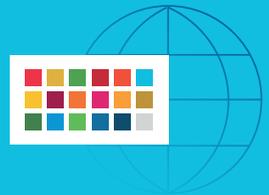




THE FRENCH POLICY APPROACH FOR THE MANAGEMENT OF WATER RESOURCES AND AQUATIC BIODIVERSITY

A source of inspiration for the
implementation of the 2030 Agenda



Supported by the Ministry
for the Ecological and
Solidary Transition



french
water
partnership



PREFACE

Scientists from the IPCC for climate and the IPBES for biodiversity stress every day that current modes of development must change and become more sustainable on a worldwide scale. Water and aquatic biodiversity are their primary victims, and climate disruption simply exacerbates existing imbalances.

The same observation, devastating for the future, can be made in many other sectors, including poverty and inequality, food security, gender equality, patterns of production and consumption, climate change, and biodiversity. Water and aquatic biodiversity are factors necessary to all these sectors.

In light of this knowledge, in September 2015 the international community approved the 2030 Agenda and its 17 Sustainable Development Goals which establish strong, quantified ambitions with specific deadlines, to be achieved by every country. It requires them to put in place integrated public policies that combine economic and social development with environmental protection.

For many years, France has had a strong water policy based on major principles: public responsibility, technical and financial management by catchment area, participation of all stakeholders and co-construction, project management on a local level, and decentralization.

This policy has demonstrated strong resilience in meeting the new challenges, such as those related to diffuse pollution, climate disruption, and the protection of aquatic biodiversity. While its position on water with regard to the ambitions of the 2030 Agenda may be satisfactory in overall terms, France continues to work on these matters in support of its population and of its international commitments.

The purpose of this guide is to inform its readers throughout the world, familiarizing them with this French policy at a time when many of them are taking action to implement the 2030 Agenda, and particularly its Goal 6 dedicated to water. We hope that they find it a great source of inspiration for their own projects!

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● ○ ● Why do we need this guide?

What makes France's management of water resources and aquatic biodiversity unique is that it acts in a spirit of solidarity at every level by including both the small water cycle (drinking water and sanitation) and the large water cycle (management of natural resources and aquatic biodiversity, etc.). The benefits of such an approach to management, which is able to adapt to a changing context, make a major contribution to the implementation of the 2030 Agenda and to its 17 Sustainable Development Goals.

First and foremost, this guide is aimed at the stakeholders throughout the world involved in managing water resources and aquatic biodiversity: countries, basin managers, local elected representatives, and all the public and private stakeholders concerned.

It aims to provide them with information about more than 50 years of French policy, which might be a source of interest to these stakeholders for their own policies and projects. It provides the keys to understanding, the major principles governing this dynamic, progressive approach, in accordance with the challenges, growing awareness, and innovative projects.

This guide focuses on public policy and cannot address the full diversity and expertise of all those in France who are involved in implementing this policy on a national level, and who share their good practices internationally. They include economic stakeholders, from major corporations to start-ups by way of consultants, NGOs, foundations and associations which work on the social dimensions, scientific institutions, training organizations, competitiveness, clusters, and more.

- ● ● To find out more about the texts and documents mentioned, the stakeholders involved in France's management of water and aquatic biodiversity, and the new policies related to it, visit:
<https://www.partenariat-francais-eau.fr/the-french-policy-approach-for-the-management-of-water-resources-and-aquatic-biodiversity-a-source-of-inspiration-for-the-implementation-of-the-2030-agenda/>

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Chronology of legislation on the management of water resources and aquatic biodiversity : key dates

French legislation on water and aquatic biodiversity is constantly evolving. It adapts to and incorporates environmental and societal changes, and in particular the ambitions of the 2030 Agenda. It also transposes European legislation and takes into account advances in international law.



FRENCH WATER ACT (NO. 64-1245) RELATING TO WATER RESOURCES AND THEIR DISTRIBUTION AND CONTROLLING THEIR POLLUTION

> Creates basin-level bodies in mainland France (basin financial agencies and basin committees)



FRENCH WATER ACT (NO. 92-3)

> Creates Water Development and Management Master Plans (SDAGE) for hydrological basins, and Water Development and Management Plans (SAGE) for sub-basins. Extends the basin committees to the overseas departments

1964

1991

1992



URBAN WASTEWATER TREATMENT DIRECTIVE (91/271 EC)

> Obliges conurbations in the European Union to collect and treat their wastewater



EARTH SUMMIT IN RIO DE JANEIRO

> Adopts the United Nations Framework Convention on Climate Change (UNFCCC), the Conventions on Biological Diversity (CBD) and to Combat Desertification (UNCCD) as well as the Agenda 21



FRAMEWORK ACT ON FRENCH OVERSEAS TERRITORIES

> Establishes the overseas Water Offices



ENVIRONMENTAL CHARTER

> Incorporates into the Constitution environmental protection and the prevention, precautionary and polluter pays principles



KYOTO PROTOCOL

> Reduces greenhouse gas emissions by 5% compared to 1990 for Annex 1 countries



WATER FRAMEWORK DIRECTIVE (2000/60/EC) - FRAMEWORK FOR A COMMUNITY POLICY ON WATER

> Establishes the rules for achieving "good status" of water bodies

LOUDIN-SANTINI ACT (NO. 2005-95 OF FEBRUARY 9 2005)

Allows regional authorities, and Water Offices and Agencies, to assign up to 1% of their budget to international cooperation activities

1997

1998

2000

2005

2006



DRINKING WATER DIRECTIVE (98/83/EC)

> Sets the criteria for the quality of water intended for human consumption



MILLENNIUM DEVELOPMENT GOALS

> Set quantified goals to be met by 2015 for developing countries



FRENCH WATER AND AQUATIC ENVIRONNEMENTS ACT (LEMA N° 2006-1772)

> Transposes the European Water Framework Directive into French law, and creates the National Office for Water and Aquatic Environments (ONEMA)



PROGRAM FOR SUSTAINABLE DEVELOPMENT BY 2030 (SDGS) - 2030 AGENDA

> Commits the international community to achieving ambitions for sustainable development by 2030: 17 Goals, 169 targets, 244 indicators

PARIS CLIMATE AGREEMENT

> Sets a quantified target, that of keeping global warming below 2°C by the end of the century compared to the preindustrial period and of continuing efforts to keep it below 1.5°C



ADOPTION OF THE FRENCH ROADMAP FOR IMPLEMENTING THE 2030 AGENDA

> Incorporates the 2030 Agenda into French public policies

MANAGEMENT OF AQUATIC ENVIRONMENTS AND FLOOD PREVENTION ACT (GEMAPI)

> A transfer of authority for managing water, aquatic environments and floods from communes to groups of communes, town groups, and urban and metropolitan groups



FLOODS DIRECTIVE (2007/60/EC)

> Sets out plans for managing flood risks, including in transboundary river basins

2007

2008



MARINE STRATEGY FRAMEWORK DIRECTIVE (2008/56/EC)

> Targets the good ecological status of the marine environment, and the improvement in the conservation status of marine biodiversity, which largely depend on the good ecological status of freshwater

2011



STRATEGIC PLAN FOR BIODIVERSITY 2011-2020, AICHI TARGETS

> Adopts 20 targets to be met by 2020, linked with the Convention on Biological Biodiversity

2015

2016

2017



BIODIVERSITY, NATURE AND LANDSCAPES RECOVERY ACT (NO. 2016-1087)

> Broadens the missions of the Water Agencies in reclaiming terrestrial and marine biodiversity. Establishes Water and Biodiversity Committees in the overseas territories

> Creates the French Biodiversity Agency (AFB), which incorporates ONEMA

2019

2

Public responsibility and decentralized governance based on the relationship with the user

French policy for the management of water resources and aquatic environments is mainly in the hands of public stakeholders. They exercise their responsibilities on various levels, including geographical. This form of management was put in place in line with the administrative and institutional structure of the country.

THE STAKEHOLDERS

French legislation assigns different and complementary roles to three broad types of stakeholders: (i) **The Government**: negotiates at European and international level, prepares national legislation and regulation and ensures that it is implemented correctly; (ii) **basin-level bodies**: help to collect data on water, plan at the hydrological basins level, collect fees and give financial aid to **local decision makers (project managers)**; (iii) local decision-makers and project managers: local authorities, businesses, farmers and associations that decide to make investments.

ROLES OF THE KEY STAKEHOLDERS



The Government and its departments coordinated by the Ministry for the Ecological and Solidary Transition



Define the water policy in compliance with European directives and the laws passed by Parliament



Parliament



Passes the laws to be administered by the Government



French Biodiversity Agency (AFB)

2020 is the year the National Hunting and Wildlife Agency merges with the AFB and becomes "Office français de la biodiversité" (OFB)

Supports the implementation of public policies in the areas of knowledge, preservation, management and restoration of biodiversity



Devolved Government Services

Support the implementation of regulations and ensure they are applied (water policing)



Regional Health Agencies (ARS)

Organize health controls on distributed water (water for consumption and for recreation)



Basin-level bodies: Basin Committees, Water Agencies, Water and Biodiversity Committees, and Water Offices for overseas territories

Draw up, plan and implement in a concerted manner the integrated water policy in the basins



Regions

Contribute technically and financially to improving knowledge and the preservation of water resources (financial support to sensitive areas or to works, for example)



Departments

Provide financial and technical support to the communes for their water policy



Chambers of commerce and industry, Chambers of Agriculture, etc.

Represent private stakeholders in the various economic sectors



Communes and groups of communes (towns, groups of towns, groups of communes, etc.)

Carry out general monitoring of water to ensure its safety, and are responsible for managing their water and sanitation services and deciding how they are managed



Intercommunal or joint unions

Lead and implement water and aquatic environment management at the level of one commune or a group of communes. These structures can bring together various regional authorities (communes, department, and public institutions). They are also responsible for collecting and transporting wastewater, for the hydraulic management of water courses, for the prevention of flood risks, for improving the functioning of sanitation networks, and for recovering natural environments.



Public On-site Sanitation Services (SPANC)

These are local public services responsible for advising and supporting private individuals in setting up their on-site sanitation facilities, and also for monitoring such facilities. As with on-site sanitation, this public service is subject to a fee, which ensures its financial balance. SPANC services fall under the responsibility of the communes, but can be transferred to a group of communes (unions, communities of communes, etc.)



Citizens (civil society)

Act through their behaviors, consumption choices, and involvement with associations

INTEGRATED MANAGEMENT BY BASIN DIVIDED INTO DIFFERENT LEVELS

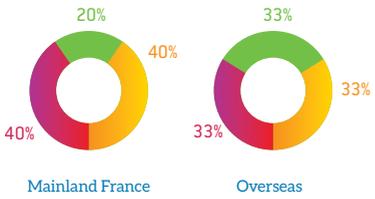
In France, hydrological basins are delimited by the watersheds of surface waters.

Management of water and aquatic environments by hydrological basin

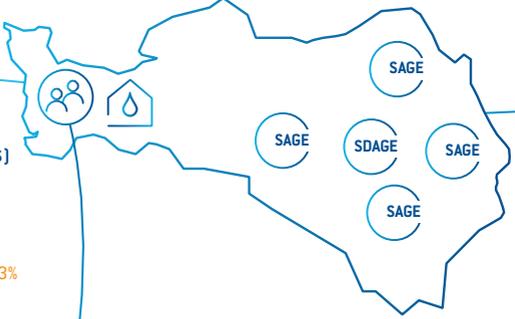


At the hydrological basin level

COMPOSITION OF THE BASIN COMMITTEE (MAINLAND FRANCE) AND OF THE WATER AND BIODIVERSITY COMMITTEE (OVERSEAS)



- Local authority representatives
- Representatives of users and water user associations
- State representatives



- Water Agency / (Mainland France) Water Office (overseas)
- Basin Committee
- Water Development and Management Master Plan
- Water Development and Management Plan

The National Water Committee: a national consultation body

On a national level, the **National Water Committee (CNE)** is consulted about the broad outlines of water policy, and on development and water allocation projects, and informed about developments in European legislation or regulations regarding water. It is the national body for consultation on water policy, and brings together the various categories of users in order to incorporate the different components of society.

Guidelines defined by all stakeholders

At hydrological basin level, a **Basin Committee** (in mainland France) or a **Water and Biodiversity Committee** (overseas territories) discusses the objectives to be achieved and actions to be undertaken within the framework of six-year programs. It votes on the financial charges to be put in place by the Water Office or Agency.

The **Basin Committee** and the **Water and Biodiversity Committee, on which the various categories of users sit and where the State is in the minority**, draw up a Water Development and Management Master Plan (SDAGE). The **Water Agencies** (mainland France) and the **Water Offices** (overseas territories) provide financial support for the implementation of each SDAGE¹.



The Water Development and Management Master Plans (SDAGE), essential tools for integrated management

A SDAGE is a planning document intended to ensure the balanced, responsible management of water resources and aquatic environments and wetlands on the scale of a large hydrological basin. It sets the general targets to be met over a six-year period in terms of water quality and quantity, preserving aquatic ecosystems, and the economic valorization of water. For example, the Rhone-Mediterranean SDAGE (2015-2021) has three main focuses: restoring 300 km of waterways while taking into account flood prevention, preserving and restoring wetlands, and restoring the quality of 269 drinking water catchments to protect human health.

1. In the case of the overseas territories, the intervention programs do not meet the funding requirements. The overseas territories therefore benefit from national solidarity with funding to supplement the fees from the French Biodiversity Agency and ultimately from the Water Agencies.

Implementation by efficient executive bodies

The **Water Agencies** and **Water Offices** are public institutions and are the implementing bodies for water policy within the basins. They act to reconcile the sustainable management of water resources and aquatic biodiversity with economic and social development, and respect for the environment. To meet the objectives of the SDAGE, they draw up a program of interventions every six years which is approved by the Government following consultation with the Basin Committee. This program defines the fee rates (see chapter 4) and the funding for the actions to be put in place. They monitor the status of the inland and coastal bodies of water. Their boards of directors monitor the budget every year and make decisions on financial aid.

Water issues are addressed in a cross-functional way, according to their technical, economic, territorial and financial aspects.



The Seine-Normandie Water Agency's 2019-2024 11th intervention program

At the end of 2018, all the Water Agencies adopted their 11th intervention programs for the period 2019-2024. Each of these programs placed adapting to climate change as its priority issue. The Seine-Normandie Water Agency's 11th program, entitled the "Water & Climate" program, sets out the amounts of aid and charges for a six-year period. It plans for 3.84 billion euros over this period, for:

- achieving the targets for the good status of water bodies;
- adapting to climate change;
- recovering biodiversity;
- mobilizing stakeholders and solidarity between regions;
- protecting public health.

The Seine Normandie Basin Committee's wish was also for the strategy for adapting to climate change to be translated into operational terms within the program.

Local Water Commissions, consultation at the heart of the catchment areas

At catchment area level, a **Local Water Commission**, made up of representatives of the various stakeholders, can be created depending on local issues to draw up and implement a Water Development and Management Plan (SAGE), the local version of the SDAGE. The SAGE is a planning tool that aims to reconcile the different uses with the protection of aquatic environments and wetlands within a catchment area or a groundwater table. It relies on a voluntary process of consultation between the stakeholders in the area. It is adapted to the area and to specific local issues.



The Arve catchment area SAGE: integrated management of water resources, preserving natural heritage, and preventing flood risks

The area of the Arve SAGE is characterized by torrential rivers and alluvial ecosystems. It comprises 106 communes and covers half of the department of Haute-Savoie. This SAGE was developed with the support of the Rhone Mediterranean Corsica Water Agency, and marked the culmination of seven years of research and consultation among local stakeholders within the Local Water Commission, a sort of “water parliament” at territorial level. The Joint Union for the Development of the Arve and its Tributaries, known as the SM3A, is tasked with the implementation of the SAGE. There are three processes involved in achieving the objectives of the SAGE: the Water Agency’s overall contract for the Arve catchment area; the implementation by the SM3A of a Regional Contract for “Sensitive Alluvial Natural Areas”, aimed at preserving and enhancing the natural heritage; and a second Program of Flood Prevention Actions. The tasks arising from the GEMAPI (Management of Aquatic Environments and Flood Prevention Act) were also assigned to the SM3A, allowing for the prevention of flood risks and the protection of aquatic environments throughout the Arve catchment area.

The local authorities’ public institutions for cooperation have the status of joint unions. They implement the policy decided on by the Local Water Commission and can, if necessary, be involved in drawing up and monitoring the SAGE. The role of these institutions is to promote the integrated management of water at the local level of a hydrological basin or sub-basin, to facilitate sea defenses, preserve and manage inland and coastal wetlands, implement studies and works to improve the hydraulic regime, and encourage consultation between the regional authorities responsible for this management. They also provide any technical support needed to fulfill the tasks pertaining to the management of aquatic environments and flood prevention (GEMAPI).



EPIDOR, the Dordogne basin's regional public institution

Created in 1991, EPIDOR aims to “*promote harmonious, coordinated development in the Dordogne valley and basin*”. It coordinates the various stakeholders in water management, develops technical expertise, and puts information and awareness-raising actions in place. One of EPIDOR's objectives is to protect and preserve the Dordogne basin, classified as a World Biosphere Reserve. In order to look ahead and anticipate land use planning projects in the context of climate change, a DORDOGNE 2050 prospective study was launched with the help of the Adour-Garonne Water Agency to define an action plan, including identifying pilot sites.

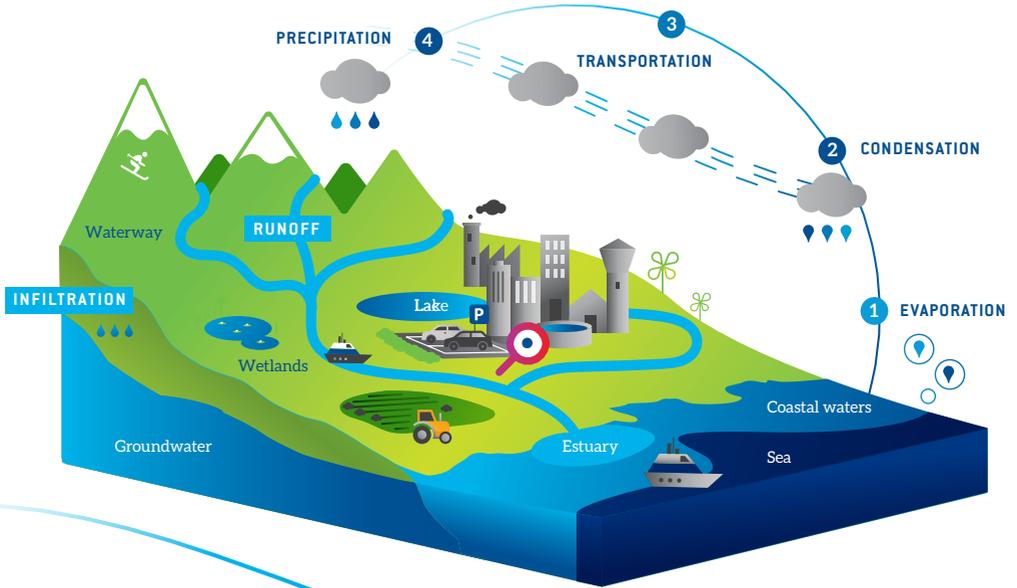
From management of drinking water and sanitation to integrated management: **what makes the French approach unique**



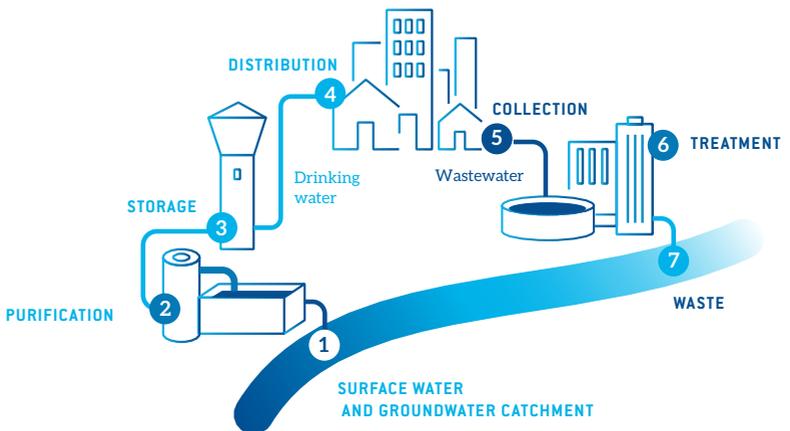
The policy for managing water resources and aquatic biodiversity in France has evolved over time in parallel with a growing awareness that encompasses the climate emergency, the multitude of benefits aquatic biodiversity offers to human communities, and governance involving all water stakeholders. The foundations of the French experience are the priority given to prevention and to protecting and conserving water resources, and preserving the biodiversity that is linked to all of this.

The small and large water cycles, two interdependent cycles

The large water cycle



The small water cycle



FROM MANAGEMENT OF DRINKING WATER AND SANITATION...

The structuring of the small water cycle in France began in the 18th century with the installation of drinking water networks. These networks then developed rapidly as towns and cities grew. Epidemics meant that sanitation also became a priority within public policy.

As with all of France's public services, the ways in which public water and sanitation services are managed are based on three principles:

- **mutability:** each service must adapt to changes in the general interest and to the context, in the best interests of users;
- **equality:** the same benefits must be available to all users;
- **continuity:** the service must be provided without interruption.

Communes or groups of communes decide whether they want their management system to be direct (a governance system) or delegated to private or public operators:

- **Direct governance:** they provide the water and/or sanitation service directly, with their own staff, and are remunerated by the users. They finance the necessary equipment and retain control of the services and their management;
- **Delegation of public service** (or concession in public law): they remain the organizing authority and responsible for the service but outsource its management through contracts and, where appropriate, investments. The contract involves a transfer of risk to the operator and sets a level of performance that must be achieved by applying strong legislation and strict regulation.



Key figures

In 2017 in France, 22,208 authorities were responsible for 33,211 public drinking water, collective sanitation and on-site sanitation services. In 2015, 69% of public drinking water services were under direct management (or «governed»), covering a population of nearly 27 million inhabitants or 41% of the French population. Meanwhile, the services managed by delegation represented 31% of services but covered nearly 59% of the population.

... TO INTEGRATED MANAGEMENT OF WATER RESOURCES AND AQUATIC ENVIRONMENTS

The actions taken to manage the small and large water cycles interact when it comes to protecting and restoring water quality. Through a participatory approach, the integrated management of water resources establishes a balance between usage and environment, and enables short-, medium- and long-term actions to be considered.

Balanced, solidarity-based allocation of water at the heart of integrated management

Water is a common asset in France. “Large cycle” management of water resources takes into account the economic, social, environmental and cultural dimensions of human activities, as well as the urgency of taking action to reduce global warming and adapt to the climate disruption it generates.

To preserve water, all uses as well as the needs of interdependent ecosystems and wildlife must be “compatible and based on solidarity”. The catchment area is the most relevant level for sustainable territorial management.

The Water Agencies in mainland France and the Water Offices in the overseas territories organize and manage the balanced allocation of water between uses, in particular by putting together territorial contracts or plans for water resource management. These plans define the rules for sharing and for action plans that will ensure that the needs of environments and uses are met in the long term (see Chapter 2).



Management of water resources in French Guiana

Fourteen large hydrological basins make up French Guiana’s river basin district. Maroni and Oyapock are the two most important basins. The 2016-2021 SDAGE drawn up by French Guiana’s Water and Biodiversity Committee takes into account the cross-border dimension of these two catchment areas, and defines the issues. For example, it envisages cross-border cooperation to combat illegal gold mining. Public awareness-raising actions are also planned, to provide information on this activity’s harmful effects on the aquatic environment.

Management and restoration of waterways

Waterway restoration projects are part of the challenge of improving water quality and preserving aquatic life, preventing floods, combating climate disruption, and adapting to change.



Creating flood channels and restoring exchanges between the major and minor bed of the Vezouze

The Vezouze is a 75 km-long fish-bearing river, a tributary of the Meurthe, which belongs to the Rhine-Meuse basin. It drains a mainly agricultural catchment area of 560 km². The Vezouze experiences regular, often violent floods which affect the town of Lunéville. Development work has been undertaken to widen certain parts of the middle bed, and two flood channels have been created. Ecological monitoring of the site shows positive results: the presence of conspicuous species, a reduction in flooded areas in the town, diversification of habitats and an increase in use by the local population.

Management of aquatic environments and flood prevention

French legislation has evolved since 2018 to assign this new authority to groups of communes. The aim is to foster greater consistency at local level between land use planning, management of environments and flood prevention (inclusion in town planning documents, management of development, etc.). In this way, the law will encourage the use of Nature-based Solutions to reconcile these different issues. Local authorities will be able to introduce and collect a tax, known as the GEMAPI, to finance this policy.



The GEMAPI tax supporting biodiversity

In 2019, 439 groups of communes² decided to levy the GEMAPI tax. This represents approximately 35% of France's communities and conurbations. The Greater Paris conurbation voted in favor of its tax in 2018 in order to finance projects such as the reopening of the Bièvre, an urban river and tributary of the Seine. This constituted a lever for reclaiming water quality and restoring ecosystems and landscapes, thus encouraging local residents to reclaim it for their own use.



2. According to the General Directorate of Public Finances

Efficient management of surface, groundwater and coastal water resources: a process initiated to support sustainable development

Managing the large water cycle also means taking an interest in the efficient management of water, developing new technologies and being part of a circular economy.

This requires the use of a diverse range of complementary levers for action at regional level, with water for agricultural use as the priority: managing the demand for water, preserving water in soils and wetlands, mobilizing new water resources where this is relevant and can be done in a sustainable way (particularly by collecting rainwater and reusing treated wastewater), responding to the water quality challenge, and encouraging territorial governance and the co-construction of projects and policies.



The city of Clermont-Ferrand at the cutting edge in reusing treated wastewater

The most noteworthy example of the reuse of treated wastewater in France is that of Clermont-Ferrand where, since 1998, 500 ha of corn and beet have been irrigated every year by 50,000 m³/day of water from the city's water treatment plant. The operation has received financial support from the Loire-Brittany Water Agency.

Specificities of the French experience of managing water resources and aquatic environments for the implementation of the 2030 Agenda

The French experience is marked by a unique form of governance which brings together the whole range of stakeholders, and is based on principles of solidarity and equity. It is characterized by the wealth of approaches and tools developed to ensure constant improvement and address the environmental and societal challenges it faces. The characteristics presented below are transferable and adaptable to other contexts at international level.

The major tools of the French water policy represent levers for implementing the targets relating to water in the 2030 Agenda and its 17 Sustainable Development Goals, and for many other targets too, since water is a highly cross-cutting theme.

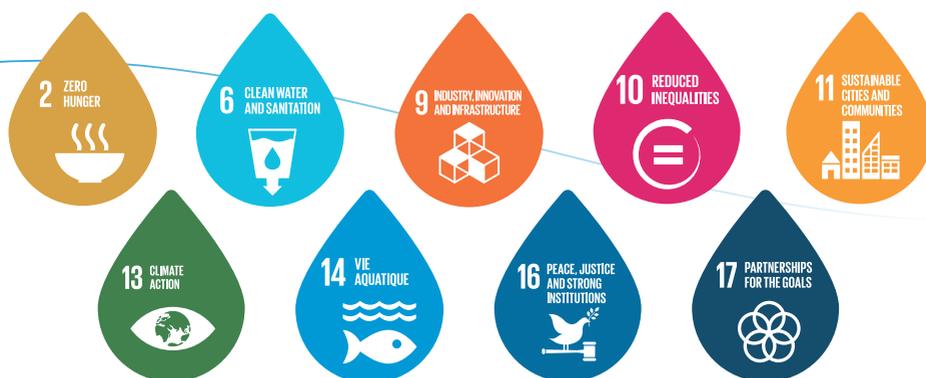
SUSTAINABLE DEVELOPMENT GOALS



Like most other countries, France needs to strengthen its policies in order to fully achieve the ambitions set by this Agenda in relation to universal access to drinking water and sanitation services that are managed completely safely, first and foremost in the overseas territories, conformity in on-site sanitation facilities, achieving good ecological status, the balance between the availability of water resources and their use, adapting to climate disruption, and preserving aquatic biodiversity.

PLANNING AT BASIN LEVEL

A lever for achieving the Sustainable Development Goals:



Planning for Integrated Water Resources Management (IWRM) at basin level is the fundamental principle of the French experience.

IWRM is an approach to management and sustainable development that aims to reconcile the availability of sufficient quantities of quality water with the balance of uses of water and the preservation of the biodiversity related to aquatic environments and wetlands. It aims to incorporate the various different policies linked to water policy: land use planning, agriculture, town planning, energy, environment, and so on.

Planning at basin level consists of defining the objectives of water management in a Water Development and Management Master Plan (SDAGE), and the actions to be implemented (Program of Interventions / Program of Measures). It is a long-term approach, with plans for a six-year period, and is based on three fundamental pillars:

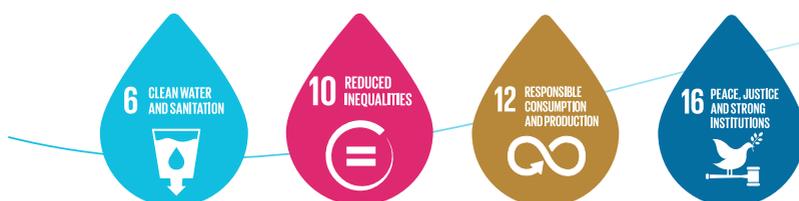
- governance that takes into account the various different uses and users, and the regional issues, while promoting a concerted approach,
- integrated management of water data and
- mutualist financing of actions.

In the French approach to managing water resources and aquatic environments, Integrated Water Resources Management is operated by the Water Agencies and Offices.

These long-term projects are run in a variety of situations, and are designed and carried out in line with the legal and regulatory framework, the reality of water resources, uses, and also with the needs expressed by institutions and stakeholders in the catchment areas. Depending on the contexts, they have made a practical contribution to setting up Basin Committees and to preparing plans for integrated management, they have increased information sharing and/or have supported the development of sustainable finance mechanisms.

FEES: A MECHANISM SPECIFIC TO EACH BASIN

A lever for achieving the Sustainable Development Goals:



A fee is a tax. Water Agencies and Offices in France collect fees from users and redistribute them in the form of aid (grants, advances or loans) to support their investments in line with the Water Development and Management Master Plans (SDAGE). These fees mean that all users are acting in solidarity. They are also important levers for financial incentive.

The history of the fees shows that it is possible to move from a vision centered on “uses/drinking water and sanitation works” to one that incorporates natural and urban ecosystems. Today, the Water Agencies’ resources serve not only to modernize the drinking water networks but also to combat diffuse pollution and protect the aquatic environment.



Example of the use of fees by the Artois-Picardy Water Agency

How much are the fees?

The average impact of the Water Agency's fees is of the order of 16% of the price per m³ of water throughout the basin.

In 2017, the overall amount of fees (all water uses combined) received by the Water Agency was €166.355 million, including €135.1 million from water bills.

REVENUE / FEES

Who pays what to the Water Agency for every €100 of fees in 2017?



Values derived from a percentage of €100
(source: AEAP March 2018)

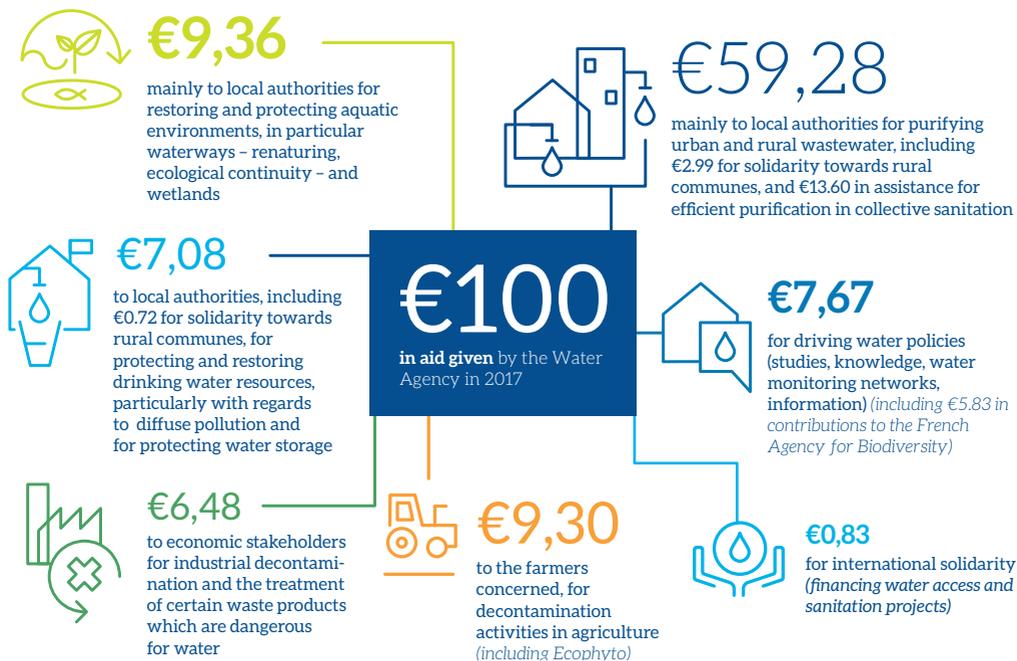
* The "EcoPhyto Plan" was launched by French government in 2008 in order to reduce the use of pesticides while maintaining high yield as well as high quality of agricultural production

What are the fees used for?

The Water Agencies use these fees to provide, as part of their intervention programs, financial aid (grants, loans) to public bodies (regional authorities etc.) or private ones (manufacturers, farmers, community associations, etc.) which carry out actions or projects of common interest to the basin with the aim of the balanced management of water resources. This assistance reduces the impact of investments by local authorities, in particular, on the price of water.

INTERVENTION / AID

How is the aid for protecting water resources distributed for every €100 in 2017?



Values derived from a percentage of €100
[source: AEAP March 2018]

The rates of fees are governed by the law, and set by each Water Agency's Board of Directors following consultation with the Basin Committees. The rates vary according to the type of fee and the geographical area. A large proportion of the fees is collected from households through the water bill. The water services manager collects the fees on behalf of the Water Agency. In France, the fees are based on the "user pays" principle: each user pays an amount pro rata to their use (user-payer) and/or to their water pollution (polluter-payer). In this way, manufacturers and farmers alike, by virtue of the specific impacts of their activities on water quality, also contribute in a specific way within the framework of these fees.

In 2016, the Water Agencies' field of expertise broadened to include the protection and preservation of terrestrial and marine biodiversity. While the founding principle of these agencies was initially "water pays for water", this development brought about a redefinition of taxation and aid to enable action in a wider scope.

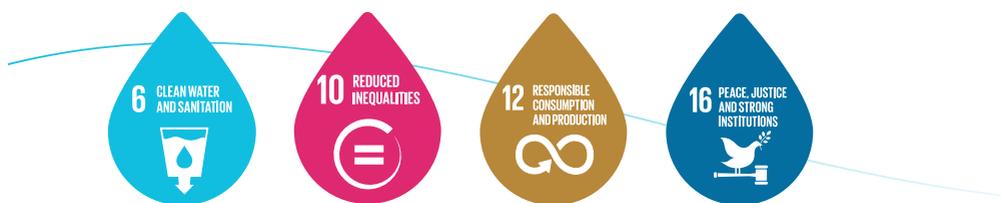


Restoring biodiversity and managing floods in the canalized Lys

With a catchment area that is predominantly agricultural upstream and highly urbanized downstream, the Lys rises in Lisbourg in France, and flows into the Escaut in Belgium. The works to canalize the waterway have decreased the frequency of flooding onto the alluvial plain in its major bed, and reduced biodiversity in an area with high ecological potential. In 2012, the Artois Picardy Water Agency carried out earthworks to create a breeding area for pike, and a connection to the Equinghem-Lys oxbow lake. By installing water control structures, the aim is to reconnect the breeding area with the oxbow lake and re-establish the submerged area, thus helping to restore a natural floodplain, to manage flooding, and to recreate potential habitats.

THE PRICE OF DRINKING WATER IN THE FRENCH EXPERIENCE

A lever for achieving the Sustainable Development Goals:



In France, water is a common asset for all. The “price” of water corresponds to the prices of the **services rendered to users**, paid to the managers of the communes and groups of communes, to the **fees** that create solidarity within the basin and are paid to organizations in it, and to **State taxes** (VAT).

Distribution of direct costs:



The price of drinking water in France varies according to geographical areas, demographic density, the rarity and quality of the resource, the techniques used, and so on.

Nowadays, the price of water is set by the commune or group of communes concerned. In 2015, the average price for water and sanitation was €4.04/m³ incl. tax, and a water bill is sent to each user by the water services.

The **price of the services** is broken down into two parts:

- a fixed element which corresponds to a subscription to the drinking water and sanitation services;
- a variable element which depends on the volume of water used or consumed, and on the volume of polluted water returned to the sanitation networks.

Irrespective of the system of management, the manager of the service has an obligation of transparency and has to present their “report on the price and quality of the public water and sanitation service” every year.

SOCIAL PRICING OF WATER, TO SUPPORT THE MOST VULNERABLE USERS

A lever for achieving the Sustainable Development Goals:



Currently, social pricing of water is implemented as an experiment which aims to provide access to water for all at reasonable rates. Participating authorities can introduce a “water check”, in other words a check to help a user pay their water bill.



Feedback on the experiment on «social pricing» for water:

Fifty authorities were selected to take part in the experiment on social pricing for water, including the cities of Lille, Nantes and Brest, the water unions of Vendée and Dunkirk, the local authorities of Nancy, Évry, Angoulême and Chambéry, and all the authorities in Martinique. All of the experimental authorities combined serve a population of about 12 million inhabitants (mainland France and overseas territories). The amount of aid is determined by the authority, and averages €50 per household per year. Nearly half of the authorities in the study have planned, in addition to the financial aid, for measures to raise awareness among the populations in difficulty in order to promote the economical use of water, thus guaranteeing both a lower water bill and the preservation of water resources, which are currently under strain.

A COMMON WATER INFORMATION SYSTEM TO COLLECT, SHARE AND DISSEMINATE DATA ON WATER AND AQUATIC ENVIRONMENTS

A lever for achieving the Sustainable Development Goals:



The French Water Information System (SIE), a mechanism created by the Government, brings together all the available data relating to water, aquatic environments and public drinking water and sanitation services. Its objectives are to collect, share and make data on public sector water available. It supports public action, including facilitating assessment of the effectiveness and efficiency of public policies.



Two examples of the French Water Information System

The observatory for data on public water and sanitation services, or SISPEA. The French Biodiversity Agency is tasked with putting in place an Information System on the public water and sanitation services (SISPEA). SISPEA collects and disseminates on a national scale data on the organization, management, pricing and performance of public water and sanitation services.

Monitoring of the quality and quantity of water resources via the piezometric reference network. France has a piezometric reference network for monitoring the quality and quantity of groundwater. This network includes 1,700 measuring points including 1,428 managed by the Geology and Mining Research Institute (BRGM) - a national geological service.

ENVIRONMENTAL POLICING

A lever for achieving the Sustainable Development Goals:



The aim of environmental policing is to ensure that environmental regulations concerning water, biodiversity and nature are complied with. It comprises State stakeholders and public institutions distributed throughout the country, and in a range of public institutions. It also carries out prevention, awareness-raising and protection actions, and provides support and technical advice to State services and local authorities.

CO-CONSTRUCTION WITH USERS AND THE PUBLIC

A lever for achieving the Sustainable Development Goals:



The participatory approach to the management of water resources in France takes several forms, including:

- **information** which allows the public to form an opinion;
- **public consultation**: this involves canvassing the public's opinions, points of view and suggestions prior to certain administrative decisions such as a development project or a draft planning document;
- **consultation and participation** around a project or a policy: the various stakeholders are invited to engage in discussions in order to co-construct a project, objectives and challenges.



The participatory approach with the advisory boards of the local public services

One objective of the advisory boards of the local public services is to involve citizens in the management of public services in communes or groups of communes of more than 10,000 inhabitants. They are made up of their own representatives and representatives of local associations. They are consulted about plans to set up governance or to delegate public services, and about partnership projects and Research and Development projects in which the service might take part.

A STRATEGY FOR ADAPTING TO THE CLIMATE EMERGENCY IN EVERY BASIN

A lever for achieving the Sustainable Development Goals:



The aim of France's National Plan for Adapting to Climate Change (PNACC) is to implement the necessary actions in order to adapt to climate change in mainland France and the overseas territories by 2050. The Water Agencies and Offices have always been aware of the challenges to be met as a result of the major changes, and have engaged in defining strategies for adaptation on the level of their basin or sub-basin.

They have produced a booklet entitled "Water and climate change - Act or endure" to encourage elected representatives and economic decision-makers to engage in the adaptation process in the context of water. In this way, they support authorities and businesses in their process of identifying the degree of vulnerability of different areas and defining a strategy for adaptation by area or by sector.

Each basin's strategies for adaptation have been co-constructed with the stakeholders in the basin and propose concrete measures, and the Agencies provide specific aid for these challenges.



Example of the Adour-Garonne basin plan for adapting to climate change

In accordance with the Paris Agreement, the six French Water Agencies have launched participatory processes in each basin to adapt to climate change. These adaptation plans, implemented in each basin, are an invitation to engage immediately in preserving water resources and ensuring that living environments are healthy and ecosystems resilient. The Adour-Garonne basin adaptation plan responds to four main objectives: finding a new balance between needs and resources, improving the quality of water resources, enhancing the ability of natural aquatic environments and wetlands to withstand a warmer, drier climate, and guarding against natural risks (flooding, drought, coastal erosion and marine submersion). This plan is a framework document, a reference for local stakeholders, and has no legal significance. Nevertheless, it will feed into the Water Agency's 11th intervention program, and the future Water Development and Management Master Plan (SDAGE 2021-2027). Regarding resources, this plan provides for an ongoing, regular investment of around €160 million per year by 2050 to implement all the measures in the plan, which represents 25% more than was considered necessary to achieve the SDAGE objectives.

A French policy of international cooperation contributing to the 2030 Agenda

THE FRENCH GOVERNMENT: WORKING AT INTERNATIONAL LEVEL FOR SUSTAINABLE TRANSFORMATION IN SOCIETIES, PEACE AND SOLIDARITY

France is involved in implementing the 2030 Agenda at an international level, as well as the Paris Agreement, by taking action in developing countries within bilateral, European and multilateral frameworks. The Interministerial Committee for International Cooperation and Development (CICID) of February 8 2018 defined five priorities in this respect: areas in crisis, gender equality, health, climate and education.

The international component of the French roadmap for implementing the water targets of the 2030 Agenda identifies three priorities: 1. Improving governance in water and sanitation at all levels; 2. Improving water security for all in a context of increasing water needs, demographic growth, climate change, conflict of uses, and multiplying crises and conflicts related to water; 3. Increasing the effectiveness of resources and tools, with a particular focus on developing innovative solutions and solidarity-based funding mechanisms.

The French Government has tools to support export, with the aim of promoting internationally the expertise of French businesses. Treasury loans support the construction of infrastructures, while innovative studies and demonstrators are financed by the fund for private-sector aid and studies (FASEP). These funds, generated by the Ministry for the Economy and Finance, represented some €695 million in loans and €38 million in donations for the water sector between 2009 and 2018. The economic departments in the embassies monitor these funds and ensure that they are implemented correctly.

The French Development Agency (AFD) is the pivotal operator of France's bilateral Official Development Assistance (APD). It executes most of the APD funding dedicated to water. Of the total for donor countries, France's bilateral aid for water, sanitation and hygiene represented a share of 18.6 % in 2017 (compared to 2.4 % in 2005), with France committing \$980 million of a total of \$5.3 billion. In 2017, France was the 3rd highest donor country, behind Japan (\$1,482 million) and Germany (\$1,424 million). The amounts committed every year by the AFD benefit several million people in the drinking water and sanitation sector (4 million and 1 million respectively in 2018). French aid also encompasses water for agricultural use and the fight against floods.



“Water for all uses: the AFD and the European Union support the implementation of an Integrated Water Management policy in Colombia”

Against the background of a strong political will to promote Integrated Water Resources Management in Colombia, in 2011 the AFD granted a public policy loan of \$100 million and a grant of €4.5 million delegated by the European Union. The project funded the strategic plans of several catchment areas in the country, and preservation actions in the Lake Tota catchment area which represents 13% of the country's water reserves (2 billion m³) and is threatened by eutrophication. The project enabled the development of planning documents and studies including the study on payment for environmental services, the promotion of changes in agricultural practices, and the acquisition of hydrologic stations and equipment for combating the growth of algae in the lake.

Some two billion people live in countries whose economic growth is compromised by fragile situations, conflicts, or a high rate of violence. In 2018, with climate change, the number of people in need worldwide increased by 4% compared to 2017.

In 2018, the French Government confirmed that France will contribute to implementing the humanitarian-development nexus, and remodel its approach in line with the guidelines of the international standards, with an annual French contribution to stabilization and humanitarian action. This will make France one of the top three European donors.

Within this framework, public and private stakeholders in France are mobilized collectively to respond to water, sanitation and hygiene needs in contexts of fragility and crisis through coordination, advocacy, expertise development, and innovation. Regional authorities can activate a special mechanism for emergency aid. This was the case with the tsunami that struck Thailand and Indonesia in 2004, typhoon Haiyan in the Philippines in 2013, and the earthquakes in Haiti in 2010 and 2016, Nepal in 2015, and Indonesia in 2018.

DECENTRALIZED COOPERATION

Since the Oudin-Santini law of 2005, French regional authorities, with the assistance of the Water Agencies and Offices, can devote up to 1% of their water and sanitation budget to actions of cooperation and international solidarity in these domains, including in situations of emergency. The water and sanitation sector is the area of development cooperation in which French regional authorities have invested the most. In practice, they can carry out three major types of international solidarity action:

- forming partnerships of decentralized cooperation with foreign communities;
- creating and monitoring funds to support initiatives led by international solidarity associations;
- being financially and/or technically involved on an ad hoc basis in an action led by a third party actor.

In total, donations of close to €200 million were mobilized between 2005 and 2015 by French authorities and the Water Agencies and Offices. These more than doubled in 10 years, from €10.8 million in 2007 to €28.1 million in 2017.



The Eaurizon program: improving access to water and sanitation in the Haute Matsiatra region of Madagascar

The Eaurizon program was set up by the city of Lyon in 2016 for a period of five years. In 16 partner communes in the Haute Matsiatra region, it aims to strengthen the local authorities' governance on water and sanitation; increase access to drinking water; increase access to sanitation and improve hygiene; preserve water resources and share them among uses; and train and professionalize the stakeholders in the sector. This program is supported by the Rhone Mediterranean Corsica Water Agency, and by Saur Solidarités. It represents one of the components of a broader partnership between the city of Lyon and the Haute Matsiatra region, which also includes other programs such as those related to the integrated management of water resources and the management of excreta and wastewater. Other partners involved include Madagascar's Ministry of Water, Energy and Hydrocarbons (MEEH), and the Greater Paris Sanitation Authority (SIAAP).

TECHNICAL AND INSTITUTIONAL COOPERATION

The aim of technical and institutional cooperation is to share the experiences of the French policy in the area of the integrated management of water and aquatic biodiversity with other water stakeholders in Europe and internationally, at catchment area level, for example by training water industry professionals.

The technical component focuses on tools and methods relating to monitoring and to assessing the quality and quantity of water resources (hydro-meteorological monitoring), to producing management plans at basin level, and to putting in place participatory management that involves all stakeholders and users.

The institutional component includes support for developing national legislation and for strengthening the funding mechanisms and legal and institutional frameworks of the basin's organizations.

Institutional cooperation is based on exchange and sharing experiences. It is supported by the French Water Agencies, creates links between water management bodies, and encourages the integrated management of water by basin.



Improving water governance in the Stung Sen basin: an example of cooperation between the Loire-Brittany and Rhine-Meuse Water Agencies and the Tonlé Sap authority in Cambodia

Initiated in 2012, this partnership focuses in particular on the Stung Sen basin, one of the tributaries of the Tonlé Sap lake, the largest freshwater lake in South Asia. The main achievements of this cooperation:

- Setting up a basin committee and training its members;
- Constructing a database to support the generation of knowledge;
- Putting in place a water management plan and a program of action;
- Strengthening the connection between the action plan and the solidarity-based “drinking water” and “sanitation” projects.



The Ministry for the Ecological and Solidary Transition prepares and implements the Government's policy with regards to sustainable development, the environment, in particular the protection and promotion of nature and biodiversity, green technologies, energy transition and energy, including tariffs, climate, prevention of natural and technological risks, industrial safety, transport and its infrastructures, equipment and the sea. It develops and implements policies against global warming and air pollution. It promotes the sustainable management of scarce resources. It is in charge of international affairs on climate. In this capacity, it conducts European and international negotiations on climate and ensures the implementation of the agreements concluded upon, in consultation with the Ministry for Europe and Foreign Affairs. It is responsible for promoting and developing the social and solidarity economy. It participates in the development of research programs, teaching and the encouragement of innovation concerning its attributions.

FIND OUT MORE: www.ecologique-solidaire.gouv.fr



*Office
International
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« **The International Office for Water (OIEau)** is a non-profit association under French law declared to be in the public interest. With 140 employees and a worldwide network of 150 partner organizations, OIEau is involved in skills development for better management of water in France, Europe and the world. Its services include: 1. Technical and continuous training, training engineering - 2. Data, information, documentation and Water Information Systems - 3. Technical and institutional assistance (water and sanitation services as well as water resources management in the basins of lakes, rivers and groundwater) - 4. Facilitation and development of networks of professional actors in the water sector. OIEau provides the technical secretariat for the International Network of Basin Organizations (INBO).

FIND OUT MORE: www.iowater.org



The French Water Partnership (FWP) is the go-to platform for public and private French water actors who work internationally. It has engaged in international advocacy for over 10 years to make water a priority in sustainable development policies, and encourages exchange between French expertise and that of other countries. With its various members (State and public institutions, authorities, NGOs, businesses, research and training institutes, and qualified experts) it delivers collective messages on water in international arenas such as the United Nations, climate and biodiversity conventions, high-level political forums and World Water Week in Stockholm.

FIND OUT MORE: www.partenariat-francais-eau.fr/en/



REVIEW COMMITTEE



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EN CHARGE DU DÉVELOPPEMENT DURABLE



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