

# 50 measures for a 100% circular economy







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# A Roadmap for a Successful Transition

**The transition towards a circular economy** is a key project of the ecological and social transition. **The linear model — producing, consuming, discarding — is inevitably leading us towards the depletion of the planet's resources.** We must move towards a different type of economy, where we consume in moderation, where products have a longer lifetime, where we limit waste, and where we are able to transform waste into new resources. This transition is a genuine **societal project** whose aim is to move away from the throw-away society. It invites us to change the way we lead our lives and to invent new and more sustainable production and consumption methods, by prioritizing use over ownership.

While the 20th century saw gains in labour productivity, the 21st century needs to produce gains in productivity in resources, without which we will not be able to benefit from the full potential of the digital and artificial intelligence revolution. The report by Cédric Villani (March 2018) thus

highlights the medium-term tensions over the availability of silicon to meet the computing power requirements of a digital economy.

The situation is clear: France has a long way to go to make progress in the circular economy. In 2014, the rate of recovery of household and similar waste was 39% — much lower than our German (65%) or Belgian (50%) neighbours. The rest, half of which is organic waste, is therefore incinerated or landfilled, which leads to local environmental pollution and energy waste that is incompatible with our climate objectives.

As for plastics, collection rates have peaked: 20% of plastic packaging is actually recycled, whereas the EU average is 30%.

The collection rate of plastic bottles is 55% on average, while in Scandinavia more than 90% of plastic bottles are recycled.

This unsatisfactory situation is not inevitable, but a change of approach will not happen spontaneously. It calls for proactive State action both to define an

## Objectives

- Reduce natural resource use related to French consumption: **30% reduction in** resource consumption in relation to GDP between 2010 and 2030.
- **A 50% reduction in the amount of non-hazardous waste** landfilled by 2025, compared to 2010.
- Aim towards **100% of plastics recycled** by 2025.
- Reduce greenhouse gas emissions: **avoid the emission of 8 million additional tonnes of CO<sub>2</sub> each year thanks to plastic recycling.**
- **Create up to 300,000 additional jobs**, including in new professions.

economic framework that makes waste recovery easier than disposal and to create the conditions for collection of nearly 100% of recyclable waste. This also involves structuring production chains that can "close the loop" between collection, recycling and

outlet capacities for materials to be recycled while allowing innovation, particularly through eco-design. To meet this industrial challenge, our country may rely on global leaders in recycling and innovative start-ups.

## Reconciling the Economy with the Environment

The transition to a circular economy brings with it **various dynamics of progress and innovation** that reconcile the environment and the economy.

The benefits of this transition are enormous for the environment and the climate. Using a circular approach to production and consumption reduces our environmental footprint and, in particular, **leads to significant reductions in greenhouse gas emissions**. For example, the production of a plastic bottle from recycled plastic emits 70% less CO<sub>2</sub> than one produced from virgin plastic. This is why the "Roadmap for the Circular Economy" is fully in line with the national "Climate Plan".

The circular economy will also contribute to achieving some of the targets of the **Agenda 2030 Sustainable Development Goals (SDGs)** for France.

The benefits for the economy in terms of **creating wealth, new business, jobs and innovations are a reality**. The circular economy sector is estimated to have the potential for 300,000 additional jobs, some of which would be new jobs or involve new business models (for example, the so-called "economy of functionality" – or "product- service systems"). Most of these jobs are local, permanent

and not relocatable. The circular economy will also lead to a reduction in France's dependence on imports of raw materials and its vulnerability to global economic uncertainties. It is about an industrial policy that aims to maximize the added value associated with recycling operations nationwide, to support the upgrading of French production and to position French companies among the European leaders in the circular economy. For companies, these are innovations for the eco-design of products and long-term gains in competitiveness, particularly in the field of plastics, which require major improvements. **Digital** technology also represents an opportunity for the transition to a circular economy, particularly by enabling networking, access to information and data for citizens, support for decision-making and the production of new services.

Finally, the circular economy broadens horizons for the **social and solidary economy**, which has paved the way for many years for projects to meet needs that are not completely covered by conventional companies. It is a source of social innovation and employment opportunities for those who are the most vulnerable. It involves **mobilizing regions** around meaningful projects.

# The Approach

Today, **the main challenge is mass mobilization** – citizens, communities, businesses, associations, government agencies, researchers and development actors in all regions – for real action and upscaling. To meet this challenge, the Roadmap aims to shake up habits, provide information by showing good practice, convince people and also to inspire them.

**The “Circular Economy Roadmap” charts a path for rapid progress towards the ambitious goals of the Climate Plan in matters relating to the circular economy. It will also be necessary to take our vision for a 100% circular economy to the European and international level via the #MakeOurPlanetGreatAgain initiative.**

Following the leadership role, it has taken in climate-related matters France can become the spearhead of the circular economy at the global level.

Scaling up and shifting the paradigm requires everyone’s long-term engagement. This has been particularly intense throughout the consultation for the development of the Roadmap.

This shows the French public’s keen interest in giving major impetus to this transition.

By 2019, the Roadmap measures will result in legislative measures through the transposition law of the new European waste directive and in the work of drafting future public budgets. In the coming months, the Roadmap will also manifest itself in the form of regulatory measures, community initiatives, in particular to significantly increase the collection of valuable waste, and voluntary commitments by companies. The deployment of the Roadmap in the coming months will be accompanied, as during the drafting stage, by major involvement on the part of the relevant stakeholders.

Beyond this Roadmap for the Circular Economy, other specific initiatives, focusing more specifically on food and agricultural practices, will be taken as part of the work extending the French National Food Conference.

## Timeline and Methodology for Developing the Roadmap

On 24 October 2017, Ministers Nicolas Hulot and Brune Poirson began to work on developing the Circular Economy Roadmap.

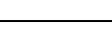
Stakeholders worked for two months in four workshops: territories, plastics, sustainable consumption/production and economic instruments. They met on five occasions.

At the same time, an online platform was opened to collect citizens' opinions: with nearly 1,800 contributions and more than 16,000 votes, this consultation showed that citizens are very enthusiastic about the circular economy. <https://www.consultation-economie-circulaire.gouv.fr/>

A specific task was also entrusted to Jacques Vernier on the future of the extended producer responsibility (EPR) schemes whose report was submitted to ministers on 14 March 2018. [https://www.ecologique-solidaire.gouv.fr/sites/default/files/REP\\_Rapport\\_Vernier.pdf](https://www.ecologique-solidaire.gouv.fr/sites/default/files/REP_Rapport_Vernier.pdf)

A summary of the proposals from the workshops was presented to stakeholders in January 2018. Specific working groups were launched by the State to continue exchanges between different actors (e.g., communities, businesses, NGOs, etc.), to identify the most relevant tools for meeting the objectives of the Roadmap and the practical ways of implementing them. Work groups have also been launched for actors in the plastics sector to establish commitments with regards to plastic resin.

The pre-roadmap was used to create this summary. It was published on 6 February 2018 and put out for consultation until 25 February 2018. With more than 3,000 contributions and nearly 30,000 votes, this second consultation confirmed citizens' strong interest in the circular economy.

A Roadmap for Better Production		Target Audience
1	Use more secondary raw materials in products	
2	Support productive investment	
3	By 2020, support 2,000 voluntary companies through the ADEME [French Environment and Energy Management Agency] mechanism “SMEs winning every time”	
4	Enable the EPR [Extended Producer Responsibility] schemes to secure investments from industrial recycling sectors and sectors of producers of recycled products	
5	Manage resources more sustainably	
6	From 2019, adapt professional skills for better production at national level and in the regions	
7	Roll out voluntary environmental labelling of products and services in the five pilot sectors and extend this voluntary scheme to other sectors in 2018	
A Roadmap to Better Consumption		Target Audience
8	Strengthen the range of services offered by actors involved in reuse, repair and the economy of functionality (product-service systems)	
9	Strengthen the obligations of manufacturers and distributors to provide information on the availability of spare parts for electrical and electronic products and furniture	
10	Mandatory simple information logo on reparability from 1 January 2020 for electrical and electronic products	
11	Strengthen the effective implementation of the legal guarantee of conformity and bring about an extension of its duration at the European level	
12	Roll out the implementation of eco-modulation criteria for all the EPR schemes and make eco-modulation a tool for encouraging real behaviour change	
13	Improve consumer information	
14	Step up the fight against food waste	
15	By 2019, promote the main principles of the fight against food waste for the textile sector	
16	Strengthen the fight against advertising encouraging the premature scrapping of products and the waste of resources	

A Roadmap for Better Managing Our Waste		Target Audience
17	Launch a "general mobilization" drive to accelerate the collection of recyclable packaging, plastic bottles and cans through returns for charitable purposes.	
18	Extend the scope of the EPR "packaging" scheme to professional packaging and aim to increase the percentage of bottles and cans collected in the cafe, hotel and restaurant sector	
19	Simplify the sorting process for citizens and harmonize the colour of containers throughout France	
20	Improve the pictogram device known as "Triman" by simplifying its definition	
21	Adapt taxation to make waste recovery cheaper than waste disposal	
22	Facilitate the deployment of pricing incentives for waste collection	
23	Facilitate the deployment of biowaste sorting at the source by councils, by easing restrictions	
24	Recycle all high-quality biowaste and enable the agricultural sector to drive the circular economy	
25	Take the ban on the use of fragmentable plastics, expanded polystyrene containers and plastic microbeads to the European level	
26	By 2020, impose the installation of plastic particle recovery filters at sites where they are produced or used	
27	By early 2019, develop a benchmark for good practices and tools for councils to combat illegal waste dumping	
28	Reinforce the confidence pact between the EPR schemes in order to restore room for manoeuvre to eco-organizations by reinforcing the monitoring means of the State and penalties.	
29	Educate the actors involved on the creation of new EPR schemes or the extension of existing sectors to include the 'polluter pays' principle for new products	
30	Develop certain EPR schemes to improve their operation	
31	By 2019, study the deployment of a financial mechanism to promote the recovery of old mobile phones	
32	Give producers more freedom to exercise their responsibility within EPR schemes	
33	Review the operation of building waste management by making collection more efficient	
34	By May 2019, conduct an in-depth review of the current regulatory framework for the "assessment of waste before demolition"	

35	By 2020, develop technical guidelines enabling recognition of the performance of reused materials	 
36	Adapt waste regulations to promote the circular economy	
37	Facilitate end-of-waste status	
38	From 2019, review the landfill and incineration rules for business and organisations waste	 
39	Ensure there is a level playing field	 
40	Combat the illegal trade in end-of-life vehicles	
A Roadmap for Mobilizing all Actors		Target Audience
41	Make unprecedented communication efforts to mobilize citizens and businesses	  
42	Raise awareness and educate	
43	Roll out and sustain regional action about the circular economy	 
44	Use public procurement and "exemplary administration" as a lever for the deployment of the circular economy	
45	Support the circular economy through dedicated funding	 
46	Strengthen synergies between companies (industrial and territorial ecology – EIT – industrial symbiosis)	 
47	Mobilize the scientific and technical community with a multidisciplinary approach	
48	Strengthen national governance and steering by developing the National Waste Council into a National Circular Economy Council	  
49	Integrate the special issues of the overseas territories	  
50	Continue France's action in support of the circular economy on the European and international scale	  
 Consumers/citizens		 Companies
		 State/local authorities

A glass bottle factory with glowing orange bottles and a 'better production' graphic overlay. The background shows industrial machinery and a conveyor belt. The text 'better production' is centered in white, surrounded by three circular arrows in green, orange, and blue.

**better  
production**

# I. A Roadmap for Better Production

In a context of growing global demand for raw materials and stress on mineral resources, it is essential for marketed products to include more recycled materials, use resources from sustainable supplies for their production and, more generally, be "eco-designed".

Creating opportunities for recycling meets the dual climate and environmental emergencies, particularly in the plastics field. On this and other issues, the challenge is to address industrial challenges in a context where a low oil price and an insufficiently incentivized European carbon price encourage producers to use virgin rather than recycled raw materials.

This transition from a linear to a circular economy will lead to employment transfers from resource-consuming activities to those that contribute to saving resources. A vigorous training effort facilitating these transfers will have to be started.

## → KEY OBJECTIVES

- Promote upgrading and differentiation of products through better environmental performance.
- Produce better with less non-renewable resources.
- Incorporate more recycled raw materials, in particular for plastics.
- Create jobs and meet training needs for new occupations or new skills in the circular economy.

## → MEASURES

1) **INCORPORATE MORE RECYCLED RAW MATERIALS INTO PRODUCTS** while ensuring their quality, traceability and genuine safety for citizens:

- **Promote, by the summer of 2018, major, practical and voluntary commitments** aimed at organizing a vision for the sector, including target volumes for the integration of plastic material resulting from waste in the following sectors: packaging, building, automotive, and electronic and electrical equipment. To this end, all actors involved (suppliers of virgin materials, product manufacturers, marketers, waste collectors and managers) are currently working under the auspices of the French Ministry for the Economy and Finance and the French Ministry for the Ecological and Solidary Transition on the formulation of commitments regarding the use of recycled plastics in different types of resins used (polystyrene, polyethylene, polypropylene, polyvinyl chloride);
- **Enhance the upgrade of the actors involved in the sector** by supporting projects, in turn enabling the implementation and deployment of innovative solutions, in particular through the actions of competitiveness clusters and calls to tender for "Circular economy and waste recovery" projects under the "Demonstrators and Territories of Innovation and Great Ambition" action of the Investments for the Future Programme.

## 2) SUPPORT PRODUCTIVE INVESTMENT MANAGE RESOURCES MORE SUSTAINABLY:

to improve the competitiveness of the business of incorporating raw materials from recycling and replacement by renewable resources, by means of mass mobilization of available public financial tools and private finance **through green finance tools** such as green fund type and green bonds. Revise the reference framework of the “energy and environmental transition for the climate” label by including the financing of circular economy projects.

## 3) BY 2020, USE THE ADEME DEVICE “SME WINNERS EVERY TIME”, TO SUPPORT 2000 VOLUNTARY COMPANIES

to streamline their consumption of resources, reduce their waste generation and ensure regular savings (80% of companies that have already benefited have saved more than €180/employee per year).

## 4) Enable the EPR schemes TO SECURE THE INVESTMENTS OF THE INDUSTRIAL RECYCLING SECTORS and producers of recycled products to close the circular economy loop:

- Rely on a group of voluntary agreements for the integration of recycled materials and, failing this, set objectives for EPR schemes for the integration of recycled materials that are ambitious and consistent with the general objectives of the Roadmap.
- Arrange for the financial risk related to fluctuations in the prices of recycled materials to be transferred from recycling operators to the eco-organizations with which they enter into contracts within the EPR scheme.
- Arrange for EPR eco-organizations to be able to finance investments to support the industrial sector of companies reusing recycled raw materials.

## 5) MANAGE RESOURCES MORE SUSTAINABLY:

- Based on the work of COMES (Committee for Strategic Metals) and the first National Resource Plan which is to be published in 2018, **commit to a programming plan for resources that are deemed to be the most strategic**, accompanied by an ambitious industrial policy for the recovery of materials, especially critical metals, contained in waste.
- Under the guidance of France Stratégie, **establish “benchmark values” representing the cost of the use of these strategic resources to society as a whole** (environmental damage, resource scarcity), in order to integrate them into the evaluation of public policies in the same way as has been done for carbon and air pollution.
- **Commit to the Mining Code reform in 2018:** France's resolute commitment to the circular economy will reduce the need for primary mineral raw materials, but extraction will still be necessary. The Mining Code reform must allow for the development of French mineral resources based on the best environmental and social standards.
- By 2019, with the help of ADEME, develop tools to **enable businesses who so wish to establish a “materials inventory”** based on the model of the “greenhouse gases inventories”.
- **Encourage regions to produce “material flow inventories”**, in particular by disseminating available methodological tools more widely and encouraging regions to broaden the role of waste monitoring bodies accordingly.

## 6) FROM 2019, ADAPT PROFESSIONAL SKILLS FOR BETTER PRODUCTION AT THE NATIONAL AND REGIONAL LEVELS:

- **Identify the specific skills** needed for certain occupations in the circular economy.

- **Propose to the regions that they take greater account of the needs of the circular economy in the vocational training they deliver.**
- **Create certifications** or “skill blocks” [units of a professional qualification] recognizing the skills that contribute to the circular economy to enhance the value of these jobs, particularly in the area of the repair and reuse of products.
- **Support companies**, including actors in the social and solidary economy, in the development of their professions.
- **Support elected representatives and local authorities** in the development of regional circular economy strategies by improving their

knowledge of the issues related to the circular economy and, more particularly, the recycling of biowaste.

**7) DEPLOY VOLUNTARY ENVIRONMENTAL LABELLING** of products and services in the five pilot sectors (furnishing, textile, hotels, electronic products and food products). Extend this voluntary mechanism to other sectors during 2018.

## SUCCESS STORIES

- **Machaon**

*Mathieu Le Bigot, CEO and co-founder of the Machaon Company (Châlons-en-Champagne, Marne):*

"Recycling soft plastics resulting from sorting"

"The Machaon plant was commissioned in April 2017 and the main start-up challenges have now been met: we have a good team, an industrial process that works well and satisfied customers. In France but also in Europe, Machaon is the only actor that specializes in recycling plastic bags and films from selective collection; however, the quantities in Europe are massive.

We are therefore entering a new phase which is the deployment of our know-how. In 2019, Machaon will triple its recycling capacity in France and will be able to recycle nearly 50% of the soft plastics (LDPE) of the French population.

At the same time, we will face a new and very important challenge — how to convince more and more manufacturers to use regenerated plastic. This is obviously the fundamental issue for the circular economy: for marketers to gradually reuse the regenerated material."

- **Beaba**

BEABA® is a specialist in childcare products, and this year it is launching its next-generation BABYCOOK®, BABYCOOK NEO, a product that has been fully designed and created in line with a circular economy approach, by:

- using sound, recyclable materials such as stainless steel and glass.
- halving the environmental and carbon footprints compared to the previous version.
- increasing quality as well as the product's five-year warranty.
- promoting an industrial manufacturing scheme in France at a competitive cost.

*Julien Laporte, Chief Executive Officer of Beaba:*

"Eco-design and relocation in France have really boosted innovation: the cooking and mixing functions of this new product have been improved and protected by four new patents. Even more than with previous generations of Babycooks, it guarantees a healthy diet."

- **Arjowiggins Graphic**

Arjowiggins Graphic is a French company that produces high-tech recycled papers and specialist papers.

*Gilles Lhermitte, Director of Sustainable Development at Arjowiggins Graphic and President of FSC France:*

"Arjowiggins Graphic is a pioneer in the circular economy: 60% of fibrous raw materials come from the collection and recycling of paper. This collection takes place in a limited area around manufacturing sites and generates about 250 jobs in the field of the social and solidary economy. Innovative manufacturing processes meet the quality requirements of customers while respecting the strictest requirements in terms of environmental impacts: 93% of manufacturing waste is recovered in recycling sectors. This achievement has been recognized since 2009 by the European Ecolabel for all the printing and writing product ranges."



cafés en dosettes

Les cafés solubles

Les filtres à café

Le tartinage



better  
consumption

## II. A Roadmap for Better Consumption

The transition to a circular economy requires that citizens be provided with access to products that are safe, robust and designed for the lowest environmental impact possible. This focus on the eco-design of products represents both an environmental objective and a lever of competitiveness for domestic industry.

It requires that all actors – consumers, businesses and public authorities – have access to information to enable them to inform their consumption choices by taking into account, when they make purchases, the environmental impacts at all stages of the product life cycle. Companies must also be encouraged to design and produce repairable, improvable products and to develop the economy of functionality based on selling the use of a good rather than its ownership. A focus on the reuse and repair of products must thus become natural and attractive to the consumer. This change will create local jobs and also lead to the mobilization of the social and solidarity economy.

### → KEY OBJECTIVES

- Give consumers the means for more responsible consumption.
- Increase the life span of products.
- Create sustainable jobs in the repair sector, particularly from the social and solidarity economy.
- Combat food waste.

### → MEASURES

#### 8) Increase the number OF ACTORS IN REUSE AND REPAIR sectors AND IN THE ECONOMY OF FUNCTIONALITY to

enable individuals to use their services rather than throwing away a product and buying a new one, while boosting the role of the social and solidarity economy within these activities and taking into account the specificities of the overseas territories. This requires a better organisation of the repair sector to make it more competitive and easier for consumers to access:

- **Include the mapping of repair, reuse and functional economy services into the specifications of producer responsibility organisations** and make this information available to the public as open data so that start-ups can offer applications to promote, in particular, the development of digital platforms to facilitate networking of repairers and contact with consumers.
- **Set reuse, re-deployment and repair targets to extended producer responsibility (EPR) schemes.**
- **Set rates for the provision of collected products** to social and solidarity economy operators.
- **Set rates or insertion jobs to** waste collection and treatment operators that have a contract with or a financial investment from a producer responsibility organisation.
- Remove the barriers to repair by allowing producer responsibility organisations **to finance the repair diagnosis** of electrical and electronic equipment for users.
- Extend the existing obligation for car repairs to propose **replacement parts from the circular**

economy to the repair of electrical and electronic equipment.

- **Extend the scope of the DGCCRF's [the French General Directorate for Competition Policy, Consumer Affairs and Fraud Control] inspections in the area of the sale of spare parts to the repair of household electrical appliances:** the DGCCRF is already carrying out inspections of consumer information on the availability of spare parts and will extend its inspections to repairers (access to parts, consumer information). Allow repairers without access to these parts and documentation to easily assert their rights.

9) Strengthen the obligations of manufacturers and distributors in terms of **INFORMATION ON THE AVAILABILITY** of spare parts for electrical and electronic equipment and furniture: extend the obligation to display the period of availability of spare parts to consumers to the obligation to display any non-availability and extend this measure Europe-wide, including for online sales.

10) Mandatory display, from 1 January 2020, on electrical and electronic equipment (electrical appliances, DIY materials) of **SIMPLE INFORMATION ON REPAIRABILITY**. This information, to be produced based on a framework developed by ADEME in consultation with stakeholders, would take the form of a reparability index based on the energy label model. France will take this measure to the European level to make this information on the reparability of products a harmonized European Community obligation.

### 11) USE THE LEVERAGE OF THE LEGAL GUARANTEE TO PROMOTE THE ECO-DESIGN OF PRODUCTS:

- **Take to the European level the extension of the legal guarantee of conformity for household electrical and electronic appliances**
- **Strengthen the DGCCRF's monitoring** of the legal guarantee of conformity: a 2016 survey of 400 establishments in the area of electrical and

electronic equipment revealed shortcomings in 50% of cases in relation to informing consumers about the legal guarantee of conformity and availability of spare parts. In particular, an "anonymous client " operation highlighted communication that disregarded the legal guarantee of conformity or presented it in an erroneous or unclear way. Compliance injunctions and litigation procedures for deceptive marketing practices are currently in progress.

- **By 2019, facilitate the submission of consumer complaints** about the legal guarantee of conformity for everyday consumer products: set up a portal enabling consumers to file a complaint easily and follow it up with the DGCCRF services when companies fail to respect the legal guarantee of conformity.

12) **ROLL OUT THE IMPLEMENTATION OF ECO-MODULATION CRITERIA FOR ALL EPR SECTORS AND MAKE ECO-MODULATION A REAL INCENTIVE**, encouraging producers that put on the market eco-designed products through bonuses, which may exceed 10% of the sale price (ex. VAT) of products. Enable, through open data, consumer access to this information on eco-modulation. Eco-modulation will be based on technological benchmarks (sustainability, reparability, recyclability, use of recycled material, substitution with renewable resources, etc.) validated by ADEME, which will make it possible to objectively determine the best available technologies at an economically acceptable cost, while taking into account the specificities of the overseas departments.

### 13) IMPROVE CONSUMER INFORMATION

to enable consumers to make "responsible" purchases:

- **Commission ADEME to produce a review, by the end of 2018, of the most relevant environmental labels** and make information on

existing labels on products and services available to the public.

- In partnership with ADEME, encourage **the development of public information applications** on the environmental and social characteristics of products: e.g. whether or not it has obtained a label, its main environmental impacts, its lifetime, its reparability and the availability of spare parts, etc.

**14) INTENSIFY THE FIGHT AGAINST FOOD WASTE** as part of the actions of the 2018-2022 roadmap food policy resulting from the French National Food Conference:

- Require collective caterers to carry out a **prior assessment** of the process for combating food waste.
- Extend the current obligation affecting supermarkets larger than 400 m<sup>2</sup>, requiring them **to propose donation agreements to charities**, to collective caterers and certain operators in the agri-food sector.
- Require certain operators in the agri-food sector to publish their **commitments** in favour of the fight against food waste.

- Act at the European and national level to revise the scope and methods for setting expiry dates and **clarify consumer information about best-before dates** of products, which do not mean that products can no longer be safely consumed.

- **Develop education modules** on sustainable food and combating food waste, in partnership with the French National Education system, to increase awareness from an early age.

**15) BY 2019, PUT IN PLACE IN THE TEXTILE SECTOR THE MAJOR PRINCIPLES OF THE FIGHT AGAINST FOOD WASTE** in order to ensure that unsold materials in this sector are not thrown away or destroyed.

**16) STRENGTHEN THE FIGHT TO PREVENT ADVERTISING FROM ENCOURAGING THE PREMATURE SCRAPPING OF PRODUCTS AND THE WASTE OF RESOURCES.**

## SUCCESS STORIES

- **Hotel Amiral in Nantes (Loire-Atlantique)**

The first hotel in France to obtain the European eco-label, the Hotel Amiral in Nantes was also the first hotel to be awarded an A rating in environmental labelling in the hotel sector, in which 150 establishments voluntarily took part to evaluate and report to their customers the environmental footprint of a night spent at their hotel. Awarded for a period of three years, the environmental label invites hotels to commit to implement measures to reduce their impact on the climate, water consumption and the consumption of non-renewable resources and to increase the share of organic or eco-labeled products in their supplies.

*Nadine Witzack, Director of Hotel Amiral:*

"For a decade, our purchasing policy has enabled us to limit packaging and waste at source, to select high-quality products by focusing on local distribution and production. The numerous certifications obtained since 2008 have enabled our independent establishment to gain visibility. We attach great importance to the choice of our partners and colleagues who must share our values. Our team is constantly developing new projects with the aim of doing better with less, which brings a sense of cohesion and personal fulfilment."

- **Seb**

*Alain Pautrot, Vice-president of customer service and after sales, SEB:*

"A '10-year repair guarantee' logo on our products"

"The SEB Group chooses to repair malfunctioning parts instead of replacing them, using products designed from the outset to be easier to remove, as well as mostly customized parts, whose prices fell by 30% in 2012, and which are available during at least 12-15 years following the end of manufacture.

To repair more, consumer surveys have also shown the need for direct information: this has been implemented since 2015 using the "10-year repair guarantee" logo on each product that meets strict specifications. Result: 8% of consumers now confirm that they have chosen a product because of its "10-year repair guarantee" even if it was not their first choice. And over 39% of out-of-warranty products were repaired in 2012-2017 i.e. 300,000 products per year, from toasters to vacuum cleaners, thereby extending their service life."

- **City of Mouans-Sartoux (Alpes-Maritimes)**

*Gilles Perole, Deputy Councillor of Education and Childhood at Mouans-Sartoux local council:*

"We have reduced food waste by 80% in our canteen"

"The Mouans-Sartoux canteen has set itself the target of providing healthy and environmentally friendly food. Every day the canteen serves 100% organic meals at no extra cost. The recipe: an 80% reduction in food waste, saving €0.20 per meal, going from 147 g to 30 g of waste per child simply by not referring to recommended weights. The portions are customized to the wishes of the child, with leftovers weighed per dish on a daily basis to assess the right amount to cook for each recipe. At the self-service counter, snacks are served in small or large portions, fruits in quarters, etc. Together with the municipal agricultural service, which produces 25 tonnes of vegetables a year for the canteen, we have created three local jobs and have also reduced waste at source by cooking all the produce without grading or sorting."

- **Établissements André Cros (Isère)**

Based in the suburbs of Grenoble (Isère) and employing around fifty employees, Etablissements Cros specializes in the sale, leasing and maintenance of equipment (compressors, pumps, generators, etc.) for industry and the construction and public works sector.

*Alexandre Mauries, Head of Marketing Communications and CSR - Établissements André Cros:*

"Our company is very conscious of its regional and environmental impact in a business that is highly resource intensive. The company has been working for 20 years to upgrade its service offering with a single objective: to move from the sale-maintenance of equipment to the paid supply of cubic metres for use, while committing to the lowest possible energy ratio, since for compressed air it is possible to lose up to 90% of the energy supplied. A change of the service, now collaboratively developed within the company using the expertise of each person, which also involved the cooperation of customers and suppliers."



**better waste  
management**

### III. A Roadmap for Better Waste Management

The circular economy loop will only be completed if end-of-life products are properly sorted and recycled for re-incorporation into new products while ensuring their performance and safety. The daily commitment of all French people is required. Public consultation raised two very clear expectations:

- Simplify waste sorting processes by having unambiguous sorting instructions and harmonizing the colours of waste bins throughout the country.
- Provide initiatives to accelerate collection, in particular by a new deposit scheme to help more people to develop a sorting habit.

To go further towards reducing non-recovered waste, it is essential to create incentives for reuse and to collect biowaste, which accounts for 40% of household rubbish, so that it is recovered rather than thrown away with the rest of the household waste. It is also essential to act on the collection of food packaging from out-of-home consumption (for example, take-aways from stations, petrol stations), as their collection and recycling rate is particularly low.

Significant progress still needs to be made for business waste, whether from offices or industrial operations, which account for 18% of total waste flows.

#### → KEY OBJECTIVES

- Aim to collect 100% of recyclable waste.
- Make the sorting of waste much easier for French citizens.

- Take biowaste out of bins, as this form of waste amounts to 22 million tonnes that can be recovered.
- Accelerate the introduction of pricing incentives for waste management.
- Ensure that companies and government agencies that produce large quantities of waste meet their obligations with regards to sorting the five most easily recyclable types of waste: metal, paper, wood, plastic and glass.
- For construction waste: set sorting and recycling targets during demolitions but also during the construction phase.

#### → MEASURES

##### DEVELOP THE MODEL OF RECYCLABLE PACKAGING COLLECTION

**17) INITIATE A "GENERAL MOBILIZATION" DRIVE IN ORDER TO ACCELERATE THE COLLECTION OF RECYCLABLE PACKAGING, PLASTIC BOTTLES AND CANS AND PRIORITIZE** areas where collection rates are lowest, particularly the most densely populated urban areas. The current collection procedure will not allow a 100% performance level to be achieved. The current system has enabled 55% of plastic bottles to be collected and the extension of the collection of all plastics in the yellow bins, which was undertaken recently, should allow to reach 70% or more on a national scale.

However, aiming for 100% collection is now the objective. The status quo cannot therefore be accepted. The system must significantly increase voluntary collection, particularly at the initiative of

local authorities, as a priority in areas where rates are low.

There are also plans to:

- Carry out experiments in using deposit schemes for waste in overseas territories that wish to participate.
- Deploy "social waste deposit schemes" in communities that wish them as these create an incentive to return waste, as each new bottle which is collected contributes to the financing of a great environmental, health or charity cause. Voluntary communities will be allowed to issue calls for projects to select the collection management operators in order to choose the most appropriate solutions for their needs, especially in the densest urban areas. These solutions will use digital technologies, social innovation, the collaborative economy or automatic bottle and can recovery machines. To finance these operations, local authorities will receive specific support per tonne collected from approved producer responsibility organisations in the packaging sector.

This measure will implement the provision of the energy transition law for green growth regarding the funding of the collection of packaging consumed outside homes by producer responsibility organisations. This "general mobilization" drive will be launched throughout the country and will last five years. Feedback on the behaviour of citizens on the capacity of the yellow bin system to absorb the extension of sorting instructions, and on the density of the innovative collection network will then be sufficient to examine the need for the potential deployment of a waste deposit scheme in France and thus the achievement of up to 100% collection performance.

**18) In consultation with the actors involved, extend the scope of the EPR "packaging" scheme to professional packaging and set the target for INCREASING THE PERCENTAGE OF BOTTLES AND CANS COLLECTED IN THE COFFEE, HOTEL AND RESTAURANT SECTOR.**

## **FACILITATE THE SORTING OF WASTE BY CITIZENS**

### **19) SIMPLIFY THE SORTING PROCESS FOR CITIZENS:**

- **Simplify and harmonize waste sorting rules** throughout the country, in homes and businesses and public spaces, with the support of producer responsibility organisations as part of the extension of sorting instructions to all plastic packaging.
- **Provide for the harmonization of the colours of containers or lids for waste bins** by 2022 in accordance with the standards established by ADEME.
- Support communities to move towards a **systematic "bi-flow"-type collection scheme**, i.e. by collecting paper and packaging in the same bin, when collection is door to door.
- Provide for producer responsibility organisations in the ERP schemes to provide the public with an open data **map of the waste collection points** they operate.

### **20) IMPROVE THE PICTOGRAM DEVICE KNOWN AS "TRIMAN"**

by simplifying its definition, as this pictogram must indicate that the packaging or used product must be sorted or brought to a specific place. In this context, make it mandatory from 2021 to put the regulatory TRIMAN label on packaging and products intended for households in the extended producer responsibility (EPR) schemes. This simplification will be accompanied by the following additional measures:

- Along with the Triman logo, provide **information on the type of sorting process** or the place where the various elements that constitute the packaging and the product must be brought.

- **Remove the possibility of providing this information online only;** the online information must remain additional and must not be a substitute for information on the packaging or product.
- **Prohibit the use of pictograms and logos such as the "green dot" on products and packaging, which leads to confusion** among citizens about which sorting process they must follow or about the recyclability of the materials.

## **DEFINE AN ECONOMIC FRAMEWORK TO FACILITATE WASTE RECOVERY RATHER THAN DISPOSAL AND REMOVE THE BARRIERS TO DEVELOPMENT OF BIOWASTE RECYCLING AND RECOVERY**

### **21) Adapt the tax system to MAKE WASTE RECOVERY CHEAPER THAN DISPOSAL:**

- To make waste prevention and recovery less costly within the public waste management service, **reduce VAT to 5.5% for the prevention, separate collection, sorting and material recovery of waste.** This reduction will also cover the acquisition of biodegradable and compostable bags in compliance with the standards in force for the separate collection of biowaste and the acquisition of technical solutions for local composting.
- Lead, as part of the National Conference of Territories (NCT), a consultation on the planned increase in tariffs of the "waste" component of the TGAP (General Tax on Polluting Activities). A multi-year implementation scheme will be necessary in order to give operators the time to adapt. It will also involve refocusing the TGAP's objective in relation to the hierarchy of waste processing, by proposing a schedule for the elimination of the reduced TGAP tariffs, which either contradict the objectives for sorting at source and the recovery of biowaste or contradict other elements of the TGAP, or otherwise have no direct link with the purpose of the tax, while maintaining a specific tariff for incineration which has high-energy performance. All local authorities that are taking a real step towards the circular economy will see their costs reduced.
- **TGAP exemption for "incineration with energy recovery" for certain waste that must be eliminated by law** and for which recycling is prohibited, such as, for example, waste from

health care activities that present a risk of infection (DASRI), waste containing persistent organic pollutants (POPs) and creosote-treated woods.

**22) TO ENCOURAGE SORTING AND AVOID WASTE, FACILITATE THE DEPLOYMENT OF PRICING INCENTIVES FOR WASTE COLLECTION,** i.e. the pricing of the service based on the quantity of waste produced (price paid based on the number of days that a full bin was put out for collection, obligation to leave waste in pre-paid bags, weighing of bins during waste collection, etc.):

- **Reduce the costs to local authorities for the rubbish collection tax (TEOM) by reducing the management fees collected by the state from 8% to 3%** for the first three years of roll-out of the pricing incentive in order to offset any additional costs at start-up.
- **Reduce the administrative burden on local authorities** for the implementation of pricing incentives by allowing their proceeds from the pricing initiative, for the first year of its implementation, to be in excess of 10% of the proceeds of the previous year.
- Introduce systematic **invoicing between local authorities based on the quantities of waste collected or processed** and prohibit flat-rate billing when the necessary information is available, so as not to negate the prevention and sorting efforts of citizens and local authorities.
- Organize **the sharing of feedback and best practices** for the deployment of pricing incentives, particularly in terms of implementation in urban areas, and strengthen support for councils in the deployment of pricing incentives.

**23) FACILITATE THE DEPLOYMENT OF BIOWASTE SORTING AT SOURCE BY LOCAL AUTHORITIES,** by easing restrictions. This will result, in particular, for local authorities that so wish, in the adoption of a two-stage biowaste source sorting implementation plan. A first step that aims to temporarily ensure the collection of biowaste comparable to household

biowaste (restaurants, community canteens, etc.). Then a second step to roll out this source sorting to household biowaste.

**24) RECOVERY OF ALL QUALITY BIOWASTE** and enabling the agricultural sector to drive the circular economy, ensuring the safety and agronomic value of the materials spread on the soil and ensuring fair distribution of the value created, in line with the conclusions of the French National Food Conference. A nationally agreed "confidence pact" will be drawn up in 2018 to set up virtuous production chains for fertilizers and growing cultures (composts and digestates in particular) from the circular economy.

- **Strengthen the existing standards for recycling-based fertilizers** and take care not to degrade the value created thanks to sorting by mixing uncontaminated organic matter (raw or sorted at source) with lower-quality biowaste.
- **Encourage the use of fertilizers from renewable resources** in agricultural production, the development of the procedure to remove the waste status of fertilizers produced from high-quality recycling processes, and the revision of the display and labelling of fertilizers and crop boosters to better highlight agronomic qualities, origin and process of composts and digestates from the circular economy compared to other forms of fertilizers.

## **COMBAT POLLUTION AND WASTE-RELATED NUISANCES**

**25) To combat marine waste and environmental pollution more generally, MOBILIZE AT THE EUROPEAN LEVEL TO PROHIBIT THE USE OF FRAGMENTABLE PLASTICS AND EXPANDED POLYSTYRENE** containers for the take away consumption as well as **PLASTIC MICROBEADS.**

**26) By 2022, ENFORCE THE INSTALLATION OF PLASTIC PARTICLE**

**RECOVERY FILTERS** at sites where plastics are produced or used in order to limit their dispersion in the natural environment.

27) Based on the work of the ADEME, develop at the beginning of 2019 a benchmark for good practice and tools intended for local authorities to use in the **FIGHT AGAINST ILLEGAL WASTE DUMPING**.

### **SET NEW TARGETS FOR EPR SCHEMES TO CONTRIBUTE TO THE CIRCULAR ECONOMY DRIVE AND THE DEVELOPMENT OF NEW INDUSTRIAL SECTORS**

28) **REBUILD THE CONFIDENCE PACT OF THE EXTENDED PRODUCER RESPONSIBILITY (EPR) SECTORS IN ORDER TO GIVE MORE ROOM FOR MANOEUVRE TO PRODUCER RESPONSIBILITY ORGANISATIONS WHILE STRENGTHENING THE STATE'S MEANS FOR MONITORING TO ENSURE THAT OBJECTIVES ARE REACHED:**

- **Simplify and ease the regulatory framework** of the ERP schemes in order to return to requirements based on objectives. Specific objectives may be set in the overseas territories.
- Give producer responsibility organisations the responsibility of suggesting a path for progress in terms of prevention and eco-design through the development of **a five-year sectoral plan**.
- **Objectivize the costs of waste collection and treatment** covered by the EPR schemes based on specific funding by producer responsibility organisations, in accordance with European law.
- **Strengthen the financial penalties in case of failure to achieve regulatory objectives so that they are effective and incentive** Mobilize the necessary means for the examination,

monitoring and effective control of applications for approval.

- Provide that **in the event of the withdrawal or non-renewal of approval** of the only producer responsibility organisation approved in an EPR scheme, the eco-contributions paid by the producers are immediately transferred to an organisation in another sector responsible for the financial streams, so as not to penalize local authorities. Also provide that in the event of the withdrawal or non-renewal of approval of a producer responsibility organisation, its assets (reserves, provisions for expenses) are allocated to the financing of the EPR scheme so as not to penalize the marketers that have contributed by their membership of the producer responsibility organisations, the waste management operators and the local authorities.
- **Simplify the governance bodies** of the EPR schemes by replacing the sector-specific commissions with a single commission guaranteeing the public interest with a limited composition of five balanced bodies (marketers, waste management operators, including those operating the social and solidarity economy, local authorities, civil society and the state).

29) **RELY ON NEW EPR SCHEMES OR ON THE EXTENSION OF EXISTING SCHEMES** to involve all stakeholders

- Extend, in consultation with the relevant actors, the scope of the existing EPR scheme on **diffuse hazardous waste (DDS)** from residential households to small businesses **and end-of-life vehicles (ELV)** to motor vehicles that are not covered (small cars, motorcycles, etc.) to eliminate the side effects that are currently penalizing them for their economic efficiency.
- In consultation with the relevant actors, investigate the deployment of new EPR schemes in the **toys, sports and leisure equipment and DIY and gardening equipment sector** in order to reduce the volume of residual household waste and

develop reuse and repair activities in connection with the social and solidarity economy.

- In consultation with the relevant actors, encourage voluntary commitments within a compact time frame or, failing that, investigate the deployment of an “EPR-” type scheme, including cigarettes.

### 30) MODIFY CERTAIN EPR SCHEMES TO IMPROVE THEIR OPERATION:

- **For the “paper” EPR scheme**, change the provision on the contribution in kind in order to limit it to press publications printed on recycled paper and stipulate that it be used for general communication campaigns on prevention, selective sorting and the recycling of all products.

### 31) STUDY THE IMPLEMENTATION OF A FINANCIAL SYSTEM, BY 2019, TO PROMOTE THE COLLECTION OF OLD MOBILE phones so that they can be recycled or reused.

### 32) Give PRODUCERS MORE FREEDOM to exercise their responsibility with EPR schemes:

- Allow producers to recover part of its financial contribution in the event of change of producer responsibility organisations.
- Provide representation of marketers that are members but not shareholders of a producer responsibility organisation on its board of directors.
- Provide for producers to have access to technical information from waste management operators contracting with their producer responsibility organisations in order to facilitate the eco-design of their products.

### STRENGTHEN THE SORTING, REUSE AND RECOVERY OF CONSTRUCTION WASTE

With 247 million tonnes of waste a year, the construction sector is responsible for more than

70% of waste in France. Therefore, it is essential to specifically reduce this flow, which results from demolition activities, in particular in the building sector. The objective of a full circular approach for this sector is to make the building stock the bank for future construction materials.

**33) Review the operation of waste management by making collection more effective to combat the use of landfill in our regions and enable the “good sorting” of construction materials so that they can be recycled.** The establishment of an **EXTENDED PRODUCER RESPONSIBILITY SCHEME FOR BUILDING WASTE** is one of the solutions to be studied in order to allow this waste to be collected free of charge. This study will take into account the technical and economic impacts for the construction sector.

**34) Conduct an in-depth review by mid-2019 of the current regulatory procedure for “PRE-DEMOLITION WASTE ASSESSMENT” in order to move to an assessment/inventory process for the reuse and recovery of building site resources and waste. The objective is to make it a solid and effective base for subsequent steps towards the reuse and recovery of waste from renovation and demolition sites, as near as possible to the needs of the regions in question. In particular:**

- **Extend the scope of the operations covered to include major building renovation works.**
- **Digitize the process** and favour the use of open data to promote the emergence of digital applications that can be used to create a link between the supply of and demand for reusable materials.
- **Strengthen the skills and professionalism** of those involved in carrying out assessments.
- **Raise awareness and train** prime contractors.

**35) In order to create the pre-requisites for the viable development of reuse in construction, work with the actors involved in the sector (prime contractors, technical controllers, insurers, etc.) to develop, by 2020, TECHNICAL GUIDES TO ACKNOWLEDGE THE PERFORMANCE OF REUSED AND REDEPLOYED**

**MATERIALS** (on the one hand, in terms of technical performance, and on the other hand, in terms of safety and the environment).

### **DEFINE A REGULATORY FRAMEWORK TO PROMOTE WASTE RECOVERY FOR THE CIRCULAR ECONOMY AND ENFORCE IT.**

**36)** Adapt waste **REGULATIONS** to promote the circular economy:

- **From 2018, establish an evolving list of waste that can no longer be accepted in storage or incineration facilities** as it must be recovered or undergo processing at a higher level of the waste management hierarchy (redeployment/reuse).
- **By July 2018, simplify the relevant nomenclature of classified installations**, notably for methanation, composting, sorting-transfer-grouping of waste, biowaste and green waste.
- **End the double application of “waste” regulation** and the regulation on animal by-products by excluding them from the scope of the “waste” regulations, except for waste intended for incineration, landfill, methanation or composting.

**37) FACILITATE END-OF-WASTE STATUS**

- **Make end-of-waste status possible outside facilities classified** for the protection of the environment in order to leverage the use of waste as resources.
- In the event of an implicit end-of-waste status and when relevant for an explicit end-of-waste status, **enable the end-of-waste status to be effective from the end of the recovery operation**, in order to make it possible to manage the facilities.
- **Simplify, on a case-by-case basis, the quality management system** for ensuring compliance with the new European Community rules.
- **Shorten the procedure for investigating requests for end-of-waste status**, by merging

mandatory consultations and abolishing the waste status consultation committee.

- **Put in place end-of-waste statuses adapted** in particular for fertilizers and quality cultivation media (not including sludges from water treatment plants), sectors making use of wood, plastic, reused parts from disassembled goods at the end of their service life, preparation operations for reuse and regeneration operations.
- **Disseminate and explain the regulations applicable to waste**, users, companies (particularly via professional organisations), local authorities and the general public, in particular with regards to the notion of by-products and their interface with regulations relating to products, in order to ensure that they are properly distributed and understood and that they can, therefore, be more easily implemented. The possibilities for reuse of excavated earth and materials from major construction projects shall be the focus of special attention

**38) FROM 2019, REVIEW THE RULES FOR ACCEPTING THE WASTE OF LEGAL ENTITIES** (companies, local authorities, government agencies, associations) in landfill and incineration, by accepting this waste only after proof has been provided from a provider that the wood, paper/cardboard, metal, plastic, glass and biowaste have been sorted for recovery and withdrawn from the waste that has been brought, as is already the case for household waste collected by local authorities.

**39) ENSURE THERE IS A LEVEL PLAYING FIELD**

- **Simplify the constraints on authorities in charge of waste policy enforcement** to make it more effective, especially combatting illegal waste dumps and illegal traffic. This simplification could mean, for example, adapting the criminal code regarding the most common offences, diversifying legal tools used by local authorities, such as the use of video surveillance, and optimizing the sharing of competence between the Minister of the Environment, the Prefect, the Mayor, and even

the President of a community with “waste”-related competence.

- **Strengthen inspections** to ensure compliance with the legislative and regulatory provisions.

**40) COMBAT THE ILLEGAL TRADE IN END-OF-LIFE VEHICLES (ELV)**, which means that we must be able to keep in our country the 500,000 vehicles treated or exported illegally every year, thus depriving our industry of these resources and jobs:

- Fight against illegal sites that are used to process end-of-life vehicles, provide environmental inspectors with the option of

drafting reports and imposing fines as soon as situations that may constitute an offence have been detected and give them the power to immediately confiscate these vehicles at illegal sites and return them to the legal sector.

- When the insurance for an end-of-life vehicle is terminated, add an obligation to provide the certificate of destruction of the vehicle issued by an approved centre.
- By 2022, remind users whose vehicle technical inspection is out of date, in order to check that the vehicle has either been sold or sent to an approved end-of-life car centre.

### **The wood waste plan: a collective approach in the wood sector for more and better recovery of wood waste by 2022**

Today, an estimated 5 million tonnes a year of non-hazardous wood waste is deposited (excluding waste from sawmills, packaging and in-house consumption in businesses): 0.8 million tonnes are recycled into particle boards, 1.1 million tonnes are used in energy generation in France, 1 million tonnes are exported and 1.2 million tonnes are buried (2012 statistics).

The wood waste plan of the strategic agreement of the wood sector is a collective campaign that brings together professional associations and the organizations in question (FEDEREC, SRBTP, CIBE, FEDENE, eco-organizations VALDELIA and eco-furniture organizations, UIPP, SER, COPACEL, CODIFAB) the MTES signatory of the sector agreement and ADEME, which co-funds the work. The aim is to recover more wood waste and in a better way, by better using resources and monitoring the air quality. By expanding collection, reducing burials and exports, promoting the development of recycling into particle board and optimizing the recycling of non-hazardous wood waste as particle board, the economic model using biomass boilers can be improved, as can the end-of-life scenarios for wood products, which are essential for the environmental performance of wood in construction.

The possible presence of chemical pollutants and the lack of descriptive data for the targeted waste wood are constraints on energy recycling and recovery in combustion, which is why the plan is structured in two phases:

The wood waste plan, which will be ready in two years, is both an element of the Circular Economy Roadmap and the *Libérons les Energies Renouvelables* (Let's Release Renewable Energy) Plan. This is therefore an action in the general interest of the sector which justifies the support received from public funds.

## SUCCESS STORIES

- **Grand Besançon Conurbation (Doubs, 69 municipalities, 192,000 residents)**

In order to encourage sorting and the reduction of waste, Grand Besançon implemented an incentive charging scheme “by weight and collection” in 2012. Based only on the residual waste bin, the bill includes a fixed amount calculated using the number and volume of bins provided and a variable incentive amount calculated using the weight of the bin and the number of times it is put out for collection.

Users very quickly bought into the system, as shown by the 34% decrease in residual waste between 2008 and 2017 (from 227 kg to 150 kg per resident) and the decrease in the average bill from €74.7 in 2012 to €71 (ex. VAT) in 2017 (bill per year and per capita).

*François Lopez, Vice president responsible for waste management, Grand Besançon:*  
“The pricing incentive scheme is part of a wider project to advance waste management; it is to be used as a tool for this project. It offers a number of advantages: less residual waste, transparency of costs for users and fairness in relation to the public waste management service. Making each one of us accountable through this system makes it possible to firmly establish the fact that waste management and cost control are everyone's business.”

- **SMICVAL (Saint-Denis-de-Pile, Gironde)**

*Alain Marois, CEO of SMICVAL:*

"Biowaste is a resource"

"Smicval performs its public service mission without creating environmental, social or economic debts. As true actors in regional development, we consider waste to be an opportunity and therefore a resource. So, since the 2000s, Smicval has been identifying the diversion of organic matter and in particular the separate collection of biowaste as one of our multi-sector management priorities.

Today, more than 50,000 inhabitants benefit from this type of collection and there is a plan to double the programme to cover 100,000 inhabitants in the short term. The collected biowaste is transformed on our platform into a certified compost that is “usable in organic farming”. This return to the land enriches our soils and reduces landfills, without increasing costs.”

- **Household Waste Deposit Scheme: The German Example**

Taking empty bottles back to the shops has been a German habit since 2003. All these bottles have the words Pfand (deposit) or Pfandflasche (returnable bottle) on the label, accompanied by a symbol.

The deposit varies from 8 to 25 cents, based on the type of container: glass, metal, plastic, recyclable or reusable. The glass bottles are recovered by the distributor and returned to the manufacturers for refilling and return to the recycling loop. Single-use bottles are deposited for recycling. The latter procedure is newer and has improved the collection of these containers by 10 points. The deposit has made it possible to achieve a collection rate of 90% for drinks containers in Germany.

At the time of its entry into force, a majority of Germans were opposed to a deposit on disposable containers, but in 2016, 82% of them approved of the system and a majority wanted to extend it to other disposable products, such as cups.

- **Bouygues Immobilier**

*François Bertière, CEO of Bouygues Immobilier.*

"A new way of thinking and designing the city"

"The circular economy is a real issue that is transforming the way we think about and imagine cities. To respond to this, we are developing, among other things, more virtuous management solutions for materials produced from our demolition sites. Thanks to an upstream assessment allowing the classification of all the materials, then methodical on-site sorting and development of recovery and reuse channels, we can considerably reduce our waste and our pressure on resources. This is the case, for example, for the restructuring project for the former Sanofi headquarters and laboratories in Bagneux, where we have achieved 97% recovery of structural and finishing materials. These new methodologies make it possible to achieve a balance between a creation of certain environmental value and the economic equation of the circular economy model, which can at times be fragile. We are working on rolling them out to a number of operations."

- **Nouvelle Attitude**

Nouvelle Attitude is a subsidiary of La Poste [the French Post Office], in charge of sorting and recovering paper and cardboard collected in companies, and it is one element of the Social and Solidarity Economy. The company employs 140 people and sorted 70,000 tonnes of paper in 2017.

*Pascale Ghio, General Manager of Nouvelle Attitude:*

"Nouvelle Attitude, using La Poste's collection facilities, has helped to create a professional and social recycling sector in France for fibrous materials. The collected product is sorted at source by the employees of the customer companies and therefore contains few pollutants. Nouvelle Attitude performs "additional sorting" of deposited waste to meet the needs of each recycling paper maker, the purchaser of the solution, in France, which allows its production lines to be supplied directly with recycled paper or newsprint. For New Attitude, this sorting activity is a pre-requisite for its second task: supporting people to return to employment.

Based on 10 years of experience, we are now thinking about collecting new materials to feed new recycling streams and to help create new streams for repair and reuse."





**mobilize  
all actors**

## IV. A Roadmap to Mobilize all Actors

The transition to the circular economy cannot take place without mobilizing all actors in all regions. This transition is a source of social innovation and an opportunity to create jobs for the most vulnerable individuals. It involves mobilizing regions around meaningful projects.

The mobilization of all is essential for the deployment of this Roadmap through raising the awareness and involvement of citizens and all public actors, notably through public procurement which represents nearly 15% of GDP and must drive innovation in favour of circular economy, and economic actors, in particular businesses.

The dynamics of change must emerge at each regional level, alongside dialogue between all local actors (companies, farmers, local authorities, environmental protection associations, and those involved in consulting and research and development, etc.). It also involves a network of coordinated actors and the mass implementation of industrial and territorial ecological (industrial symbiosis) approaches that aim to foster synergies between economic actors to achieve the optimal management of resources in each region.

### → KEY OBJECTIVES

- Inform, educate and train all actors about the circular economy.
- Rely on the key driver of public procurement.
- Mobilize local authorities and businesses in the regions.
- Establish sustainable governance.
- Support the transition to a circular economy with appropriate financing measures.

### → MEASURES

41) Make **UNPRECEDENTED COMMUNICATION EFFORTS** to mobilize citizens and businesses:

- **Communicate to the general public**, in particular regarding sustainable consumption, reuse, repair, recycling, the environmental impact of dumping waste and the sorting of biowaste at source.
- Deploy a system of **circular economy ambassadors**, based on feedback from the packaging EPR scheme with the sorting ambassadors, to inform the public more effectively and improve the mobilization of citizens on the circular economy, responsible consumption and waste prevention and management.
- Provide companies with **a portal to easily locate the public funding** they can access to contribute to the circular economy.

42) **RAISE AWARENESS AND EDUCATE**

- **Integrate the concept of circular economy into mainstream education for sustainable development** by the Ministry of National Education, starting from primary education. The various actors in environment education are invited to promote the concept of the circular economy and to educate, train and raise public awareness about it at national and regional levels.
- **Encourage the deployment of composters for educational purposes** in primary schools and begin product repair in educational projects and scientific and technical workshops.

#### 43) ROLL OUT AND SUSTAIN REGIONAL ACTION ABOUT THE CIRCULAR ECONOMY

- **Ensure a presentation is given about the Roadmap by regional councils and regional prefects**, along with DIRECCTE, DREAL, DRAAF, consular actors, local authorities and ADEME, for economic and institutional actors.
- Distribute the conclusions of the national working group on the integration of the **circular economy into development projects** to these same actors. Local authorities will be encouraged to engage in “ÉcoQuartier” (Eco-district) initiatives.
- **Entrust the regional councils with the role of helping to** drive forward the circular economy approaches in the regions. They will be able to develop a regional strategy for transitioning to the circular economy, in connection with the State, going beyond the formal framework of mandatory regional plans and schemes (in particular, PRPGD, SRADDET and SRDEII). This strategy may contain a monitoring component, particularly for resource flows and job creation. It may be possible to establish a regional charter, based on a national model defined in consultation with the actors involved, between the Regional Council, the State and the actors of the regions involved in the organisation of the approach (local authorities, economic actors and associations, etc.).
- **Highlight the role of local authorities** in preventing the waste they already have by moving from a "public waste management service" to a "public waste prevention and management service".
- Introduce a circular economy component to the **Ecological Transition Contracts (CTE)**.

44) Make **PUBLIC PROCUREMENT AND THE "EXEMPLARY ADMINISTRATION" SYSTEM** a driver for deploying the circular economy:

- **Encourage government agencies to give assets in good condition which they no longer use** (depreciated goods such as books, furniture, electrical and electronic equipment and other types of equipment) to social and solidary economy organisations: create a web interface for donations related to the site [www.ventes-domaniales.fr](http://www.ventes-domaniales.fr), publish a guide on the practice of donation by government agencies and promote public procurement with social and solidary economy organisations.
- Set a target **for at least 50% of drinks vending machines deployed in the government departments and its public bodies to differ in price depending on whether they are bought with or without a cup**, by 2021.
- Set the State, its public bodies and local authorities the target **of using at least 50% recycled paper from 1 January 2022**, while continuing to reduce their consumption of paper at the same time.
- Commit, on the basis of a study to be completed by 2019, **to the use of retreaded or retreadable tyres** for the heavy-duty vehicle fleets of government departments, its public bodies and local authorities.
- Commit, on the basis of a study to be completed by the end of 2018, **to the use by public bodies of telephones produced from reused products**.
- **Integrate public procurement strategies into the circular economy** (sustainable public purchasing charter, lowering of the threshold for mandatory use of the scheme for the promotion of sustainable public procurement (SPASER), statistics from the public procurement economic watchdog, etc.).
- Provide public purchasers, by 2022, with **life-cycle cost tools** for major types of procurement based on methods that include direct costs, such as purchase, transportation, use, maintenance, the end of life of a product or service, and also including the costs due to environmental externalities, for example in terms of greenhouse gases.

- Develop new innovative tools and methods: **digital sourcing platforms, especially for sustainable bio-sourced products**, references to exemplary clauses and criteria, implementation of organisational and budgetary procedures, encouraging public authorities to take account of operating and end-of-life costs of public procurement, systematic acceptance of environmental criteria in tenders, etc.
- **Consolidate regional public purchasers networks**, including by strengthening the state-level steering using the state's regional procurement platforms (PFRA) created in 2016.
- By 2019, propose **services related to the circular economy** (purchase of second-hand products, services related to the product-services systems, etc.) via the UGAP (Union of Public Purchasing Groups).
- Develop, as part of the inter-ministerial **"exemplary administration" system**, a specific monitoring system for the waste produced by public bodies and the community canteens that depend on it; take into account a "circular economy" element in this system and put in place a new incentive device to mobilize public services and encourage good practice.

#### 45) SUPPORT THE CIRCULAR ECONOMY THROUGH DEDICATED FUNDING

- Take advantage of the "FrenchImpact" initiative for the benefit of the circular economy by launching a "FrenchImpact Circular Economy" call for projects to create innovative local initiatives for operational solutions to be developed at the national level.
- **Mobilize specific funding for innovation**, in particular through the ADEME waste fund, which will be transformed into a "Circular Economy Fund", by the Investments for the Future programme (PIA) and jointly mobilize European funds with regional councils.
- **Create a "circular economy pass"** to stimulate investment and encourage recognition for industrial projects that have a structural impact or contribute to the upgrading of the French recycling industry. Projects related to structuring biowaste collection and recovery services will be encouraged. The major actors in support of business development – ADEME, Bpifrance, DGE, the DI(R)ECCTE network – will mobilize and coordinate with the regions to offer unique, priority and accelerated services that are specific to issues related to the circular economy (accelerated appraisal process, priority financing, etc.). This "circular economy pass" will enable the prize-winners to access financial advice and mobilize existing financial instruments, notably ADEME and BPI.
- **Create a one-stop-shop to support local actors** (businesses, local authorities) in their projects, starting with testing in some regions under the umbrella of ADEME.

#### 46) STRENGTHEN SYNERGIES BETWEEN COMPANIES (INDUSTRIAL AND TERRITORIAL ECOLOGY – EIT - INDUSTRIAL SYMBIOSIS):

- **Promote industrial and territorial ecology (industrial symbiosis) in regional schemes (PRPGD and SRDEII) for regions that wish to participate.**

- Expand the establishment of “**resource hubs**” (materials, equipment, services, consumables) in digital form that is accessible to all.
- Set up a **national access point for circular economy data**.

**47) MOBILIZE THE SCIENTIFIC AND TECHNICAL COMMUNITY** with a multidisciplinary approach, notably by launching calls for projects financed by ADEME and by encouraging the submission of European projects to foster the technological innovations required for the deployment of the circular economy and mobilize cross-functional experts (urban planning, land-use planning, management, sociology, design, fashion, communication, economy, etc.).

**48) Strengthen national GOVERNANCE** and steering by developing the National Waste Council into a National Circular Economy Council.

**49) Incorporate the ISSUES THAT ARE SPECIFIC TO THE OVERSEAS TERRITORIES:**

- **Make use of the synergies between adjacent regions and neighbouring countries**, in particular for pooling specific waste processing facilities, taking into account resources that can be mobilized at the targeted territorial level and for the transportation of waste between overseas territories and/or for the transportation of waste from the overseas territories to France.
- **Adapt national policies to the specifics of overseas territories**, in particular through the maintenance of specific means of support for structural investment, the adaptation of TGAP waste pricing to the financial capacities of overseas territories, the introduction of reduced TGAP pricing specific to the overseas territories for incineration plants that produce

electricity and reinject it into the grid and the adaptation of regulatory requirements for storage facilities on remote sites.

- **Continue the deployment of EPR schemes** overseas through the optimization of waste management and processing costs, specific support by producer responsibility organisations if relevant, the development of territorial action plans with producer responsibility organisations or the deployment of an Overseas Action Plan for the management of end-of life vehicles.
- Support the implementation of the measures and projects to be identified as part of the **Assises des outre-mer (Overseas Conferences)**, which are part of the circular economy loop.

**50) CONTINUE FRANCE'S ACTION TO PROMOTE THE CIRCULAR ECONOMY AT THE EUROPEAN AND INTERNATIONAL LEVEL, WHICH INVOLVES:**

- Continuing **to promote the French approach** to the circular economy through several international bodies and forums, including the 2030 Agenda and the SDGs, UN Environment, the IRP (International Resource Panel), the OECD, the G7, and the G20.
- **Mobilizing other countries** in the fight against plastic waste, in collaboration with the UN.
- Supporting the **necessary changes in European law** in parallel with French law.
- **Regularly informing French stakeholders** about European and international work on the circular economy.
- Sponsoring the policy relaunch of the **European “Circular Economy” Action Plan** without waiting for 2020.

## **Digital technology at the service of the circular economy**

Digital tools, such as smartphones and connected devices, are key instruments for disseminating circular economy policies in all regions to actors and citizens.

The presentation of the "Digital and Ecology" white paper on 19 March 2018, in the presence of Brune Poirson and Mounir Mahjoubi, illustrated the environmental potentialities and impacts (consumption of energy and raw materials) related to the use of digital tools.

To optimize the development of these new tools, a Digital Package will be set up. What will that involve? The aim is to organize the networking of circular economy actors, by promoting access to information and data. This networking will also facilitate support for decision-making and the sharing of goods and services, including collaborative methods. Thus, digital tools will play a key role in the implementation of measures in support of the circular economy, involving "free and open hardware" approaches, like open source software.

## **The Roadmap for Sustainable Development Goals**

The mobilization of the regions at all levels is a key element of engagement towards a circular economy. This issue has therefore been included in the Sustainable Development Goals (SDGs) established by the UN Member States. The 2030 Agenda, adopted by the UN in September 2015, defines a common sustainable development language for the United Nations. It brings together 17 SDGs, which address the following general objectives: eradicate poverty, protect the planet and ensure prosperity for all. Of the 17 SDGs, SDG 12 is devoted to sustainable consumption and production (establishing sustainable consumption and production patterns). It aims to "do more and better with less". The aim is to match the increase in social and economic gains with the reduction of pressure on resources due to their use, degradation and the pollution generated throughout the product life cycle. Achieving this goal requires rethinking our current consumption and production patterns, which requires the involvement of many stakeholders, especially businesses, consumers and policy makers.

## SUCCESS STORIES

- **Platform for Industry and Innovation at Caban Tonkin (PIICTO – Marseille, Fos-sur-Mer, Bouches-du-Rhône)**

*Jean Philippe Gendarme, Director of the Kem One Fos and Vauvert sites and President of the PIICTO association:*

"A ground for experimentation for the ecological transition"

"An association since September 2014, PIICTO today has 38 members — in industry, the port authority, local authorities, public bodies, consular services, competitiveness clusters, etc. — working around two objectives: to consolidate the competitiveness of existing industrial actors through exchanges of material flows, the pooling of services and equipment and developing the platform's attractiveness, particularly through innovation in the energy transition and the circular economy.

Our approach to industrial ecology has already led to the implementation of four active synergies of recovery of several hundred tonnes of materials and more than a dozen channels being studied. In addition, the PIICTO platform has positioned itself as a veritable ground for experimentation for the ecological transition by hosting several demonstrators and pre-industrial pilots with already €60 million in innovative projects in the fields of energy storage, renewables, CO<sub>2</sub> capture and recovery, recovery of industrial by-products, etc."

- **The Brittany Public Land-management Institution (Rennes, Ille-et-Vilaine)**

*Romain Cavé, Manager of Public Procurement*

"A marine evacuation and a recovery of construction waste"

"As part of works to rehabilitate railway rights-of-way in the development zone of the Lorient train station district, the Brittany Public Land-management Institution (*l'Établissement Public Foncier de Bretagne*) set up an evacuation of the site's soil by sea.

Two vessels with a capacity of 4,500 tonnes each were chartered to transport non-inert and non-hazardous soil to a processing and recovery centre in the Gironde, where they were screened and sorted, before being reused in the construction and public works sector. Already highly developed in some countries such as the Netherlands or Belgium, this technique is an alternative to landfill without recovery, and as Lorient is the leading commercial port in Brittany, it was an obvious step for the institution and the Lorient conurbation to mobilize shipping, which enabled the 450 trucks that would have been needed by road to be replaced."

- **French Association of Private Enterprises (AFEP)**

*Nicolas Boquet, Director of Environment and Energy of the French Association of Private Enterprises (AFEP):*

"Mobilize and train all economic sectors in the circular economy"

"Large enterprises in all AFEP's business sectors have been mobilized on the circular economy. In 2015, a booklet on good practice in large companies was published to mark the United Nations Climate Change Conference (COP 21) by presenting synergies with the climate. In 2017, 33 companies publicly adopted 100 commitments in relation to all levers of the circular economy that undergo annual monitoring. The association also promotes the adoption of Green Deals in France. The aim is to set off a ripple effect, beginning with large corporations and passing throughout the economy to create innovation and lead to the better preservation of resources."

- **Zero Waste France**

*Flore Berlingen, Director of Zero Waste France:*

"A citizen challenge to call into question our consumption habits"

"The 'Nothing New' Challenge is Zero Waste France's flagship project on citizen mobilization for this year. Around 12,000 participants are committing themselves systematically to seeking an alternative to purchasing new products throughout 2018. Our objective through this challenge is to draw attention to the upstream — often invisible — phase of our consumption. For the participants, but also for all those who hear about the challenge by word of mouth or in the media, the approach calls into question all shopping habits. The many testimonies received confirm that the leisure element of the challenge leads to the discovery of other modes of consumption or uses: borrowing, second-hand purchase, rental, repair, pooling, donation, etc. We insist both on the individual dimension of the challenge (each new object avoided represents an important saving of resources) and on its collective dimension: citizen mobilization and the curiosity generated by this project are also levers to convince producers to focus on prolonging the life of their products."



Download the **Roadmap for the circular economy** from the ministries' sites:

 Ministry for an Ecological and Solidary Transition  
[www.ecologique-solidaire.gouv.fr](http://www.ecologique-solidaire.gouv.fr) section Politiques publiques > économie circulaire  
et déchets > économie circulaire

 Ministry for the Economy and Finance  
[www.economie.gouv.fr](http://www.economie.gouv.fr) section Entreprises

