the precaution principle, this applies in cases where there is a potential risk, which remains hypothetical.

Other statements stem from these two principles in international law and regional laws, in particular EU law. They involve knowledge development as well as the transmission and access to information which must be at the heart of the strategy for adaptation to climate change.

These principles encompass the environmental domain as well as other fields including health.

The prevention and precaution principles are complementary with the information principle and the principle for public participation in environmental decisions. Yet, here again, environmental law is still innovative, with the 1998 Aarhus Convention on access to information, public participation in decision-making and access to justice with regard to the environment. This agreement, which could be described as a historic moment in the history of international law, commits the States to collect information and put it at the public's disposal. Public participation is guaranteed for all activities which can have a significant impact on the environment. Finally, the Convention provides for conditions for access to justice, in particular for rejected information requests or for any challenge regarding the legality of an act.

Other significant principles express the capacity of environmental law to participate in the construction of climate justice. The principle of integrating environmental law into public policies allows it to be circulated and makes it operational.

The principle of shared but differential responsibilities depending on respective abilities was developed in international law and is inspired by the concept of equity. It boosts acknowledgement of developed countries' historic responsibilities in the deterioration of natural processes which are risk factors, in particular climate-related, with, as a consequence, financial obligations. This principle guides our responsibility in managing the financing of adaptation to climate changes at an international level but it can also be applied at national level. We contribute through our lifestyles to global warming but not in the same amounts or with the same options. Those who are poorest often have reduced choices, for example:

inadequate quality of housing, homes that are far from their workplaces and unsustainable consumption patterns mainly oriented by the price of products.

Two significant principles introduced by the Act for the Recovery of Biodiversity, Nature and Countrysides are of great interest for climate justice. The principle of ecological solidarity "calls for the interactions of ecosystems, living things and natural or managed environments to be taken into consideration in all public decision-making which has a significant impact on the environment of the areas affected" (Article 2.6)". Thus, highlighting interactions between ecosystems and living things helps to consider the impact of climate change as a factor in public decision-making. However, some stakeholders, in particular economic, are asking for further clarifications on the precise scope and implementation methods for this new principle.

Ecological solidarity allows for the consideration of the accountability of our behaviour with regard to nature and other living things, in particular those who are most vulnerable to the effects of climate change. It can also support awareness that decisions which cause damage to ecological functions can be particularly harmful to those who need them for their health (air and water quality for example), for their living conditions, economic activity (agriculture and aquaculture for example) or for their social and cultural life.

The non-retrogression principle, according to which environmental protection can only improve, is finally expressly recognised in French law. It joins the theory of continued progress enforced in social rights and European Union law which aims for a high level of protection and improvement in the quality of the environment (Article 3 of the Treaty of Lisbon).

In this sense, it is indeed about **putting the fundamental principles of climate justice back into the heart of public policies; these principles are based on an ability to anticipate, prevent and also reinforce adaptation methods by taking into account each person's abilities at an economic, social and environmental level.**

Climate justice before the law

On the initiative of NGOs and associations, appeals cases to national tribunals, whether finished or declared, seem to be multiplying on the basis of liability actions. Some of these actions stemmed from COP 21. In Europe, they are particularly drawn from a court decision made in June 2015 in the Netherlands: in the Urgenda case, the Court of Justice for the Hague area ordered the State to take more effective measures to reduce GHG emissions. This case has at least three major merits from the perspective of "restorative" climate justice: 1- a private legal entity, in this case a Foundation, can have an interest in acting and questioning the climate policy of a State; 2- an association can defend a collective interest which crosses national boundaries, Urgenda has the right to claim that Dutch emissions have consequences on people beyond the Dutch borders. It is the implicit recognition of an international environmental right to act; 3- a duty of diligence weighs on the State in climate matters.

On a national level, the reform of class action within the bill for "21st century justice" could be of significant interest for climate justice. Class action would take place when a form of discrimination occurs which appears on a limitative list defined by the future act. Proven

discrimination would represent both a misconduct likely to incur the civil or administrative liability of the perpetrator of the harmful event and a penal offence. This bill is still under consideration by Parliament.

The ESEC is aware of the importance that civil society exercises its right to act in order to defend the general interest, which includes climate justice.

Economic principles adapted to the challenges

In economics, several action principles can be considered which establish climate justice as a strategy.

If a direct link is thought to exist between the explosion of income and asset inequalities and climate change, because generally the richer people pollute most, the issue of redistribution of income involves a challenge to stimulate the reduction in GHG. Taxation is an interesting, indirect response but is insufficient as it affects secondary redistribution. By resorting to instruments such as the conditions of eligibility for public calls for tender, it would be possible to also act on the primary distribution of incomes, outside of their ceiling.

This eligibility condition could, for example, aim to facilitate access to public calls for tender for businesses who adopt impartial and transparent criteria for managing their executives' salaries. In this way, the AFEP-MEDEF listed firms' Governance Code advises the implementation of principles for determining salaries and for informing about these salaries which are founded on coherence, balance with regard to the general interest of the company, and consideration of the context of the profession and the markets.

For the ESEC, securing access to basis resources must also be considered. Climate justice implies minimal access to resources for the poorest people. Furthermore, in order to guarantee conditions for fair competition, the ESEC supports the principle of a clear, long-term, economic, social and environmental framework, which is at least European, and in the long-term international.

In view of the economic issues associated with climate change, the notion of an "adjustment rate" must finally be looked into as a vital determinant in justifying the investment choices which directly affect climate justice.

For the ESEC, the adjustment rate used in taking economic decisions must better take into consideration the interest of future generations. We must consider the impact of our decisions for the future and the time lag between implementing public policies and their effect on the environment, in particular in the domain of fighting climate change.

Social justice and the fight against poverty at the heart of climate justice

The principles of equality and solidarity are the basis of social justice. Within the context of climate change it is important to develop an integrated and coherent approach

to fundamental rights linked to the protection of ecological balances which include the climate system.

It is necessary to be in tune with the positions of the Declaration on Fundamental Rights to Work, the decent work agenda and the 2008 Declaration on Social Justice for a Fair Globalisation.

In this regard, the ESEC supports a change in public policies based on the identification and awareness of social vulnerability. To this end, the ESEC recommends that:

- **strategies for fighting against climate change and adaptation policies be incorporated within policies for fighting against poverty;**
- **policies and measures for fighting against climate change be evaluated with regard to their advantages for the 20 % poorest people;**
- **the energy transition be prepared and accompanied by worker training according to the activity sector;**
- **underprivileged populations be able to benefit from training and the creation of jobs linked to implementing the energy transition.**

The key role played by research

Tackling the risk of increasing inequality linked to climate change in our country requires research into different aspects.

The better we identify the consequences of global warming, the more effective adaptation to climate change will be - which of course applies to all sectors of the population. Even if the quality of projections at regional levels is progressing regularly, it is vital to continue to improve them, in mainland France as well as in overseas territories, in order to optimise adaptation measures in these areas. Executing regional projections, which requires very high computing capacity, and summarising them, should be entrusted to teams of researchers on the basis of mission letters accompanied by the implementation of dedicated means. **The ESEC considers that the idea of drawing up annual reports on climate in France in the 21st century, which was carried out between 2011 and 2015 in this context, should be continued within the second phase of the National Plan for Adaptation to Climate Change (PNACC).**

Climate services, a notion which covers "*all information and performances which help to evaluate and qualify the past, present or future climate, to assess the vulnerability of economic, environmental and societal activities to climate change and to provide ideas in order to undertake mitigation and adaptation measures*", are a significant tool in preventing climate risks. Their development, which has hardly begun, is already the subject of intense competition at international level. **The development of climate services expected to play a key role in strategies related to adaptation to global warming and risk prevention linked to**

extreme events (heatwaves, floods, droughts, cyclones in overseas territories, etc.) must be supported.

In terms of jobs, the ESEC notes a lack of qualitative and quantitative studies which would help to correctly evaluate job developments in different sectors affected by climatic variations and where mitigation and adaptation strategies are still being developed.

The ESEC recommends carrying out national studies on job development in these sectors.

There are a number of studies on the link between climate change and poverty including a well documented summary "*Managing the Impacts of Climate Change on Poverty*" which was the subject of a World Bank report overseen by the French researcher, Stéphane Hallegatte. Weather-related disasters are already a hurdle to reducing poverty and recommendations are made here to prevent the consequences of climate change from accentuating poverty. However, this report does not deal with Europe, nor more generally, developed countries. **The ESEC recommends carrying out studies on the link between poverty and climate change in France.** Currently there are almost no such studies, when they would be very useful for implementing adaptation strategies which fully take into account aspects linked to poverty.

The ESEC also hopes that scientific work aiming to understand aspects and changes in a society which is *open to integration processes to fight against inequalities within the context of climate change will be supported, by relying on the national research strategy.*

In order to develop an ambitious climate justice strategy, it is imperative that the uncertainties which influence vulnerability components are removed. Yet, the trend in public policies confronted by such uncertainties is, at best, to make estimations based on the current vulnerability situation in which a population finds itself in a given territory.

Inversely, research carried out on vulnerability trajectories suggests developing knowledge regarding the changes in human factors in order to provide guidance on changes in vulnerability which will help to fuel forward planning and so to develop our adaptation abilities.

The ESEC recommends supporting research carried out on trajectories of vulnerability for the territories which are most exposed to climate risks, integrating social criteria for risk exposure within the research and developing plans for to make the poorest populations better adapted.

B. A territorial ambition which goes beyond mainland France: overseas "examples" and challenges

Diverse situations

The 2006 national strategy for adaptation to climate change provided for taking into account the special features of the overseas territories. However, the PNACC did not identify which domain was dedicated to these territories as the preliminary consultation revealed the need for further discussion before defining specific measures.

The major challenge when broaching the law of overseas territories, whatever the subject, is of course the diversity of the situations and legal statuses with five overseas regions, five overseas communities, four French Southern and Antarctic Lands (Kerguelen, Crozet, St Paul and Adélie Land) and New Caledonia's special status.

In its 2012 report to the Prime Minister and Parliament on overseas territories in the face of climate change, ONERC (National Observatory on the Effects of Climate Change) conducted analyses of the effects by sector. It made its recommendations based on these analyses, without these translating into an action plan. The summary table attached to the 2012 report, summarising the main measures, is in the appendix.

The PNACC's evaluation mission highlights in its report that "*the choice to not differentiate between overseas territories allowed the relevant central administration directorates to oversee adaptation policies and to provide for measures relative to overseas territories in an almost systematic way*". It shows however:

- that further scientific work remains to be done;
- that a specific action plan remains to be established and "to be included in the future PNACC";
- that an effort of national solidarity seems necessary to reinforce local abilities "as indicated by the ESEC";
- that climate scenarios for overseas territories must be outlined.

The ESEC asks that an evaluation of the recommendations drawn up in 2012 be carried out (the summary of these recommendations is reproduced in the table attached as an appendix to this opinion). An examination should be carried out, whenever relevant, from the perspective of justice and solidarity.

However, the Solutions Agenda published by the Ministry for COP 21 shows that projects are being carried out in all of the overseas territories which are in accordance with the major themes from 2012: development and protection of rich biodiversity and ecosystems on land and in the sea, integrated management of the coastline and development of the coastal area, preservation of water resources, prevention and management of disasters and sustainable fishing management.

The unique nature of overseas territories

What is particularly striking with regard to overseas territories is that they are ruled by special statuses which should lead to different standards for constructions, developments and town planning. Yet this is far from the case.

The CGCT, French local government Code of Practice, (Articles L.4433-7 and those that follow) prescribes development schemes for the overseas regions and *départements*. However, specialists in law related to natural risks note that "*Despite the specific features of natural risks which weigh on these remote lands due to their geographic locations, Article L.4433-7 only creates, from this viewpoint, a link with general provisions from the environmental code*", without these idiosyncrasies being properly taken into consideration.

The French Society of Environmental Law (SFDE) has notably carried out a specific study on the clarification of institutional powers with regard to the environment which leads to different recommendations. **The ESEC hopes that overseas regions and *départements* will be encouraged to fully exercise powers in favour of environmental protection considering that it is a key factor for the resilience to global warming of territories which are particularly affected.**

Climate justice must also involve recognising the specific features of exposure to risks and vulnerabilities.

The ESEC considers it necessary to strengthen the consultation mechanisms of local authorities in the overseas regions and *départements* (including municipal and inter-municipal authorities which are affected by the application of texts related to environmental protection).

"- It is advisable to associate decentralised authorities more closely in the State's drawing up of some plans and operational outlines. Greater involvement of decentralised authorities could result in the use of mechanisms involving co-decisions, delegation and experimentation.

*- Furthermore, a problem which is specific to French Guiana needs to be highlighted. It is the participation of native populations in drawing up operational outlines and more generally law related to environmental protection. In this overseas *département* and region problems can arise from the coexistence of common law regulations and customary regulations."*

The ESEC strongly recommends that the overseas territories which share joint concerns develop cooperation instruments between themselves in order to mutually support their ability to react and innovate with regard to climate change and thus they will be able propose them to third-party countries in affected areas.

The ESEC also emphasises the importance of adopting agreements for regional cooperation which will contribute, by mutually reinforcing abilities to mitigate and adapt to climate change, to greater regional solidarity.

Finally the ESEC recalls France's commitment to the European strategy for adaptation to climate change and the significant role European funds play in supporting the development of overseas territories. **The ESEC recommends implementing funds for climate justice geared towards supporting the resilience of overseas territories in connection with protecting ecosystems and for local initiatives.**

The contribution of overseas territories to the national adaptation strategy

For the ESEC, overseas territories are, in many ways, veritable laboratories for adaptation to climate change; to begin with: because of their diversity in terms of, for example, their geophysical and geographic configuration, overseas territories are exposed to a multitude of risks. Secondly and more importantly, their ability to adapt is, in view of their isolation, strongly linked to knowledge of their environment and their ability to anticipate and prepare for dealing with climatic events.

For the ESEC, the following actions, with adapted legal instruments, must be prioritised above all:

- develop a risk culture to stop densification in areas which are at risk, in particular the coastal areas;
- reorganise housing spatially in connection with the problem;
- take into consideration environmental risks in broad terms (reintroduce a view of the risks issue which is more ecosystem-based). The ESEC considers that the National Biodiversity Strategy is an important instrument for supporting an adaptation strategy over the short, medium and long term, as shown by the National Assembly's information report on the consequences of climate change in overseas territories. *"The marine protected areas and national parks in the overseas territories are key instruments for environmental protection, which are capable of providing a positive contribution to adaptation strategies for preserving biodiversity."*

In any case, it is appropriate for the ESEC to carefully examine the specific conditions of overseas territories (areas which are over-exposed to risks) by ensuring that solutions which are tailor-made to each territory are implemented. The ESEC calls for research into innovative solutions, taking into consideration the diversity of populations and statuses of the overseas territories in order to develop efficient strategies and public policies for adaptation.

C. France's international commitment

The ESEC is committed to the State's engagement from the standpoint of international security and the status of climate-displaced people, as well as through its influence in the evolution of the international climate regime.

As already expressed in several of the ESEC's opinions, the significance of movement linked to climate-related disasters must be considered, but the situation of people who are unable to migrate for various reasons, and are therefore in situations of concern, must also be highlighted.

Climate change and security

Towards the development of climate security

A 2014 report for the Ministry of Defence called "The consequences of climate change for the Ministry of Defence" states that *"Territories in the French sphere of influence, in the periphery or in the sphere of influence of France's overseas territories could be destabilised by*

the consequences of climate change (extreme weather and adaptation). Even if links between climate change and armed conflicts have not yet been established, the position of the threat as a multiplier is recognised by our American and British partners and by all of the research carried out on the subject".

As for the IPCC, it highlights that climate change can indirectly increase the risk of violent conflicts - civil wars and inter-ethnic violence - by exacerbating sources of conflict such as sharing resources, poverty and economic shocks.

The ESEC considers that security is a major challenge for achieving climate justice. **It recommends that the potential destabilising effect of climate change be subject to studies which are specific to each territory in order to identify the risks to national and international security with particular attention paid to the poorest populations.**

The ESEC recommends taking into account climate risks (see list in the appendix no.5) in the production of strategic defence documents.

The ESEC supports the proposed appointment of a special representative for climate security, attached to the Ministry of Defence in connection with the Ministry of the Environment, the Ministry of Social Affairs and the Ministry of Foreign Affairs, who is able to develop a cooperative, global approach coordinated with the adaptation strategy. He/she will also collaborate with European bodies.

Climate change migration

- The diversity of migrations and the overlapping factors: A challenge: choosing to move

Due to either extreme climatic events - floods, droughts and storms - or slower climate variations - increasing sea levels and lakes drying out - people have to leave, either temporarily or permanently, the places they live in. The idea of a "climate refugee" is often associated with these people, though the definition is still quite vague. Their number risks increasing with the anticipated increase in the frequency and/or intensity of extreme events, in addition to the inescapable rising sea levels. Based on a United Nations report, the figure of 250 million "climate refugees" between now and 2050 is often cited. But it seems that a numerical estimate is extremely difficult to determine as highlighted by the latest IPCC report. According to this report - which asserts that migrations can also be an effective adaptation strategy - the complex nature and multiple causes of these migrations linked to climate change make it difficult to make reliable projections for their evolution.

Some of these migrants, primarily those from the Mediterranean area, could choose our country as a fallback and, if possible, a refuge. This must be anticipated then fully taken into account at national level.

The ESEC recommends that migration be considered as a strategic approach to adaptation when justified with respect to proven climate risks. It must therefore be based on the consent of the populations concerned.

Such movements must be anticipated in order to prevent human disasters and to facilitate social acceptance. It is important to take both economic and social conditions for these movements into consideration.

In this same vein, the ESEC recommends solutions related to land and insurance be considered in order to provide for and organise a "supportable" movement of populations.

- The status of climate refugees

As already highlighted by the ESEC in its opinion on *International migrations: a global issue in 2015* "(...) migrations are taking new forms, such as environmentally displaced persons, as a result of climate change, for example. However, international law on migrations and refugees elaborated after the Second World War could not take into account the fact that the environment would subsequently become a major factor in population movements. The United Nations Convention of 1951 relating to the Status of Refugees does not recognise climate refugees as such. In concrete terms, this poses the question of the adaptation of international conventions, signed decades ago in an entirely different international environment, to these new situations, a question which can be expected to become an even more burning issue in future, as a result of an increase in migratory flows and the increasing complexity thereof.

These migrations are the result of human activities carried out in the States' territories and especially, for historical reasons, in the territories of developed countries.

However, international law, which is based on the respect of the sovereignty of the State, provides that the exclusive power of the State in its territory also includes the right that its environment is not subject to damage caused by activities outside of its jurisdiction. This rule was drawn up from case law precedents and the regulations of general international law and it is repeated in Principle 21 of the Stockholm Declaration according to which States have "the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction." This rule is echoed in Principle 2 of the 1992 Rio Declaration on Environment and Development.

As a consequence, international environmental law places a specific responsibility on the State with regard to States affected by activities which harm the climate system resulting from activities carried out in territories under its jurisdiction. This responsibility must lead the State to accept its involvement in the deterioration of the global environment and in particular in climate change, it being understood that one of these consequences is movements of populations victim to climate change. In this regard, the State must assume its role to support these people. In this context, some authors advocate the recognition of a "right to environmental asylum" which could be a way of showing the State's commitment to its responsibility. For them, the right to environmental, and therefore climate, asylum could be given either as human solidarity, or as compensation for the environmental damage suffered. It could take the form of a negotiable offer for resettlement established in

partnership with several States and involving approaches and commitments "beforehand", in other words, in anticipation of an evolution in environmental damage which is gradual and so is likely to be subject to monitoring.

The UN expressed support for the creation of a climate refugee status and France officially supported the approach during COP 21.

In this regard, aware of the need to take into account the inescapable migration phenomenon related to climate change, the ESEC recommends that the subject of the status of climate refugees be placed on the agenda for COP 22. France could recommend opening negotiations to adopt a legal status for displaced victims of environmental disasters.

Moreover the ESEC recommends that France ask the Security Council, in accordance with Article 96 of the United Nations Charter, to request an advisory opinion from the International Court of Justice on the legal future of States threatened with disappearance as a result of climate change.

Finally the ESEC recommends that granting climate refugee status be considered for people displaced by climate change.

The State's commitment to international negotiations

By putting itself forward for the organisation of COP 21, France showed its commitment to the negotiation process put in place by the climate convention within a UN mechanism.

For our country, the first level of involvement is in Europe, responsible for climate negotiations, and within which the distribution of efforts to be contributed between now and 2030 to respect the commitment to a 40% reduction will not be without its difficulties. It is important to make a good contribution - from public, private and public-private funds - to the 100 billion dollars that developed countries are committed to make available to developing countries each year in order to help them fight against climate change and adapt to it. **The Council hopes that a significant part of these investments will be geared towards the most vulnerable populations and in this way contribute to the "climate justice" approach, which President Hollande committed our country to during the Paris Conference. With regard to these "climate justice" aspects, the ESEC hopes that negotiations regarding climate and sustainable development objectives will be carried out in a collaborative way. Finally, France must continue to be active in these negotiations while supporting their transparency and the involvement of stakeholders.**

Moreover, these international negotiations - whether regarding climate, biodiversity or SDGs - are based on reports produced by relevant scientific communities. **The active involvement in recent years of French scientists in work groups in charge of these reports (IPCC and IPBES for example) must be continued, or even increased in certain areas. This involvement entails the State's reiterated support of public research**

and the awareness of stakeholders in private research whose participation in these approaches involving collective expertise is highly desirable.

In its opinion on "*Making a success of the 2015 Paris Climate Conference*", the ESEC asked for the 11 European States who had shown willing to respect their commitment to implement an international tax on financial transactions. It also recalled that following the 2008 financial crisis, the International Monetary Fund issued several billion dollars in special drawing rights (SDR). Because these have not always converted into currency by the countries which have them, they could be used for the benefit of the Green Climate Fund and other funds responsible for ensuring the correct workings of the Paris Agreement's financial mechanisms.

The ESEC, recalling its 2015 recommendations **"insists that a substantial portion of the available funds be allocated, via subsidies, to projects targeting the most vulnerable populations.** *Of course, care must be taken to ensure that these funds are additional public funds and not recycled or, as is perennially tempting, deducted from state development assistance programmes"* The ESEC is also supportive of the idea to *"make it possible for local authorities to apply to the Green Fund directly and more generally to apply for international funding"* and make *"it possible for the States concerned to call upon the Green Climate Fund when population displacements related to environmental conditions occur"*.

Since the Green Fund gives help to businesses, the ESEC hopes that this help given to the private sector will support the development of local economic conditions as a priority. Their conditions for allocation must guarantee that the provisions of International Conventions are respected, especially with regard to the respect of human rights, social rights and the protection of the environment.

The ESEC also highlights the strategic role played by France and its responsibility in the protection of marine environments, considering that France is the second maritime power in the world and the vital role oceans play in the fight against global warming. **The ESEC recommends that the "blue carbon " approach is taken into consideration with regard to climate financing** in connection with climate justice objectives in anticipation of COP 22.

International investment, fuelling climate justice

International investment is a key factor for development which can weigh heavily in the implementation of environmental policies. Indeed, it allows for technology transfers and brings in significant tax revenues. Inversely, if misguided, investment can go against the objectives of the fight against climate change. France's international commitment to climate justice must take this aspect into consideration. Drawing up international standards is vital in order to orientate investment law towards ecologically responsible projects which are respectful of populations and ecosystems affected by the projects being financed.

In that regard, the ESEC recommends that France incorporate, within its model for international investment agreements, obligations related to impact assessments, providing for evaluations which take account of the objectives of climate justice.

Moreover, the ESEC recommends that France support, within investment treaties, a definition of investment which incorporates the principles of climate justice and respects policies fighting climate change. As a consequence, international arbitration should be opened up to other criteria in order to assess investment disagreements. France must support this opening up at international level. The ESEC recommends in particular supporting mechanisms for controlling and monitoring investments in collaboration with local communities and all parties with interests affected by investments.

I. DEVELOPING CLIMATE JUSTICE IN FRANCE: FROM THE ENERGY TRANSITION TO AN AMBITIOUS ADAPTATION STRATEGY

The two approaches to the fight against global warming (mitigation and adaptation) have been a national priority since 2001. France's fight for the environment is also a fight for a cohesive society.

It is vital to make clear choices by defining priorities by economic sector with targets, an implementation schedule and methods to help reach these targets. A major cross-disciplinary target is to avoid aggravating existing inequalities and creating new ones.

Time scales, different territorial levels of action and their articulation must be defined in a concerted fashion and by guaranteeing coherence in decisions. This is especially important in order to successfully carry out policies of adaptation and vulnerability reduction.

COP 21 helped to raise awareness of the "Action Agenda" - the multitude of initiatives, projects and solutions led by non-State stakeholders (for example, authorities, businesses and civil society organisations). The involvement of these stakeholders in the development of climate justice will be one of the keys to making it work. It is therefore vital to expand upon and support this involvement.

France has firmly committed to the energy transition. It now needs to commit to a social energy transition based on rethought public policies in relation to the challenges of climate change which are already affecting our society and which will be exacerbated if we do not change our development model. The ESEC therefore encourages the emergence of innovative adaptation tools (A) and the development of public policies for climate justice (B).

A. New tools for public policies incorporating climate inequalities.

Designing public policies in relation to climate justice: the role of the PNACC

The National Plan for Adaptation to Climate Change, passed in 2011, covers a five-year period, the first phase of which has recently been subject to an assessment and recommendations within a report to the Prime Minister and Parliament published under the ONERC in June 2016.

Through the PNACC, the challenge of anticipating the effects of global warming is becoming a concern in public policies. It sets out a national framework to ensure that policies are consistent with the objective of voluntary adaptation.

In view of the uncertainties which still surround the extent of the changes, the plan's measures are mainly "no regrets" and reversible. All in all, the PNACC includes 84 actions broken down into 242 measures at national level.

The national plan does not include territorial adaptation actions which come under regional schemes.

With regard to risk prevention, energy, transport, health, education and jobs, climate justice, in terms of the fight against social or territorial inequalities, is not mentioned in its current form as a concern of the PNACC.

On the other hand, it is appropriately taken into consideration within the field of agriculture, thanks to the creation, in 2013, of a National Fund for Pooling Health and Environmental Risks (FMSE) and the annual appropriation of funds from the European Agricultural Fund for Rural Development (EAFRD) for the management of climate risks.

As far as town planning is concerned, the fight against heatwaves in densely populated areas has been subject to exploratory work and research, some of which is on-going; the research is likely to join the fight against inequalities.

In its report from June 2016, the ONERC explicitly refers to different cross-disciplinary opinions on the adaptation to global warming including one published by the ESEC in 2014. The ESEC is in tune with the general recommendations of this report "*to better coordinate the different levels of action, to identify and develop synergies between sectors and to further explore the areas which have hardly been mobilised*". It recalls its hope that the work on "climate in France in the 21st century", the summary of which is presented in the ONERC report, is continued as part of a mission letter (see 3, the major role played by research).

In the view of this opinion, the ESEC adds specific recommendations to the "climate justice" aspects, which it hopes will be implemented within the second phase of the PNACC:

- **the ESEC recommends that climate justice be incorporated in the PNACC. It also supports the need for a more ambitious and better articulated plan;**
- **the PNACC should also be incorporated into the policy for fighting against poverty in order to guarantee collaboration between the measures proposed;**

- **finally, the PNACC must provide tools for evaluating policies and measures designed to fight against climate change, in terms of their benefits for the 20% poorest people, in order to ensure that these policies do not increase inequalities.**

To better incorporate social and intergenerational justice within investment projects and programmes

Studies on climate impact: an instrument to develop

In France, since 1976, and in the whole of the European Union, since 1985, the study of the environmental impact of projects which are likely to have significant effects on the environment is prescribed (original Directive 85/332/EEC, amended by Directive 2014/52/EU). This obligation was expanded by Directive 2001/42/EC to include plans and programmes defining the framework for carrying out projects. In these two cases, climate impacts are explicitly cited amongst the environmental impacts to be taken into account during the analysis of the foreseeable consequences of the project or programme, and in the definition of the measures aimed at managing them.

The ESEC recommends that project managers be asked to pay particular attention, when studying the impacts, to the impacts affecting underprivileged people and the ways to avoid or reduce them.

Socio-economic assessments of investment projects:

The methodological framework for ex-ante assessments should be modified to better take into account the poorest people and future generations.

All investments in transport infrastructures over a threshold fixed by the Transport Code (currently around 80 million euros) must be subject to a socio-economic assessment meeting specific regulations. Since the Decree of 23 December 2013, the same goes for all public investments receiving funding from the State, or one of its public establishments, of above 20 million euros.

The method generally involves calculating a "net present value" or an internal global rate of return when it is commissioned, by adding together all of the revenues and expenditures forecasted, updated and increased by the monetised assessment of "externalities", in other words the consequences of the project not directly resulting in a financial impact (noise, time saved or wasted, greenhouse gas emissions, etc.). This method poses, from the point of view of the question of climate justice, two significant questions:

- calculating the net present value gives (subject, of course, to the validity of the hypotheses and parameters used) a global assessment of the "social utility" of the project, positive or negative, according to the sign of the results of the calculation. But this result does not specify the distribution of the project's positive or negative effects on each person or group of people concerned. However, even if a project's global utility, sanctioned by the Declaration of Public Utility, is recognised, it generally has effects split between territories or user categories, and so between social categories too;

- updating a project the year it is commissioned, necessary for taking a comparison between current and future revenues and expenditures into account, is based on the choice of adjustment rate. This rate, which implies preference for the present over the future, has been fixed for State expenditures at 4% since 2005, with regular decline only after around thirty years. This means that an expenditure of €1 in year n and another of €1.04 in year $n+1$ are seen as equivalent. This rate implies a high "preference for the present": Nicholas Stern, in his 2006 review on the Economics of Climate Change, retained a rate of around 1.3%. For reference, the same impact of a million euros in 30 years is considered for €165,000 at a rate of 4%, and for €680,000 at a rate of 1.3%, therefore implying four times higher attention to the future.

These two methodological aspects require a fundamental review. They are invisible to users who only see the calculation result indicating whether the project is justified or not.

The ESEC recommends that the State review the socio-economic assessment guidelines for investment projects which it applies to its own financing. On the one hand it is a question of completing the calculation of a net present value or an internal global rate of return by analysing the redistribution effects with regard to the most disadvantaged populations, and on the other hand it involves fixing an adjustment rate which better takes the well-being of future generations into consideration. This attention to fairness must complement the efficiency prerequisite of all public investments in favour of fighting climate change.

Social, financial and fiscal equalisations

In its opinion on "Reducing regional inequalities: which national policy for regional management?" the ESEC highlighted that climate change *"does not affect all regions in the same way and will have different repercussions on regions according to their geographic situation, their ability for natural and human adaptation and their level of economic development"*. However, territories are not all concerned by the same risks.

That is why it is important for public policies to be made according to territory in this matter, and to be linked to environmental issues, economic local development issues and social issues for dealing with inequalities. The reduction of territorial inequalities plays a part in national cohesion, and the State is responsible for this cohesion. Since the Constitutional amendment of March 2003, Article 72-5 of the Constitution states that *"the law provides for equalisation measures intended to favour equality between regional authorities."*

To avoid increasing inequalities between territories, it is vital to redistribute resources. Financial equalisation is a central issue for reducing regional inequalities.

In the same opinion, the ESEC has not only highlighted the importance of "social equalisation" but also its contribution to the reduction of regional inequalities: *"When considering the overall budget of "Social Security", through all its branches, there is growing awareness of, not only the fact that our "distribution" model benefits people, but that it actually*

has a significant impact on the "endogenous economy" of regions and contributes directly to reducing regional inequalities..."

The ESEC asks that the "social equalisation" role played by social transfers is better evaluated and that an appropriate welcome policy for populations concerned is implemented in each territory, consistent with the established regional diagnostic.

In its opinion "Environmental and Social Inequalities: identifying emergencies, creating dynamics", the ESEC recalled that *"if budgetary, fiscal and economic policies are, rightly mobilised for climate change, it is nevertheless vital, as for any other public policy, that before any new measures go ahead, serious studies are carried out on the economic, social and environmental impact."*

The opinion highlighted in that regard that inclusion in the Energy Transition Act of a gradual expansion of carbon in the domestic tax on the consumption of energy products (TICPE) and in the domestic tax on consumption (TIC) of natural gas was insufficiently prepared. Eloi Laurent confirmed this during his interview with the section: the increasing power of the carbon tax in France should lead it to reach gradually €100 per tonne in 2026. However, at this stage, a social planning mechanism for carbon taxation is not anticipated, this taxation will become harder for taxpayers to support. A high risk of increasing social inequalities and discontent will result from this, which could lead to the questioning of its very principle.

The ESEC hopes that carbon taxation can be planned socially by establishing a progressive system.

On a broader level, the ESEC's opinion on "Financing environmental and energy transition" recalled that, in order to be accepted, the financial effort needed for the transition must be made fairly and go alongside a reduction in inequalities. The historical observation of environmental policies shows that their financing received support either by directly applying the polluter pays principle (general tax on polluting activities and development cost charges for example) or from the consumer (water charges, effluent charges and Contribution to the Public Electricity Service (CSPE) for example), or from the taxpayer (financed by the general budget).

Insurance policies

A study was carried out by the insurance sector during the preparation for COP 21 (Climate change and insurance for 2040). For the period 2008-2013, it cited a cost for insurance providers of 48 billion constant euros for droughts, floods, sea floods and storms. By 2040, the additional cost for insurance due to material damages caused by climate events would increase 90% in relation to the total amount of damages over the preceding 25 years.

The Insurance Code provides that the financial consequences of a disaster which is incorrectly called natural, such as a technical disaster, are covered by a particular scheme under certain conditions. According to Article L-125, insurance contracts, taken out by any natural person or legal entity other than the State, and insuring against fire damage or all other damage to property in France, give rise to the guarantee of the insured against the effects of natural disasters. In concrete terms, all property insurance contracts (comprehensive

home insurance, comprehensive business insurance, comprehensive car insurance for example) must include a guarantee covering damages caused by wind (falling trees, a roof which is damaged or blown off, furniture damaged by rain following damaged roofing, etc.).

However, a natural disaster declaration is needed for the damages caused by a flood, for example an overflowing river, as well as by droughts, landslides, avalanches and earthquakes. The 'state of natural disaster' is declared by inter-ministerial order which determines the areas and periods where the disaster occurred as well as the nature of the resulting damages covered by the guarantee. The scheme for compensation for natural disasters (CATNAT) was created by the Act of 13 July 1982. It helped to cover natural risks which were hitherto barely insured. It was established on the preamble of the 1946 Constitution, which provides that *"the Nation proclaims solidarity and equality for all French people in bearing the charges which result from national disasters"*. Premiums from comprehensive home insurance contracts and vehicle insurance help to finance compensation. The State and the CCR, a French public-sector reinsurer, are the keystone of this system, with the State's guarantee as a last resort and the CCR making provisions. In 2000, cyclones were incorporated into the CATNAT scheme as damages suffered stopped being insurable.

The Major Natural Risk Prevention Fund (FPRNM), or Barnier Fund, supports financing measures to reduce vulnerability, in particular different planning concerning public authorities. It is funded by a levy on insurance contracts for natural persons or legal entities (home, vehicle and operating losses) in link with the "natural disaster" guarantee. Its scope continues to expand.

Generally speaking, insurance is a competitive market where clients who are in the same tariff classification pay the same price. Market segmentation by tariff classification ensures that those with the same profiles pay the fair price for risks, thus building random solidarity between insured parties in the same tariff classification. In contrast to this market insurance, it is possible to initiate a system outside of this where insured parties benefit from the same price for a social guarantee.

The majority of countries have a market insurance system.

According to the interview made to the section by Mr Nussbaum and Mr Delcamp, respectively Directors of MRN (Mission for Insurance Companies' Knowledge and Prevention of Natural Risks) and Deputy Director of Risks and Responsibilities at FFSA (French Federation for Insurance Companies), the "worst risks" tend not to be insured, with adverse effects called anti-selection or adverse selection, whilst the "best risks" benefit from a reduced premium, encouraging prevention.

Inversely, an additional premium or refusal to provide cover can only be justified with the agreement of public authorities on the basis of planning documents.

The speakers raised quite a few points which they consider to be of concern. Firstly, the percentage of premiums which finance natural disasters are fixed, irrespective of the

geographical location of the insured goods and their nature, which is worth discussing in terms of justice and fairness.

The deductible amounts are also relatively low, however, they are increased significantly when natural disaster orders are involved concerning the areas where no PPR is adopted or initiated. This is not the norm.

They are also concerned by the objective criteria for triggering the CATNAT guarantee by ministerial orders. They point to the fact that nothing guarantees that the criteria used guarantee equality in treatment between territories.

Finally, the level of the levy currently used in contracts to cover disasters is not sufficient to deal with a significant increase in the cost of damages. This has an effect on intergenerational solidarity: for example, when there is a major climate event, it is not the insured party, but the taxpayer, through their contribution for the current year, who will pay for the reimbursement by national solidarity which has not been provided for in insurance. With regard to prevention, they think that €40 per year and per inhabitant would be needed to fund local projects.

The Council recalls that it hoped, in its opinion on adaptation to climate change, that professionals in the sector would set up a system of financial bonuses for the premiums of insured parties who would be committed to adaptation approaches by the voluntary reduction of the vulnerability of their goods and activities, and inversely, a penalty for situations which are potentially dangerous in the future. Likewise, **the Major Natural Risk Prevention Fund (FPRNM) must be able to favour stakeholders who have committed to a prevention approach.**

The ESEC hopes that a discussion will be carried out on the increase in the deductible amounts which a lack of PPR leads to, on the conditions of this increase (PPR approved or on-going), on the amount and its methods (modulation at the discretion of the insurance companies for example) and on the situation of insured parties, whose ability to act or influence the PPR managers is very weak. The prescription, appropriation and implementation processes for Flood Risk Prevention Plans (PPRI), Coastal Risk Prevention Plans (PPRL) and Natural Risk Prevention Plans (PPRN) must be accelerated, and the previous prevention plans must be updated (some date back over 20 years).

The ESEC supports the idea that compensation for the cost of rehousing victims whose main residence has been destroyed can be incorporated into the natural disaster scheme.

The French Insurance Association's "white paper for better prevention and protection against natural risks" highlights that the hierarchy of risks will change: the shrinkage-swelling phenomena of subsoil linked to drought and the coastal submersion phenomena are the greatest developments anticipated in terms of frequency and intensity. **The ESEC considers that it is now urgent, by 2040, to prepare for the reform of the cover for climate risks in general and the natural disaster scheme especially, both to maintain national solidarity and to allow the poorest people to access insurance, via the market system or a social cover. The ESEC recommends that the insurance sector continue its effort**

for transparency in the development of insurance costs and the level of premiums by providing insured parties with information.

B. Ambitious choices for economic, social (health) and environmental development bringing about climate justice

Climate justice is taking shape in profound changes in our development methods and involves rethinking the way in which economic activity is structured based on the consequences of climate change. A national strategy for adaptation in tune with the imperatives of climate justice involves altering the major guidelines for development in line with territorial development, financing and education programmes to develop the environmental awareness vital for preparing our society for adaptation.

Structuring economic activity in relation to adaptation

Territorial development and climate change

Since the promulgation on 7 August 2015 of the Act on the New Territorial Organisation of the Republic (NOTRe), regions have had their own powers which help them, if they want to, to develop local policies to fight against inequalities from the point of view of climate justice.

With regard to the environment and territorial development, the region must devise a regional scheme for planning, sustainable development and equality for territories (SRADDET). This fixes objectives for the balance and equality of territories, for establishing different infrastructures of regional interest, for opening-up rural territories, for housing, for the economical management of spaces and for the intermodality and development of transport; all areas where actions for fighting inequalities could evidently be developed.

The SRADDET also fixes objectives for energy control and recovery, for fighting against climate change and for fighting against air and biodiversity pollution. These objectives must be included in town planning documents for municipalities and inter-municipalities. This scheme seeks to bring together existing schemes (including the regional scheme for climate, air and energy (SRCAE) and the regional scheme for ecological coherence (SRCE)), giving the region a key role in the consideration of the area, resources and their management.

At the level of public establishments for cooperation between local authorities (EPCI), regional climate and energy plans (PCET) are becoming regional climate, air and energy plans (PCAET): air is thus incorporated into strategies for territories' climate policies. These

plans will need to be developed quickly amongst EPCIs who can levy their own taxes, before the end of 2018 at the latest.

It should be recalled that the SRADDET and PCAET should incorporate a section regarding adaptation. These sections in the SRCAE and PCETs were considered to be weak.

The *départementale* powers are now focusing on social and territorial solidarity. The NOTRe Act reaffirms the social powers of *départementale* councils.

In view of this, and territorial methods for organising economic and solidarity development and climate policies, it must be recognised that the different levels of authority have to collaborate. The current PNACC does not involve regional authorities.

The ESEC proposes that the creation of the next PNACC involves an in-depth consultation phase with the authorities who will have to set out within it the guidelines for their territories.

As the PNACC's evaluation report highlights, "the State's coordination with the regions is a new step which is becoming more and more crucial for the smooth running of the country's adaptation". **The ESEC hopes that these regional schemes and climate plans open their action principles to the idea of climate justice. The ESEC recommends the regional schemes be coordinated with the PNACC, involving the regional prefect and an objective for climate justice between territories.**

Funding areas: prevention, information and risk culture

The development of a genuine culture of adaptation to climate change amongst the stakeholders is vital, it is not widespread in either mainland France or the overseas territories.

The risks from climate change and their uncertainties are difficult to determine in terms of their form, the impact of their effects on territories and the probability of them occurring and repeating. Risk management and adaptation measures will depend therefore on evaluations carried out at the relevant territorial level.

The CPP (Committee for Prevention and Precaution) notes in its 2013 opinion on "Adaptation to climate change, acceptability of leaders and risk" that risk management by stakeholders, especially public authorities, must involve all stakeholders, in the risk assessment as much as in decisions.

For a risk culture, as it exists in some countries in relationship to natural risks for example, to take root in our country, the ESEC recalls that it must be an integral part of education about the environment and sustainable development, in school curricula, continuing education modules and non-formal education.

The ESEC also recalls that it considers stakeholders' and citizens' education about risks, especially systematic risks, to be necessary. This mainly involves educating populations, especially those who are most exposed in the short and long term, as well as the members of society in the most precarious situations.

In keeping with its opinion on adaptation to climate change, the ESEC is in tune with the following recommendations from the CGEDD (General Council for Environment and Sustainable Development) in its evaluation report:

- **organise a dialogue on risk assumption;**

- **initiate a discussion about the transitional management of environments which are likely to be durably affected by the effects of climate change;**
- **incorporate studies or analyses of adaptation to climate change into public service contracts, in order to define the level of resilience each sector providing essential public goods (electricity, transport, etc.) can reach;**
- **from 2016, start the study to identify the industrial sectors which will be struck the hardest by climate change.**

With regard to the PNACC, the ESEC recalls that monitoring its budget was highly approximative: amounts allocated based on estimations, incomplete assessment of the means needed for all actions, total amount not disaggregated by theme and random financial monitoring of the implementation by ministries (no specific monitoring, incomplete approach, etc.).

The ESEC recommends that the next PNACC have a proper financial plan, coherent forward-looking management of the resources concerned and monitoring tools for its budget implementation.

Policies for supporting social and technological innovation

The report from the CNEPI (National Commission for the Evaluation of Innovation Policies) published in January 2016 by France Stratégie and called "*15 years of innovation policies in France*" shows that "*Innovation is not only a matter for researchers and engineers. It is based on many other skills - financial, commercial, managerial, etc. - which bring into play the creativity of personnel and therefore implies a qualified and motivated workforce. The notion of "creative class" is an example of this. It also implies that the partners and clients - both public and private - of innovators are receptive to change, including when it requires major managerial and organisational transformations. Finally, it requires society as a whole to be forward-looking: an economy of innovation cannot be developed within a society preoccupied by nostalgia.*"

Climate change does not allow for nostalgia: it requires society to be strongly mobilised, which can only be fully achieved if social cohesion is maintained and reinforced.

The ESEC recalls in its opinion on "Energy Transition, 2020-2050: a future to build, a way forward to be chartered", that it had called for development in R&D strategies and research benefiting from a sociological and political vision supported by human sciences. It recommended - and this recommendation remains particularly relevant - that a network be developed linking, through university Chairs, human sciences research with engineering sciences and economics, conducting multi-disciplinary, pluralistic research on energy conservation, its sociological, political and psychological consequences and costs.

Today, the ESEC recommends making the same effort to incorporate vulnerability and adaptation. Projects could include, for example, changes in behaviour, social acceptability and the link between insecurity, poverty and climate change.

The ESEC notes that the role played by territorial authorities and especially regional authorities in innovation policies is increasing. The latter now have responsibility over the

economic development of their territory and are solely responsible for allocating aid to businesses. This suggests an effort to specialise according to the region.

The ESEC asks for the actions carried out by different tiers of the community to be better coordinated for greater efficiency and for the development of R&D partnerships between public stakeholders and capable businesses, with a view to developing new sectors.

The fight against climate change is a priority for public policies. **Generally speaking, the ESEC considers that the support of R&D and innovation should favour investments in the economy, especially in industry and services, helping to market products which have a significant impact in terms of mitigation and adaptation.**

Adaptation education

In tune with the development of a risk culture, it is vital to prepare the current and future French population, in particular those who are poorest, for changes in their lifestyles. In terms of climate change, environmental education plays a key role in giving everyone the means to understand and face climate change.

It plays a part in environmental awareness for supporting mitigation efforts and in the development of adaptation abilities on an individual and collective scale.

In the previous term, the ESEC showed its interest in issues related to environmental and sustainable development education in particular by preparing an opinion on climate change and biodiversity. It produced an opinion on the subject called "Environmental and sustainable development education throughout life, for ecological transition". This interest is proving consistent in the 2015-2020 term.

In this opinion, the ESEC highlighted that one of the goals of Environmental and Sustainable Development Education (EEDD) is to promote, overall, a multidisciplinary approach as a training method for sustainable development and for citizenship (understanding the issues, education in complexity, responsibility and participation for example).

The initial and continuing training modules are beginning to incorporate specific themes, such as biodiversity, carbon assessments and CSR (corporate social responsibility), into some sectors. In the ESEC's opinion, CSR should be one of the tools helping businesses to respond to society's expectations from the point of view of sustainable development.

In this period of energy transition, activities and jobs are disappearing or changing and others are being created. Former economic models and modes of production are called upon to change. EEDD aims to contribute to putting these economic and social changes into perspective, in relation to environmental issues and especially climate change. EEDD

must link, as far as possible, with discussions regarding the evolution in professions, new professions and the corresponding training.

The ESEC noted in its opinion that all sectors (industry, agriculture, services, craft, associations, etc.) are concerned and encouraged the practical implementation of this evolution in EEDD training in keeping with the sector.

To continue this discussion, **the ESEC is renewing its hope that, within continuing training modules, themes be dealt with which include changes in lifestyle, consumption, distribution and production aiming to save resources and reduce the environmental and health impact of our development model, whilst promoting economic activity and employment .**

Committed social policies

Climate change, a challenge for national public health: the preventative option

A number of diseases are emerging and are likely to evolve with climate change. In addition to more or less extreme climate events, there are environmental changes (deterioration in air quality and biodiversity changes for example) which promote pathogenic micro-organisms' survival and multiplication whilst also having indirect effects, linked to societies' social and economic deterioration (decrease in the quality of health systems and migratory phenomena for example). In all cases and in all countries, exposure and vulnerability to these risks vary depending on territorial and social inequalities.

However, within the seven Articles of the 1948 Universal Declaration of Human Rights which deal with social rights, is the right to the satisfaction of basic health needs. At national level, the preamble of the 1946 Constitution includes the protection of health within social rights. Finally the Environmental Charter (2004), which was incorporated into the body of constitutionality of French law in 2005, establishes the right to an environment which respects health.

This convergence between a recognised right and proven health inequalities when facing the effects of global warming justifies taking all appropriate measures to mitigate them, or else eradicate them.

It is in light of this observation that the ESEC supports the idea of the economist, Eloi Laurent: "it is due to the link between climate and health that climate justice must develop in France, by relying on what is called "the double dividend between climate and health""; the mitigation of climate change is an opportunity to improve health within the world, or even human development. The place of the environment in social inequalities related to health is increasing while the right to health, established in the principles of our law, can establish climate justice. As climate justice is one of the elements of environmental justice, which consists of identifying, measuring and correcting environmental inequalities which lead to social injustices, the ESEC considers that health should be one of the key components in policies which bring about greater environmental justice. It shares the idea

that, thanks to the link between health and climate, it is possible to show that actions carried out at national level generate benefits.

Moreover, the ESEC considers that the link between health and climate represents a significant issue in terms of communication in favour of fighting global warming, by establishing a link between ecology and social issues. It is through health that we must remember the true aim of adaptation policies - the preservation of the planet's hospitality for humans, especially future generations.

There is still only fragmented information regarding the recent questions about the links between global warming and health and the consequences of policies implemented in terms of their effectiveness and their potential adverse effects for inequalities. **The ESEC recommends, in particular, that public health studies and work on the issue of climate extremes be carried out. Currently, a lot of data and figures are missing globally on this matter.** In addition, interdisciplinary and international co-operations for operational research on climate change and its effects on health would be useful in order to incorporate problems related to health, demography, policies, lifestyles and behaviour specific to different countries.

The link between heatwaves and excess mortality is starting to be documented in a number of other countries (including the United States and Russia). This excess mortality depends on the length of exposure, whether there are urban heat islands and factors specific to each individual related to vulnerability (age, isolation, economic level, associated diseases and mitigation abilities). The ESEC reiterates its recommendation made in its opinion on adaptation to climate change: *"urban heat islands must now be analysed in terms of public health risks and priorities for urban populations. Therefore, our assembly considers that approaches to vulnerabilities such as population ageing, urban respiratory diseases and pollen allergies must be combined with urban planning choices on the one hand, and technical standards for equipment and buildings on the other(...)[It] specifically calls for knowledge integration in this field."*

The ESEC considers that the selection of the most effective strategies and the optimal allocation of resources must involve preliminary inter-disciplinary assessments of the effectiveness of measures which are already in place to reduce the impact of heat and extreme climate events. These assessments are vital to improve the resilience of health systems.

In addition, it supports the idea of assessing the potential health impacts of mitigation policies in order to ensure they will not have significant harmful repercussions on public health and to identify their negative or positive synergies. Generally speaking, as highlighted by the International Workshop for Climate Change and Health, "adaptation and mitigation measures for the health consequences of climate change must demonstrate solidarity and aim to reduce social inequalities related to health at local (for example, within a town) and global level".

The ESEC notes that the 2015-2019 National Health Environment Plan (PNSE) is linked to the other structural approaches in the health-environment field, in particular the PNACC. Therefore, the PNSE mainly focuses on topics such as risks of epidemics and local strategies

for fighting against vectors of communicable diseases for example. The ESEC is pleased that the issue of overseas territories is being dealt with at length, given their exposure and proven vulnerabilities. However, our Assembly regrets that the characterisation of exposure at territorial level, taking into account the populations' vulnerability inequalities, boils down to taking into consideration children and pregnant women. Likewise, it is a shame that no reference is made to climate risks in the section related to the characterisation of environmental and territorial health inequalities, which only takes into consideration current or past human activities.

The ESEC regrets that the guideline expressed in the PNSE 2 has not taken root, namely "taking into account and managing environmental inequalities, in other words limiting environmental nuisances which are likely to result in or reinforce health inequalities". The implementation of this guideline could have incorporated a section on the effects of global warming. **Our Assembly therefore advises systematically incorporating aims for reducing environmental inequalities related to health into regional plans for health and the environment by introducing a global warming dimension.** In this way, they would put into practice the guidelines drawn up in the second PNSE and unfortunately not taken up by the current plan.

The ESEC considers that the link between health and climate change issues must be established, at national and territorial level, in order to incorporate the two problems when drawing up public policies, at all levels, by avoiding policies which are rigorously sectoral and actions which are carried out in parallel with no real links between them. It supports the idea of adapting the regional health strategies framework to climate change issues (medium/long-term issues and in particular regional health/environment plans).

Urban policies adapted to climate and social issues

Policies for regional and inter-municipal authorities regarding climate change have been in place since 2004 as part of the National Climate Plan (since updated), the 2007 Grenelle Environment Forum and the PNACC, adopted in 2011, which put forward a list of measures to be implemented in order to deal with new climate conditions until 2015.

In order to anticipate and prevent climatic effects which, within the context of global warming, mean the poorest people will suffer the most damaging effects, the town planning strategy and the strategy for reducing energy consumption through the renovation and construction of public and private buildings must be considered in conjunction.

The ESEC recommends promoting new reasoning for town planning which incorporates the links between town planning and mobility in order to develop towns which consume a lower amount of carbon. Urbanism tools must take into consideration the optimisation of travel methods by relying on principles related to urban consolidation, polycentrism and social and functional diversity.

Beyond methods for urban regeneration, is the question of housing which is directly linked to the issue of "climate justice". The aspect which is referred to most often, and analysed in the ESEC's opinion, is fuel poverty, as a real challenge to social justice: according to the Fuel Poverty Monitoring Centre, 5,100,000 households, so 20% of all households in France - and 11 million people - are in fuel poverty, the primary effect being heating restrictions or

deprivation. The difficulties posed by heatwaves are less often cited; they will become more frequent and more intense during the decades to come and so the effects - especially for populations' health - risk becoming significant in some regions in mainland France and in the majority of overseas territories. In both cases, harsh winters on one hand and heatwaves on the other, access to housing, housing quality with regard to thermal insulation and its geographic location are vulnerability factors. Homeless people, for example, suffer directly from the effects of climate change such as heatwaves.

In the housing field, the ESEC considers that actions must involve both national public policies and territorial policies and initiatives. **The ESEC hopes that the aims and implementation of these work programmes will be evaluated as part of an assessment of public policies.**

Regarding the Act for Energy Transition, the ESEC reasserts the urgent nature of the publication of the implementation decree for Article 12 of the Act, incorporating a minimum for the thermal performance of housing within requirements for decency. This same law reinforced goals for thermal renovation. **The ESEC asks that means devoted to this policy be compatible with this aim.** Noting that the rate of renovation in private housing is not as fast as the renovation of rent-controlled housing, which complies with the aim, the ESEC calls for a special effort to be made in this housing section, in particular in collective housing including tenants and occupants of co-owned housing. The causes of the observed situation must be addressed with major and targeted renovations.

Moreover, the ESEC notes that the lack of accessible housing in our country will not be resolved solely by providing new social housing. That's why **it calls for the policy between private organisations and public authorities with regard to private housing construction to be revived.** This policy could effectively contribute to reducing the number of buildings which consume a high amount of energy while assuring accessible rent for the duration. In order to take budget constraints into consideration, action must primarily be focused where it is possible to articulate environmental, economic and social goals.

At territorial level, restoration activities must link support with participation. Experiments have been carried out successfully by local energy response services, who visit the homes of people in fuel poverty, as these people do not visit the counters set up by the bodies involved in this domain. In the spirit of the reality principle, **the ESEC praises this voluntary approach and supports it becoming widespread.** Moreover, our Assembly calls for the development of inhabitants' participation and for the support of their active involvement. This must be made in a regulated framework and support craftsmen's ability to respond, which is a local and territorial issue regarding economic development.

Participating in work (self-restoration) must be organised carefully in order to avoid undeclared work and problems related to insurance cover and to maintain quality standards. Incidentally, the accumulation of conditions and standards is an economic impediment to self-restoration. With technical supervision, this approach is not necessarily less expensive than ordinary renovations, at least in mainland France. A discussion should be carried out

to decrease these costs and to implement additional funding and effective supply chains. In the same vein, self-maintenance is a possible option.

In overseas territories, the housing supply is, totally or for the most part, inadequate, with many people in social housing, which is not adapted to how people live and the resources of the population. For this reason, **the ESEC advises developing a number of other products such as scalable social housing, continuing with housing development interventions by changing the number of resources assigned to different policies and bringing about short or local procedures to help populations access housing at a lower cost.**

Moreover, the ESEC considers it necessary to develop the management of squatter settlements. Without such an approach, there is a high risk that some fringes of the population will continue to settle in risk areas.

In order to promote ecological self-building, the ESEC considers it necessary to distribute the credits of the unique budget heading (LBU) in a different way. During his interview with the section, Mr Colombier stated that, in Martinique, housing improvement worked because the region dedicated funds to it, in particular with assistance, in addition to the State assistance, which helped the most precarious households with financial arrangements. At the same time, it seems necessary to allocate resources to experimentation, research and innovation in order to develop local industries. Indeed, viable economic approaches must be developed. In addition, if we are to capitalise on these experiences, self-building must be supported both concretely and as an abstract.

Actions must also be taken on a broader scale. In connection with mitigation policies, short and local supply chains should be promoted along with saving and re-establishing natural areas in towns. In that context, the issue of urban agriculture and home gardens takes on greater significance again. There are, for example, self-produced gardens at guesthouses which welcome lonely people who have lived on the streets, for whom these guesthouses are sometimes their first home. The ESEC supports these initiatives and calls for their development, these gardens support communal activity and are a way of eating well.

In overseas territories work is to be done, in connection with associations, in order to promote the right to the city for all. In concrete terms, this means incorporating the precarious city into the formal city. In French Guiana and Mayotte, there is especially strong demographic growth. Without decisive public action, squatter settlements will develop. There is now not much time left to avoid increasing these settlements which are especially exposed to climate risks. Mr Colombier stated that the GRET carried out a study on Saint-Laurent du Maroni on behalf of the AFD. It confirmed that inaction will be very costly: the difference between immediate action and a "*laisser-faire*" attitude followed by an intervention with the tools for reabsorbing substandard housing amounts to millions of euros. The tax revenue forgone, the consequences of building on farmland and natural spaces, for example, add to this.

In this same town, studies predicting the movements/rehousing of populations who were remaining in areas where they could not stay have been carried out. The design of housing for the neighbourhood was carried out in consultation with inhabitants in order to

analyse the possibility of producing housing which guarantees hygiene and building quality, whilst also fitting in with what the inhabitants know how to build themselves. Mr Columbier stated that the most successful participation experiments "*were those where action was taken not only in the housing and development section but where there were also accompanying social and economic measures, as well as urban policy methods. This truly helped to consolidate real parts of the city, to reintroduce economic activity and public equipment, etc.*".

In overseas territories, the questions of land tenure security must also be dealt with. There are solutions for security of land use with a separation from the land priority. Experiments in this regard are being carried out in Amerindian villages in French Guiana. It is, for example, possible to establish precarious occupancy agreements, which are not on an individual basis but allocated to a community. Such measures can only work when there is no land speculation. To avoid this, as well as the significant eviction effects which it leads to, **the ESEC recommends that public land establishments form land reserves in order to separate part of the land from the market.**

Indeed, it considers that France is in a very weak position in this regard: considerable amounts are invested in carrying out work, sometimes supported by grants, without precautions or the checks considered advisable, in other words independent experts planning and monitoring the work. Considerable investments are therefore sometimes agreed to with limited impact - operations which go hand in hand with making households poorer.

Gender equality

The bodies of the UN are committed to taking gender into account in the fight against climate change: gender equality is moreover cited three times in the Paris Agreement. The UN placed International Women's Day 2016 as part of the 2030 Agenda for Sustainable Development, one of whose objectives is specific to equality and female empowerment.

UNESCO is moreover committed to taking gender into consideration in all its activities, work groups, committees, programmes and projects linked to adaptation and mitigation of climate change.

Climate justice aims to incorporate objectives relating to gender equality from a perspective of vulnerability and exposure to risks (1), representation during decision-making in particular in connection with adaptation (2) and participating in the adaptation plan and measures (3).

- Gender equality in exposure to climate risks

In order to consider taking gender equality into account in exposure to climate risks, it is vital to establish whether differences are noted. For example, it is vital to assess whether women are more exposed to certain climate risks than men or whether there are differences according to, for example, territories, socio-professional categories, living conditions and family situation.

With regard to "natural" disasters, Ms Ceinos, speaker for the charity CARE, highlighted that assessments of the number and categories of victims do not often distinguish by gender. This choice can be made periodically by the countries affected themselves, by the UN services or by NGOs, most often in order to have an analysis of this subject for extrapolation

purposes. In such situations, a number of NGOs show they are willing to obtain, as often as possible, data disaggregated by gender: **the ESEC recommends generalising this data, which is vital for understanding the vulnerabilities of each gender in different economic, social and cultural contexts during a disaster.**

The speaker also dealt with the issue of men and women's vulnerabilities facing climate change, each gender having, according to the concept of differentiated vulnerability, their own vulnerabilities. She highlighted that there are only global figures available in this field and that studies are lacking which would help to access data for each territory.

The ESEC asks that qualitative and quantitative studies on gender vulnerability be carried out in France, taking into consideration the realities in different territories and a more significant risk culture in overseas territories. The different impact and vulnerability scales must encourage extensive studies to be carried out.

- Equality in climate governance

Ms Aurélie Ceinos used the projects she carries out with regard to climate change as an example, especially in the Pacific Ocean, in which community-based committees work on adaptation or risk reduction plans. These committees must be representative. In order to incorporate the issue of gender equality into the plans and the work carried out by these committees, training on, for example, gender, working times for women and their specific vulnerabilities, is organised.

In terms of governance, women are under-represented in planning and decision-making procedures - which is also true in France. That does not mean that their messages are never conveyed, but that they are not always conveyed and attention must be paid to this fact.

The speaker emphasised the benefit that simultaneous work on the two issues can bring about in terms of gender equality, even though it is generally more difficult to assert that taking gender into account in projects fosters adaptation to climate change.

The ESEC considers that even in France, progress needs to be made in terms of including women in governance. It retains the idea that the subject of climate change should lead to changes being made in the situation on this point, on the mainland as well as in overseas territories. Gender committees, associated training and accompanying measures working for equality can be interesting in order to help men and women think together, on an equal footing, about developments in power relations and social norms and structures which are needed for better adaptation.

- Equality in adaptation policies and measures

With regard to adaptation activities (agriculture and food storage, for example) CARE supports activities carried out by women which help them show their abilities and gain self-esteem. In Vanuatu, a territory made up of a number of islands, the multi-NGO approach helped to advocate gender equality at provincial and national level. Climate change helped to advance women's representation in governance. Moreover, Vanuatu produced gender

submissions which could prove interesting for overseas territories in similar geographic contexts.

Climate justice in the world of work

According to Ms Anabella Rosemberg, representative of the CSI, the idea of climate justice is now considered by this organisation as consistent with the broad guidelines of its members' actions. For her, thinking in terms of climate justice could be seen as a pragmatic way of considering public policies and investment decisions.

Additionally, according to Ms Rosemberg, in order to deal with climate change, sustainable and sizeable transformations need to be carried out in the labour market, as a productive system as a whole. The way in which these transformations occur must be fair for workers.

Very often, climate issues are presented as scientific evidence which directly lead to a particular type of action, as if the policy choice was ultimately reduced to objectives to tick off and did not include the methods for achieving these objectives. The ESEC considers that climate justice addresses, in concrete terms, the question of action methods. Climate action is not a choice, but climate justice is.

For the ESEC, committing to climate justice involves implementing policies which are coherent with the climate imperative and social justice. These policies must set short, medium and long term goals while fostering discussions about the goals that stakeholders give themselves in terms of the fight against climate change. The idea of a just transition, which has been supported by the trade union movement for several years, joins that of climate justice.

Acting for climate justice is also ensuring that the employees and sectors facing major transformations in their business and supply chains, are protected and supported, which requires effective action for social justice. This requires targeted investments, anticipation of effects, professional training, employee support, **reinforced social protection and social dialogue**.

For the ESEC, climate justice must help to promote practices and investments which reinforce the quality of jobs in these sectors which are hiring but which involve some jobs which are still not very popular including construction, waste management and the circular economy. Generally speaking, it is necessary to plan ahead, as far as possible, and make the necessary investments on time, in order to manage, by keeping social and economic impacts to a minimum, the transition between the disappearance of the jobs of yesterday and the booming development of new jobs. The ESEC recalls that the Energy Transition for Green Growth Act provides for the implementation of a programming plan for jobs and skills, in connection with the multi-year energy plan. There is an urgent need for this programming plan to be drawn up in order to make anticipating this energy transition easier and thus to contribute to climate justice.

Employees have the right to know how businesses are going to achieve zero emissions. They must be involved in strategic discussions in businesses from the beginning, in particular in decision-making bodies. In addition, all information regarding job prospects, working conditions and methods and training opportunities

must be communicated. Likewise, the ESEC recommends supporting and encouraging initiatives for creating and developing businesses which establish their business model on the fight against climate change and adaptation.

In the same vein, CSR development can be considered as a tool for fighting inequalities. Stakeholders can show their engagement by making environmental, social and societal information linked to their work available.

In order to encourage engagement of company staff and citizen information, **the ESEC recommends planning for the systematic sharing of the section of the management report dedicated to environmental, social and governance information online. It also recommends that staff representative bodies express an opinion on the part of the management report dedicated to this information.** This power was provided for initially in the Grenelle 2 Act of 12 July 2010.

The ESEC recalls its support of the improvement of the information provided by CSR propelling positive momentum supporting the energy transition, making businesses develop themselves and acting in favour of job developments.



In conclusion, even though the ESEC supports a strategy for fighting against climate change backed up by climate justice principles and objectives, it considers climate justice more generally as a goal and an expression of general interest. This objective must guide public policies in a cross-disciplinary way. Climate justice brings a new approach for drawing up and articulating these policies. It enables us to preserve, in an effective and sustainable way, the right to a healthy environment for everyone, including the poorest, those most exposed and those more vulnerable to climate change. By creating conditions for equity, climate justice opens the way to collective consensus for action, for both mitigation and adaptation.

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THE ESEC'S OPINION

Even limited to 2°C, global warming will have consequences which our society will have to adapt to. Some people will have the means to adapt, others will not. There is a real risk that inequalities will increase.

The aim of climate justice is to do everything possible to stop global warming from increasing these inequalities. It became a key theme during the opening of COP 21.

Climate justice brings a new approach for drawing up and articulating public mitigation and adaptation policies. It must help to effectively and sustainably preserve the right to a healthy environment for everyone, including those who are poorest and most vulnerable to climate change.

The opinion, underscoring that the ESEC supports the fight against all forms of inequality, aims to pave the way for consensus for action. With its proposals, it commits public authorities and society to limit and reduce social and economic inequalities caused by global warming.

ECONOMIC, SOCIAL
AND ENVIRONMENTAL COUNCIL
9, place d'Iéna
75775 Paris Cedex 16
Tel. : +33 (0)1 44 43 60 00
www.lecese.fr