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MINISTRY OF ENVIRONMENT, ENERGY AND THE SEA

LA TRANSITION ÉNERGÉTIQUE pour la CROISSANCE VERTE

ENERGY TRANSITION FOR GREEN GROWTH ACT *in action* *Regions - Citizens - Business*



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A great ambition underlies France's Energy Transition for Green Growth Act: to make France – following on from the Paris Climate Summit – an exemplary nation in terms of reducing its greenhouse gas emissions, diversifying its energy model and increasing the deployment of renewable energy sources.

The success of COP21 puts us in a strong position to say to other developed countries and new emerging powers: 'You can do it too', and it is also up to us to set an example in implementing the commitments made.

This Act provides a unique opportunity both for climate negotiations and for France. It sets goals and implements operational solutions which can be shared with different regions, companies, researchers, the public and anyone with a long-standing commitment to fighting climate change.

As Paul Eluard said: 'There is another world, but it is in this one'.

We have the will, we have the talent and we have the solutions to create this new world, right now.

François Hollande
President of France





The Energy Transition for Green Growth Act and its attendant action plans are designed to give France the means to make a more effective contribution to tackling climate change and reinforce its energy independence, while striking a better balance in its energy mix and creating jobs and business growth. The texts required for its implementation are operational and support plans are in place.

These tools are available to private individuals, businesses and the regions, enabling them to take concrete action.

Increase household spending power by reducing energy bills.

Protect the planet and public health.

Seize green growth opportunities, delivering a competitive advantage for today's industry and the cutting-edge industries of the future, while securing jobs in France and improving quality of life.

Many initiatives have already been launched, setting the stage for large-scale implementation. The experience acquired to date has in turn directly inspired simplifications and additions to the law.

The movement is now under way.

By expanding and consolidating it, we can take full advantage of two major sources of growth and jobs:

- **energy savings**, especially through massive incentives for investment in home renovations and access to clean transport;
- **the rise of on- and offshore renewable energies**, which are sources of technological performance and economic growth and hold great potential in mainland and overseas France.

We have the assets required to make energy transition a success and become a leading environmental player worldwide: the initiative and resourcefulness of our people, the commitment of our local and regional officials, the calibre of our research, and the skill and creativity of our businesses, both large and small.

Making efficient use of our resources, fostering prosperity, long-term employment and quality of life, both today and for the future: the Act will provide each and every one of us with the means to be part of the solution and reap the full benefits of green growth.

*Minister of the Environment, Energy and the Sea,
responsible for International Climate Relations,
President of COP21*

Making energy transition a success

ACTING TO MITIGATE CLIMATE CHANGE

In adopting the Energy Transition for Green Growth Act, France has defined its objective and the means to implement the Paris Agreement on Climate Change signed on 12 December 2015. The Act, adopted four months prior to COP21, sets down in law the commitments made by France for its national contribution.

PREPARING FOR THE POST-OIL ERA

Most of the energy that we consume today causes pollution, is expensive and is derived from increasingly scarce fossil resources. Energy transition is a plan for the post-oil era and a step towards a new French energy model, which is stronger and more sustainable in its response to key energy supply challenges, changes in prices, the depletion of resources and environmental protection requirements.

COMMITTING TO GREEN GROWTH

The Energy Transition Act promotes sustainable economic growth and the creation of sustainable and non-relocatable jobs:

- it will allow for the creation of 100,000 jobs in the short term (including 75,000 in the energy renovation sector and nearly 30,000 in the renewable energy sector), together with more than 200,000 jobs by 2030;
- the investments made are expected to boost GDP by 0.8% in 2020, and by 1.5% in 2030.

FINANCING ENERGY TRANSITION

The energy transition fund, worth 1.5 billion euros and supported by the Caisse des Dépôts, comes in addition to existing measures (e.g. the *Fonds Chaleur*, the Heat Fund) and is designed to support new projects, particularly green growth projects in positive-energy regions, regions aiming for zero waste and more breathable cities.

to build green growth

1 GOALS

Define common goals
Consolidate France's energy independence
Tackle climate change.

Goals

- Provide a framework in which individuals, businesses, regions and the State can take action together, setting medium- and long-term goals.



Reduce greenhouse gas emissions by **40%** in 2030 compared with 1990



Reduce the use of fossil fuels by **30%** in 2030 compared with 2012



Increase the share of renewable energy sources to **32%** of total energy consumption by 2030 and to **40%** of electricity generation



Reduce total energy consumption by **50%** in **2050** compared with 2012



Reduce the amount of landfill waste by **50%** by 2025



Diversify electricity generation and reduce the share of nuclear to **50%** by 2025

CARBON PRICING

The French government has set a target of one tonne of carbon to be valued at €56 in 2020 and €100 in 2030, for the carbon component of the Domestic tax on the consumption of energy products (*Taxe Intérieure de Consommation sur les Produits Energétiques* – TICPE). This will help focus investments on medium- and long-term horizons and change behaviour to reduce fossil fuel consumption and greenhouse gas emissions. This increase will be offset by a tax reduction at an appropriate level for other products, projects and revenue contributing to energy transition.

CARBON PRICING

Leveraging energy transition

Transition to a low-carbon economy is vital for the climate, but it also provides a great opportunity to create economic growth and jobs.

There are many opportunities at the level of the European Union. Nonetheless, making low-carbon investments and taking advantage of these opportunities currently face two major difficulties: the collapse in the price of fossil fuels and the very low price of carbon in most countries. Since the Paris Agreement, carbon pricing has become a key challenge.

FIVE PRIORITIES FOR ACTION

- **Introduce a price corridor on the European Union Emission Trading System (EU-ETS).** This does not mean replacing the market with a tax, but maintaining changes in market price between a minimum and a maximum to reduce volatility and improve forecasting of the carbon price.
- **Integrate a carbon component in the energy tax of European countries,** based on the model implemented by France with the climate-energy contribution set at €22/tonne in 2016 with a price trajectory of €56/tonne in 2020 and €100/tonne in 2030. This measure is essential to encourage energy efficiency and the development of renewable energy in the transport and construction sectors.
- **Work toward the introduction of carbon pricing outside the European Union and work together with all countries that choose to do this.** This does not mean imposing a single global carbon price or a global CO₂ market, but rather bringing together and sharing common principles with all the countries and businesses that commit to carbon pricing.
- **Take the measures necessary to prevent carbon leakage.** The absence of reciprocity on the price of carbon requires us to take measures to preserve the competitiveness of energy-intensive industry in Europe, which is subject to international competition. To ensure that efforts to prevent carbon leakage are effective, the arsenal of measures must be updated when the EU-ETS directive is revised.
- **Introduce a minimum carbon price** for producing electricity at coal-fired power plants, thus improving visibility for investors and reducing the use of electricity production systems that produce the highest levels of greenhouse gas.

THE CARBON PRICING LEADERSHIP COALITION

In September 2014, during the Climate Summit organised by the UN Secretary-General, seventy-four countries and over a thousand businesses formed a carbon pricing coalition. Its aim is to encourage fruitful dialogue between public and private sector decision-makers regarding opportunities to extend carbon pricing policies. France, Germany, Mexico, Canada, Chile and Ethiopia are all members of this coalition, which was officially launched on 30 November 2015 at the opening of COP21.

2 | ACTING TOGETHER

Empowering individuals, businesses, the regions
and the State to act together



Aiming for a shared definition of policies and goals, the Act carries out an in-depth reform of national and regional governance tools. The means by which local authorities can act are being clarified and reinforced.

Goals

- Bringing all key players on board to plan for energy transition.

A NATIONAL LOW-CARBON STRATEGY AND CARBON BUDGET

The National low-carbon strategy (*Stratégie nationale bas carbone* – SNBC) outlines the cross-sector and sector-specific policies that will enable the targets to reduce greenhouse gas emissions in the medium and long term to be achieved (40% reduction by 2030). It includes a strategy paper and carbon budgets that establish France's greenhouse gas emission limits for five-year periods. The first SNBC and the first carbon budgets were published in November 2015 and cover the period from 2015 to 2028.

THE MULTI-YEAR ENERGY PROGRAMME (PPE)

The PPE (*Programmation pluriannuelle de l'énergie*) sets out the priorities for action by the public authorities to achieve the energy objectives defined in the Energy Transition and Green Growth Act. For the first time, all aspects of energy policy (managing energy demand,

renewable energy sources, security of supply, networks, etc.) and all types of energy are dealt with under one strategy, taking into account the fact that the various aspects of energy policy are interconnected and enabling the development of a comprehensive vision of the energy sector that will help achieve our objectives more effectively.

CLEAN MOBILITY DEVELOPMENT STRATEGY

This is an annex to the PPE and involves managing demand for mobility, developing clean vehicles with low pollution and greenhouse gas emissions and deploying the power supply infrastructure needed for them, optimising existing vehicles and networks, boosting a modal shift to means of transport that are less polluting and emit lower levels of greenhouse gas, including walking and cycling, and developing collaborative means of transport.

SETTING A CEILING ON NUCLEAR ELECTRICITY GENERATION CAPACITY

Maximum nuclear electricity generation capacity is set at 63.2 GW. Operating licences will no longer be granted for nuclear power plants that would raise total authorised capacity above 63.2 GW, the total output of the fleet currently in service.

CSR REPORTING BY INSTITUTIONAL INVESTORS

Institutional investors are called on to describe how their investment policies factor in social, environmental and governance criteria. This will support implementation of the national low-carbon strategy. In particular, institutional investors must explain how they deal with their exposure to climate risks and what they are doing to reduce global warming and implement ecological and energy transition.

ELECTRICITY SUPPLY AND DEMAND FORECASTING BY PUBLIC ELECTRICITY GRID OPERATORS

Measures relative to multi-year forecasts of electricity supply and demand are revised. These define the contents of the national electricity balance and procedures for drafting it. They also specify the information that must be given in the national register of electricity production and storage facilities. The operators of the natural gas transmission network are required to draw up a multi-year forecast at least every two years. This forecast must factor in changes in consumption, and capacity relating to transmission, distribution, storage, regasification, renewable production and trading with foreign gas networks.

PREROGATIVES OF THE NATIONAL ENERGY OMBUDSMAN EXTENDED

The competence of the national energy ombudsman has been extended, first to ensure that all energy sources are covered by the public information and energy mediation service (where before, only electricity and natural gas were covered), and second, to ensure that all consumers can use the ombudsman's services.



REGIONAL PLANNING

Regional energy and climate plans (*Plans climat énergie territoriaux* – PCET) will now only be produced at inter-municipal level, aiming to cover the entire region. They now include air quality and have been renamed Regional energy, air and climate plans (*Plans climat air énergie territoriaux* – PCAET). Regional energy, air and climate plans may be accompanied by Regional energy efficiency plans.

ENERGY-RELATED DATA

This measure provides for data relative to energy to be transmitted to public authorities, by the gas, electricity or heat network operators, as well as by operators supplying petroleum products, where such data is of use to those public authorities in fulfilling their public duties.

DISTRICT HEATING AND COOLING SYSTEMS

The Act defines the competences of the municipalities (or public entities to which competence is transferred) in the matter of developing and operating district heating or cooling systems.

PILOT PHASE FOR THE CHÈQUE ÉNERGIE SCHEME

The *Chèque énergie* scheme will provide vouchers to help low-income households pay their energy bills. Since May 2016, it has been introduced as a pilot scheme in four of France's *départements* and, once it is introduced across the country, will benefit 4 million households.

POSITIVE ENERGY REGIONS FOR GREEN GROWTH

The aim of positive energy regions for green growth, developed as a result of the call for projects launched in the summer of 2014 and recognised by the Energy Transition for Green Growth Act, is to produce more energy than they use, launching building projects to save energy and renewable energy production sites.

Four hundred local authorities have now been granted the label and have received 500 million euros in support from the energy transition fund, for a total of three times the amount of building work generated.

This financial support has enabled the regions to pursue and step up initiatives in the six key sectors of energy transition.

- 1. Buildings:** reducing energy consumption in buildings and public spaces.
- 2. Sustainable mobility:** reducing greenhouse gas emissions and pollution caused by transportation.
- 3. Clean energy:** local renewable energy production.
- 4. Circular economy:** developing sustainable waste management.
- 5. Participative democracy:** promoting education on the environment, eco-citizenship and mobilising local players.
- 6. Biodiversity.**

According to a survey carried out in the regions, the results of initiatives launched and implemented since 1 January 2015 reveal:

- over 260,000 tonnes of CO₂ prevented;
- nearly 3,500 GWh of renewable energy produced;
- over 350 public buildings renovated to comply with the LEB standard;
- over 1.5 million sqm of photovoltaic panels and over 500 wind turbines installed.



3 BUILDINGS

Renovating buildings to save energy
Cutting bills
Creating jobs



In 2014, the building sector accounted for 45% of energy consumption in France. It is the largest energy consumer and offers significant opportunities for energy efficiency. It caused 20% of greenhouse gas emissions in 2013.

Goals

- Speed up the energy renovation of housing: target of 500,000 major renovations per year with the priority of addressing energy poverty.
- Improve the energy performance of new buildings: all buildings will be built to the low-energy building (LEB) standard by 2050.
- Create jobs: 75,000 jobs will be created thanks to the building projects undertaken.

CONSTRUCTION

POSITIVE-ENERGY BUILDINGS AND BUILDINGS WITH HIGH QUALITY ENVIRONMENTAL CERTIFICATION

Providing project owners with incentives to develop energy-efficient and eco-friendly buildings, or positive-energy buildings without waiting for legislation to be passed, the Act makes it

possible to obtain a "constructibility bonus" for such buildings. The scheme will help improve the return on investment in such operations and partly offset the higher costs of building to environment-friendly standards. In addition, all new public buildings must be exemplary in terms of energy and environmental standards.

RENOVATION

IMPROVING INSULATION WHEN UNDERTAKING MAJOR RENOVATION WORKS

When undertaking any major building work, the Act includes a requirement to improve building insulation. This is known as "*travaux embarqués*" (simultaneous works). This measure aims to take advantage of the opportunities afforded when carrying out major building works to cut energy use and reduce heating bills. It applies to housing, offices, education buildings, commercial property and hotels. Major energy-savings can be made when working on building façades and roofs, given that this is an ideal time to insulate walls.

CO-OWNERSHIP – SIMPLE MAJORITY VOTE FOR ENERGY RENOVATION WORKS

For co-owned buildings, procedures for improving energy efficiency when carrying out work on common areas are now simpler. Carrying out major works (e.g. re-roofing, façade renovations and extensions) can be used as an opportunity to significantly improve the energy efficiency of all buildings.

THIRD-PARTY FINANCING

An operational framework for third-party financing by public companies means that funds can be advanced to private owners wishing to undertake works.

OPTION TO DEPART FROM LOCAL URBAN PLANNING SCHEME (PLU) REGULATIONS

The option to depart from PLU regulations (site coverage, height, location, exterior appearance) means that it is possible to install protection against solar radiation, external wall heat insulation or a raised roof.

SUPPORT MEASURES

ENERGY TRANSITION TAX CREDIT

The energy transition tax credit (*Crédit d'impôt transition énergétique* – CITE) provides for a refund of 30% of the total cost of energy renovation work, up to a limit of €8,000 for a single person and €16,000 per couple.

INTEREST-FREE ECO-LOAN

This is an interest-free loan of up to €30,000 available to property owners carrying out energy renovation work. It can be combined with the CITE, with no restrictions applying.

THE HABITER MIEUX PROGRAMME

To boost energy renovation work in the housing sector, the *Habiter Mieux* (Better housing) programme managed by France's National Housing Agency (ANAH) set a target of renovating 70,000 homes in 2016; this implies a 40% increase in the programme's targets.

INDIVIDUAL HEATING COSTS

Individual heating cost schemes mean that people pay only for the energy they consume. This makes people use energy more responsibly, thereby significantly reducing energy consumption. This measure extends the requirement relative to individual heating costs to all housing, as well as to the tertiary sector, unless it is technically impossible or requires changing the entire heating system. This measure came into effect on 31 May 2016.

REGIONAL ENERGY RENOVATION PLATFORMS

(PLATES-FORMES TERRITORIALES DE LA RÉNOVATION ÉNERGÉTIQUE)

The remit of the regional energy renovation platforms has been defined to improve technical and financial support provided for home owners carrying out energy renovations. This applies to the existing 450 *Rénovation info service* units across the whole of France.

"ENERGY POVERTY" AND ENERGY-SAVING REQUIREMENTS

The energy-saving certificate scheme (*certificats d'économies d'énergie* - CEE) requires energy providers (fuel, electricity, gas, heating oil, etc.) to support energy-saving initiatives. While it is aimed at all households and businesses, it also specifically applies to low-income households. The Act introduces a specific and supplementary requirement relative to energy savings for households faced with energy poverty, effective as of 2016. The scheme will cost up to 900 million euros over two years.

ENERGY RENOVATION GUARANTEE FUND

This measure defines the means-based eligibility criteria for use of the energy renovation guarantee fund which provides loans to low-income households. It also sets out the collective loans granted to co-ownership management syndicates eligible for the fund guarantee.

DIGITAL MAINTENANCE AND REPAIR RECORD

Digital maintenance and repair records are introduced for housing properties, to improve knowledge and encourage people to carry out energy efficiency works. A call for projects has been published, opening up the field of research to the tertiary sector and allowing for future experimentation with one or more operational solutions.

MINIMUM ENERGY PERFORMANCE CONDITIONS

Minimum energy performance conditions apply to social housing sold to natural persons. This also includes extending the measures currently in force for collective housing to individual housing.

SMART METERS

Smart gas meters (Gazpar) and electricity meters (Linky) are being deployed to provide users with more detailed information regarding their energy use. The Ministry has also posted calls for projects to develop online and mobile applications (Green Tech).

4 | TRANSPORT

Developing green transport to improve air quality and protect public health



The transport sector is the number one producer of greenhouse gas emissions, accounting for 28% of France's total emissions in 2013. It accounted for 32.6% of France's total energy consumption in 2014.

Goals

- ▶ Step up measures to combat air pollution.
- ▶ Reduce dependence on hydrocarbons.
- ▶ Speed up the replacement of car, lorry, coach and bus fleets with low-emission vehicles.
- ▶ Provide 7 million charging points for electric vehicles by 2030.

NATIONAL PLAN TO REDUCE POLLUTING EMISSIONS IN THE AIR

This plan will be adopted in 2016. It forms part of a broader approach, encompassing more than just the transport sector, to improve air quality, and dealing with the health and economic effects of pollution. The plan will be reviewed every five years, and revised as necessary.

CLEAN VEHICLES AND INFRASTRUCTURE

RENEWING PUBLIC FLEETS WITH LOW-EMISSION VEHICLES

When replacing their vehicle fleets, the French State and its public bodies are required to purchase a minimum of 50% vehicles with low CO₂ and air-polluting emissions, such as electric vehicles. Local authorities are required to ensure that 20% of their replacement vehicles are clean vehicles. All new buses and coaches purchased for public transport services from 2025 onwards must be low-emission vehicles.

PURCHASE OF ELECTRIC CARS BY COMPANIES OPERATING TAXIS AND HIRE CARS WITH DRIVERS

By 2020, at least 10% of the vehicles acquired by companies operating taxis and hire cars with drivers when renewing their fleets, where their fleet is made up of more than ten vehicles, must be low-emission vehicles. 10% of the vehicles purchased by car rental companies, and companies operating taxis and hire cars with drivers when renewing their fleets must also be low-emission vehicles.

CAR PARKS

When undertaking works on existing buildings, the Act requires the installation of electric vehicle charging points and cycle parking facilities. Charging points must also be installed when undertaking work on car parks of existing buildings. Charging points must also be installed in car parks at existing shopping centres, and in new car parks.

MINIMUM OF SEVEN MILLION CHARGING POINTS INSTALLED BY 2030

To provide access to as many charging points as possible, for all types of rechargeable electric and hybrid vehicles, France aims to install at least seven million charging points by 2030. Since September 2014, private individuals who install a recharging point for electric cars are entitled to a 30% tax credit.

SUPPORT MEASURES

REBATES FOR THE PURCHASE OF CLEAN VEHICLES TO REPLACE POLLUTING VEHICLES

The rebate for the purchase of an electric vehicle, provided it is accompanied by scrapping a polluting vehicle (diesel vehicle over 10 years old), has been extended and increased since 1 April 2015. The rebate is worth up to 10,000 euros. 7,000 electric vehicles have been purchased using the conversion rebate, worth 70 million euros for the electric vehicle market in the first year. This aid has helped double the French electric vehicle market, making it the largest in Europe, with over 12,000 electric vehicles registered since the beginning of 2016.



TRAFFIC AND MOBILITY

RESTRICTED TRAFFIC AREAS INTRODUCED BY LOCAL AUTHORITIES

The Energy Transition Act affords local authorities the option of introducing restricted traffic areas (*zones à circulation restreinte* - ZCR) restricting access to the most polluting vehicles, in all or part of their local area, with a view to protecting the health of people in areas which are regularly subject to airborne pollution. ZCRs are created by local decree, following an environmental study and approval by the authorities that manage mobility in the area in question and its surrounding area, the municipal councils of surrounding towns, road management authorities and local chambers of commerce, agriculture and industry, etc.

AIR QUALITY CERTIFICATES FOR LOCAL AUTHORITIES

Crit'Air is an air quality certification scheme used to classify vehicles according to how polluting they are. It is a tool designed for local authorities who want to implement proactive air quality policies.

RESTRICTED TRAFFIC ACROSS AN ENTIRE TOWN

This is a transition measure enabling mayors in areas covered by air protection plans to introduce traffic restrictions targeting polluting vehicles on all roads in the area.

POOR AIR QUALITY AND REDUCED SPEED LIMITS

Mayors can reduce speed limits to below the limits set out in the French highway code across all or part of the roads in the area under their authority.

REDUCED FARES TO ENCOURAGE USE OF PUBLIC TRANSPORT WHEN TRAFFIC IS PROHIBITED FOR CERTAIN CATEGORIES OF VEHICLE

When certain categories of privately-owned cars are prohibited from road use, incentives to use public transport networks are provided with reduced fares, or even free transport, decided by transport management authorities. Such restricted traffic measures can be introduced in areas subject to poor air quality.

COMPANY MOBILITY SCHEMES

As part of an urban mobility plan, any company with at least one hundred employees working at a single site can draw up a mobility scheme to improve mobility for its personnel and encourage them to use public transport and car-pooling.

CLEAN TRANSPORT

CAR-POOLING DEFINED

Car-pooling is when a driver shares their motorised road vehicle with one or more passengers, without payment other than sharing expenses, for a journey which the driver is making anyway.

PROCEDURES AND AMOUNT OF ALLOWANCE PER KILOMETRE FOR CYCLISTS

Employers can contribute to the travel costs of employees who travel to work by bike or electric bike. This cycle allowance is exempt from social security contributions payable by the employer, up to a maximum of €200/year/employee, and based on the number of kilometres travelled by the employee to get to work. The allowance is set at €0.25/kilometre.

REDUCED TAX FOR COMPANIES THAT PROVIDE BICYCLES

Any company subject to corporate tax may claim a tax reduction equal to the costs of making a fleet of bicycles available without charge to its employees for their journeys between home and work, of up to 25% of the purchase price of the fleet.

TIGHTER CONTROLS ON THE EMISSION OF AIRBORNE POLLUTANTS DURING PERIODIC VEHICLE INSPECTIONS

This measure requires that, experimentally, current tests on petrol-engine vehicles should include measuring fine particle and nitrogen oxide emission levels, and that tests on diesel-engine vehicles include measuring emission levels of carbon monoxide, unburnt hydrocarbons, nitrogen oxide, carbon dioxide and oxygen.

INTRODUCING A PUBLIC EASEMENT FOR URBAN CABLE TRANSPORT

A public easement for urban cable transport is a means of overcoming problems related to overfly regulations, which may occasionally require expropriating all land within the fly-over area. More than just a technical measure, it implies an ecological, industrial and service-oriented approach to promote the development of sustainable urban public transport services.

SULPHUR CONTENT OF MARINE FUELS

It is essential to reduce sulphur emissions in order to reduce air pollution caused by shipping. The precise sulphur emission limits that must be complied with at sea and in port, together with criminal sanctions, are designed to improve environmental quality in the shipping industry.

SUPPORT MEASURES

BREATHABLE CITIES IN 5 YEARS

The regions have been mobilised by the call for projects "Breathable cities in 5 years" (*Ville respirables en 5 ans*): 25 winners have been selected and will receive aid packages of up to a million euros.

20 local authorities will be Breathable cities in 5 years

- Communauté d'agglomération d'Épernay
- Communauté urbaine de Dijon
- Métropole de Reims
- Mission de préfiguration de la Métropole du Grand Paris
- Métropole de Strasbourg
- Métropole de Montpellier
- Métropole de Bordeaux
- Métropole de Toulouse
- Communauté d'agglomération Côte Basque-Adour
- Communauté urbaine d'Arras
- Communauté d'agglomération d'Annemasse

- Communauté urbaine de Dunkerque
- Communauté de communes Faucigny-Glières – Bonneville
- Métropole de Lille
- Métropole de Grenoble
- Métropole de Rouen
- Métropole de Lyon
- Communauté d'agglomération d'Avignon
- Métropole de Saint-Étienne
- Communauté d'agglomération du Pays de Lérins – Cannes

3 winning authorities will become Breathable Cities

- Métropole de Clermont-Ferrand
- Communauté d'agglomération du Havre
- CA de la Vallée de la Marne

2 local authorities which have a local energy transition contract

- Champlan
- Saint Maur-des-Fossés

The winning authorities undertake to implement measures in various areas.

- **Transport and Mobility:** developing pedestrian areas, car-sharing and car-pooling strategies, cycling infrastructure, aid for replacing highly polluting vehicles, etc.
- **Industry:** performing energy audits in companies, implementing a "clean worksite" charter.
- **Agriculture:** supporting eco-farming, making a test bench available for checking tractor emissions.
- **Housing:** aid for replacing inefficient heating systems and for heat-efficient renovations to housing.
- **Innovation driving green growth:** study on innovative sensors for measuring air quality, support for purchasing research lab equipment to test air quality.
- **Urban planning:** strategic air quality mapping, factoring air quality into urban mobility plans, etc.

5 | CIRCULAR ECONOMY

Tackling waste and promoting the circular economy, from product design to recycling



Our linear economic system – extract, manufacture, consume and discard – has reached its limits.

Goals

- Progressively dissociate economic growth from the consumption of raw materials.
- Reduce household waste and similar products by 10% by 2020.
- Recycle 55% of non-hazardous waste by 2020 and 65% by 2025.
- Recover 70% of construction and civil engineering waste by 2020.
- Halve the amount of waste disposed of in landfill sites by 2025.

BAN ON SINGLE-USE PLASTIC BAGS

The conditions relative to implementing the ban on single-use plastic bags as of 1 July 2016 have been decided. They define the term single-use, the minimum content of bio-sourced materials for bags made of plastic which are exempt from the ban for fruit and vegetables, and consumer information tools. In 2014, 17 billion single-use plastic bags were used in France. The environmental impact on natural habitats and biodiversity, and especially the sea, is huge.

TACKLING BUILT-IN OBSOLESCENCE

Improving the design of products can reduce their environmental impact and extend their service life. To this end, built-in obsolescence, i.e. deliberately designing a product so that it has a very short service life, becomes a punishable offence.

LABELLING PRODUCT SERVICE LIFE

Experiments have been launched to develop labelling showing how long a product will last, thereby informing consumers and allowing them to make informed choices.

MAIN ENVIRONMENT-RELATED CHARACTERISTICS OF A PRODUCT

This measure defines the means by which consumers are informed of the main environment-related characteristics of a product when it becomes the subject of a voluntary environmental warning or allegation.

SUPPORTING THE FUNCTIONALITY ECONOMY

Public aid systems, such as the Waste Fund managed by Ademe, can support the practices entailed in a functionality economy, which favours use over ownership and sells services related to a product rather than the product itself.

ENVIRONMENTAL PERFORMANCE FACTORED INTO PUBLIC PROCUREMENT CONTRACTS

The Act defines the concept of sustainable bio-sourced products and requires that the award of public procurement contracts factors in the environmental performance of products, with particular emphasis on whether they are bio-sourced or not.

USING RECYCLED SPARE PARTS

This measure stipulates that car maintenance and repair professionals should offer customers the choice of using recycled spare parts rather than new parts. This will help save non-renewable resources, energy and raw materials by re-using components that are no longer used but which still work, as well as reducing costs for households. This measure will come into force on 1 January 2017.

STRONGER POWERS FOR MAYORS TO DEAL WITH BROKEN-DOWN ABANDONED VEHICLES

Mayors of towns in which broken-down vehicles have been abandoned have a complete set of tools for dealing with the nuisances caused by such abandonment.

The situation is particularly serious in overseas France where many abandoned vehicles are reported and where insect larvae hatch in broken-down vehicles, potentially causing or exacerbating epidemics. The Act empowers mayors to take action, even where vehicles are abandoned on private property.

MANAGING ELECTRICAL AND ELECTRONIC WASTE

The requirement to take out a contract with an entity set up by electrical and electronic equipment manufacturers was adopted to optimise recovery and recycling of related waste products via legal and controlled channels.



RECOVERING BUILDING AND CIVIL ENGINEERING WASTE

Developing a network of waste collection centres for the building and civil engineering trade by 1 January 2017, introducing a scheme requiring wholesale/retail distributors to collect materials from building and civil engineering professionals at (or near) sales outlets.

SHIP RECYCLING REQUIREMENT

Ship owners who want to recycle their vessels must declare the recycling facility used and the conditions in which they are to be dismantled. Failure to make a recycling declaration will leave them liable to sanctions.

FIVE TYPES OF WASTE TO BE SORTED BY WASTE COLLECTION AND MANAGEMENT COMPANIES

The Act sets out measures relative to separating the collection and sorting of paper, metals, plastic, glass and wood by producers or holders of waste.

MECHANICAL AND BIOLOGICAL TREATMENT OF HOUSEHOLD WASTE

New facilities will no longer receive public financial aid (mainly from the Ademe's Waste Fund) unless the local authority in question has established solutions to sort bio-waste at source.

SOLID RECOVERED FUEL (SRF)

SRF is made from non-hazardous waste with high calorific value. By establishing a technical and regulatory framework for preparing SRF, its use can be developed in conditions that satisfy environment and health protection requirements.

PHYTOSANITARY PRODUCTS

A ban on the use of phytosanitary (plant protection) products in municipal green spaces will come into force on 1 January 2017. The ban on the retail sale of phytosanitary products to the public will gradually be phased-in, leading to a total ban as of 1 January 2017. Aerial spraying of phytosanitary products (except in the event of a serious health risk) is also banned as of 2016.

SUPPORT MEASURES

ZERO WASTE, ZERO WASTAGE REGIONS

(TERRITOIRES ZÉRO DÉCHET, ZÉRO GASPILLAGE)

The Environment Ministry and the Ademe provide technical and financial support to the regions, mainly through the Waste Fund. This fund provided 55 million euros for the regions in 2015, funding promotion of the Zero waste, zero wastage regions initiative.

This project affects 33.7 million inhabitants, and aims to recover 79% of all household waste.

The call for projects backs local authorities in implementing an exemplary and participative approach to promoting the circular economy. 153 local authorities have been named winners. Aid worth €30,000 to each Zero waste, zero wastage region which proposes innovative and original solutions, looking ahead to the ban on single-use plastic bags on 1 July, was announced in February 2016.



6 RENEWABLE ENERGY

Developing renewables to create a balanced energy mix and optimise our regional resources



Mainland and overseas France boast significant advantages for becoming a major producer of renewable energy. In 2014, 14.3% of the energy we consumed was produced from renewable sources. The aim is to increase this figure to 23% by 2020 and 32% by 2030. Wind and solar power production increased by over 25% in 2015 (1000 MW more wind capacity and 900 MW more solar capacity). The number of recoverable and renewable heat projects receiving aid from the Heat Fund has risen by nearly 30%.

Goals

- More than double the share of renewables in the French energy mix over the next fifteen years.
- Promote the improved integration of renewable energy sources into the electricity distribution system thanks to new support mechanisms.

DEFINING RENEWABLE ENERGY DEVELOPMENT OBJECTIVES

The Order of 24 April 2016 relative to renewable energy development objectives sets out the ambitious objectives to be achieved by 2023 and which will help to:

- increase installed capacity of renewable electricity production by over 50% compared to 2015;
- triple the amount of renewable and recoverable heating and cooling supplied by the district heating or cooling systems;
- inject biogas derived from methanisation in the 8 terawatt-hour gas network and support development of bio-NGV (Natural Gas for Vehicles) up to 20% of NGV consumption in 2023.

NEW SUPPORT FOR RENEWABLES: SUPPLEMENTARY PAYMENT

(COMPLÉMENT DE RÉMUNÉRATION)

This is a bonus paid to renewable energy producers in addition to the price paid for selling, on the market, the electricity they have produced. It is designed to enable the producers who receive it to be paid enough to cover the costs of their installation and, at the same time, ensure a normal return on investment. The *complément de rémunération* replaces the requirement to purchase electricity in the case of high power renewable energy production installations (over 500 kW installed capacity). The requirement to purchase is maintained in the case of small installations and for wind power.

INVESTING IN LOCAL RENEWABLE ENERGY COMPANIES

Local inhabitants are encouraged to invest in companies involved in local renewable energy projects. Municipal and inter-municipal authorities can invest in public companies (*société anonyme*) set up to produce renewable energy.

"SELF-CONSUMPTION" CALL FOR BIDS

Self-consumption can be defined as consuming electricity you have produced yourself. It is related to self-production, defined as producing electricity for your own consumption. The call for bids is open to consumers in the industrial, tertiary and agricultural sectors, and particularly shopping centres, economic players for which self-consumption may be the most advantageous option. All renewable energy technologies (solar, small hydro, windmills, etc.) are admissible. The call for bids is for 100 to 500 kW installations. Total allocated volume is 50 MW (i.e. 100 to 500 projects awarded). Successful bidders will have their self-consumed electricity valued in accordance with the procedures set out in the Energy Transition Act.

REGULATION RELATIVE TO THE MAXIMUM PERIOD FOR CONNECTING AN INSTALLATION THAT PRODUCES ELECTRICITY FROM RENEWABLE SOURCES

The Act defines the starting point for the maximum eighteen-month period for connection as the date on which the applicant and the network operator sign a connection contract. The Decree also lists the cases for suspending or stopping this period and defines the procedure applicable to extend it.

HYDROELECTRIC CONCESSIONS

The Act introduces innovative measures regarding the hydroelectric facility concession regime, aimed at ensuring coherent management of engineering works, reconciliation of water use, good stakeholder information and regional economic development.

The Act sets out the procedure for setting up a specific type of semi-public corporation (*société d'économie mixte hydroélectrique* - ESMH), during the process of renewing concession contracts, formed by competent operators, local authorities and the State.

INJECTING BIOMETHANE IN THE GAS NETWORK

The Act allows for a competitive bidding procedure in the case where the objectives of injecting biomethane in the gas network are out of line with the trajectory forecast in multi-year energy plans. The criteria applicable to such competitive bidding processes include an emphasis on crowdfunding.

SUPPORT MEASURES

GREATER SUPPORT FOR THE HEAT FUND

This fund is used to support the production of heat from renewable sources (biomass, geothermal, solar thermal, etc.). In two years, 733 projects have received funding worth a total of 400 million euros.

"DYNAMIC BOIS": PROMOTING THE USE OF WOOD RESOURCES THROUGH SUSTAINABLE FOREST MANAGEMENT

Dynamic Bois is a call for expressions of interest, the second round of which was launched at the end of February 2016. It aims to fund projects that make better and more efficient use of French forests, as crucial to mitigating climate change. 24 projects have received backing.

CALLS FOR BIDS IN THE SOLAR PHOTOVOLTAIC SECTOR

- 250 contracts have been awarded for high-power solar power installations (over 250 kWc).
- 349 contracts awarded as a result of the first call for bids, launched in 2015, to develop medium-power photovoltaic installations (100 to 250 kilowatt-peak) on buildings and parking canopies.
- 378 contracts to be awarded in the second call for bids, in July 2016.

DEVELOPING METHANISATION

In 2016, the purchase tariff for electricity cogenerated by existing methanisation plants was revised to improve the return on investment in biogas plants (mostly operated by farmers), and to lay sound foundations for the development of this technology. A 20-year guaranteed purchase tariff exists to support development of biogas plants with output under 500 kW.

7 | NUCLEAR SAFETY

Optimising nuclear safety and public information



The Act takes additional steps in terms of providing transparency and public information regarding nuclear safety. It establishes the conditions for dismantling facilities and storing waste in compliance with stringent safety and environmental protection requirements. The Act sets a ceiling on nuclear electricity generation capacity at 63.2 GW, which is the current level.

Goals

- Clarify operator responsibilities with regard to nuclear safety principles.
- Strengthen the role of the French Nuclear Safety Authority (Autorité de sûreté nucléaire – ASN).

STRENGTHENING ASN'S REGULATORY RESOURCES AND POWERS

ASN will be given greater regulatory powers and increased inspection resources. It will have more incremental inspection and punitive powers (administrative fines, daily penalties, possibility of making seizures, etc.).

STRENGTHENING THE ROLE OF LOCAL INFORMATION COMMISSIONS (CLI)

Local Information Commissions (*Commissions locales d'information* – CLI) can ask operators to organise facility site visits for local residents. The CLIs for nuclear facilities will be consulted in the event of any change to the facility off-site emergency plan (*Plan particulier d'intervention* – PPI),

which sets out emergency response measures in the event of an accident. In the case of facilities located near national borders, the Local Information Commissions will be extended to include representatives living in neighbouring countries.

TIGHTER REGULATORY FRAMEWORK RELATIVE TO NUCLEAR INSTALLATIONS IN SERVICE BEYOND 40 YEARS

The measures proposed by an operator of a basic nuclear installation during safety reviews of the facility that has been in service for over thirty-five years are now subject to a public inquiry followed by a licensing procedure by ASN or, if appropriate, a procedure to modify the ministerial decree granting the initial construction licence.

LIMITATIONS ON SUBCONTRACTING AND SERVICE PROVIDERS

Regulation is introduced with regard to external service providers, limiting the number of levels of subcontracting for certain safety-critical activities. In particular, the limit is 3 levels in the case of activities related to operating and to dismantling basic nuclear installations.



8

SIMPLIFICATION

Simplifying and clarifying procedures to boost efficiency and competitiveness



Changes to the current legislation are required in order to accelerate deployment of all forms of renewable energy and connect them to national transmission and distribution grids.

Goals

- ▶ Remove regulatory constraints.
- ▶ Facilitate the development of renewable energy sources.
- ▶ Combat fuel poverty.

GUARANTEEING THE BEST PRICES FOR CONSUMERS BY IMPLEMENTING A NEW METHOD FOR CALCULATING THE REGULATED TARIFFS FOR THE SALE OF ELECTRICITY

The Act guarantees the best prices for consumers by implementing a new method for calculating the regulated tariffs for the sale of electricity. This reform has cut the rate of price increases by half in the last few years.

WIDESPREAD IMPLEMENTATION OF THE SINGLE ENVIRONMENTAL PERMIT EXPERIMENT

Since November 2015, the experiment initiated in 2014 in seven French regions to unite all the permits required to develop a wind turbine or biogas project under a single environmental permit issued within 10 months of application, has been extended throughout France.

LARGE ELECTRICITY-CONSUMING COMPANIES

The Act sets out the conditions and procedures related to attributing reduced tariffs for the use of the public transmission grid for companies or sites which are heavy consumers of electricity and have a forecastable, stable or counter-cyclical consumption profile, with a positive impact on the electric power system.

LOAD REDUCTION PROCEDURES

Load reduction consists in voluntarily reducing the amount of electricity consumed at a site compared to its usual consumption. This is an effective and environment-friendly means of dealing with peak demand in winter, and avoids having to construct peak supply facilities which emit CO₂.

COMMITTEE FOR THE PUBLIC ELECTRICITY DISTRIBUTION SYSTEM

The Act defines the membership rules, functioning and competence of the Committee for the public electricity distribution system tasked with giving opinions on the investment policies of the distribution system operators and the organising authorities for public electricity distribution systems.



KEY FIGURES

500 ENERGY
TRANSITION FOR
green growth regions

900 MW
more SOLAR POWER
CAPACITY

1000 MW
more WIND POWER

30%
TAX CREDIT
for energy transition

15,000
MORE GREEN JOBS

25%
more RENEWABLES

over
500 million euros
through the
INVESTMENT IN THE FUTURE PROGRAMME

733
projects FINANCED BY THE HEAT FUND

25
BREATHABLE CITIES

1000 km
of SOLAR ROADS

153
Zero waste, zero wastage
REGIONS

€10,000
REBATE on the cost of
an electric vehicle

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