

Acting for water in the Sustainable Development Goals

FRENCH SOLUTIONS



With the support of
**French Ministry for
the Ecological and
Inclusive Transition**



MINISTÈRE
DE LA TRANSITION
ÉCOLOGIQUE
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water
partnership



partenariat
français
pour l'eau

Why this guide?



Laurence Monnoyer-Smith,
Interministerial
delegate and
Commissioner-General
for Sustainable
Development

Two years after their adoption, the **2030 Agenda and its Sustainable Development Goals** constitute a set of common standards aimed at accompanying countries' ecological transition and the fight against poverty and inequality. The Sustainable Development Goals are universal and raise questions in terms of action, plans, programmes and policies carried out by public and private stakeholders. In France, the Ministry for an Ecological and Inclusive Transition and the Ministry for Europe and Foreign Affairs are responsible for coordinating the implementation of the 2030 Agenda.

The members of the "**French Water Partnership**" immediately started tackling these questions, both internally and through very active participation in workshops and exchanges organized by the Government. This guide is one of the tangible results of their commitment. It analyzes in particular a crucial characteristic of the Sustainable Development Goals, which is the interlinkages between the 17 SDGs and the targets defined for SDG6, "*Ensure availability and sustainable management of water and sanitation for all*".

Through this work, the FWP illustrates the full scope of a multi-partner action plan, and provides a quality French production.

Water-related issues are on the rise in numerous parts of the world and, since individuals have no solution at hand, **the responses are necessarily collective**. The world needs more assertive and ambitious public policies. In this light, having one of the **17 new global Sustainable Development Goals (SDGs) dedicated to water and sanitation brings a lot of hope**. Like all of the SDGs, the Water SDG features ambitious quantified targets to reach by 2030 which cover the major challenges linked to water. Every country is concerned, even France with its scattered territories in different regions of the world. However, **15 years is a very short time** to attain universal access to drinking water, to stop the overexploitation of groundwater, and to remove pollution from half of discharged water. If we don't succeed in meeting these challenges, the situation will only get worse. Every country needs to identify its focal needs and start acting now. **This publication, which showcases the expertise of members of the French Water Partnership, shows that solutions already exist.**



Gérard Payen,
President of the working
group on the Sustainable
Development Goals for the
French Water Partnership

The French Water Partnership (FWP) is the go-to platform for all the French water stakeholders, public and private, operating at international level. For more than 10 years, the FWP has been advocating for water so that it becomes a real priority in sustainable development policies worldwide. The FWP also stands as a facilitator for exchanges between the French and international water know-how.

LEARN MORE : www.partenariat-francais-eau.fr/en

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MARCH 2018

The SDGs basics

The 2030 Agenda : **GLOBAL KEYS** for understanding sustainable development

    	LAST NAME	2030 Agenda for Sustainable Development	<input checked="" type="checkbox"/> Economics
	FIRST NAME	Sustainable Development Goals	<input checked="" type="checkbox"/> Social
	NICKNAMES	SDG, post-2015 Agenda	<input checked="" type="checkbox"/> Environment
	DATE OF BIRTH	25 September 2015	
	CREATOR	United Nations General Assembly	
	ANCESTORS	Millennium Development Goals (MDGs); Agenda 21	
	PLACE OF BIRTH	New York	
	PLACE OF BIRTH	15 years (2016-2030)	

WHAT THEY CONTAIN

A DECLARATION > 17 Goals



> Broken down into 169 precise, measurable targets to be met by 2030



NEW, AMBITIOUS AGENDA

- **UNIVERSAL** : concerns all countries
- **INTEGRATED** : each target should be considered in connection with the others, and not individually
- **AND INCLUSIVE** : the aim is to “leave no one behind”: the emphasis is on the most vulnerable

GLOBAL MONITORING OF IMPLEMENTATION



Global report

published annually by the UN General Secretariat



Technical monitoring

232 global indicators based on national data to measure progress annually



High-level Political Forum (HLPF)

- Every year at ministerial level. Since 2016
- Every 4 years at heads of state level. First time in 2019

Political meetings to :

- Discuss progress
- Examination of a 1/3 the SDGs each year (sessions; thematic reports)
- Present “voluntary national reviews”: countries that want to can report on their progress

6 CLEAN WATER AND SANITATION



At the 2018 HLPF, SDG 6 on water and sanitation is one of the SDGs examined in detail

France committed to achieving the SDGs

WHO?



In France, responsibility is shared between :

- **An interministerial committee** led by the interministerial Delegate for sustainable development appointed by the prime minister and in close coordination with the Ministry for an Ecological and Inclusive Transition and the Ministry for Europe and Foreign Affairs



- **"Pilot ministries"** for each SDG



- **The National Institute of Statistics and Economic Studies (INSEE)** coordinates data production with support from all ministerial statistics departments



BUT, implementation concerns everyone: the state, companies, local authorities, associations, citizens, etc.

HOW ?

National monitoring

- France is committed to producing an annual update of the actions implemented
- France mobilizes its statistics departments to produce global indicators

Multi-faceted dialogue between the state and civil society

- Spaces for dialogue: the National Council for Development and International Solidarity (CNDSI); the National Council for Ecological Transition (CNTE)
- Participative workshops

Tools in preparation

- A 2030 Strategy promoting ecological, inclusive transition in line with the SDGs ("SDG roadmap")
- French online course (MOOC) on SDGs
- Information website to raise awareness of the 2030 Agenda

WHEN ?

25 September 2015

United Nations General Assembly:
France voted to adopt the
2030 Agenda



SINCE THEN, IT GETS INVOLVED EVERY YEAR
IN A NUMBER OF WAYS:



March/April

France organizes each
year consultations with all
stakeholders to prepare
its annual update



July

France presents an
annual voluntary
update

June

European Sustainable
Development Week
(ESDW)



September

France organizes an event each year
on SDGs on the anniversary date of
their adoption: an occasion to organize
consultations with all stakeholders

20 Water-related targets

Water is a cross-cutting theme that connects with key components of all 17 SDGs.

In total, 20 targets directly relate to water, supported by monitoring **indicators** available on the website <https://unstats.un.org/sdgs/indicators/database/>



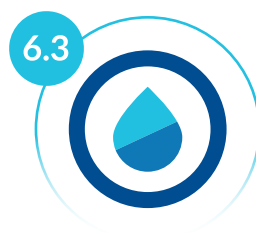
8 TARGETS IN GOAL 6 DEDICATED TO WATER AND SANITATION



By 2030, achieve universal and equitable access to safe and affordable drinking water for all



By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation



By 2030, improve water quality by reducing pollution and halving the proportion of untreated wastewater



By 2030, substantially increase water-use efficiency (domestic, agricultural, industrial) and ensure sustainable withdrawals



By 2030, implement integrated water resources management at all levels, including in transboundary basins



By 2020, protect and restore water-related ecosystems



By 2030, expand international cooperation and capacity-building support



By 2030, support and strengthen the participation of local communities in improving water and sanitation management

These targets are directly related to water, but as shown in the rest of this document, all of the other SDGs also depend on water.

12 WATER-RELATED TARGETS IN THE OTHER SDGs

Simplified, shortened (or clarified) captions of targets illustrating their link to water



POVERTY : 1.4 By 2030, ensure that all men and women have access to basic services; including water and sanitation



AGRICULTURE : 2.4 By 2030, implement resilient agricultural practices that help maintain ecosystems, strengthen capacity for adaptation to drought and flooding, and improve soil quality



HEALTH : 3.3 By 2030, end diseases, including water-born diseases

HEALTH : 3.9 By 2030, substantially reduce the number of deaths and illnesses due to water, air and soil pollution and contamination



EDUCATION : 4.a Build and upgrade suitable education facilities (including adequate water and sanitation services)



CITIES : 11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services (including access to water and sanitation), and upgrade slums

CITIES : 11.5 By 2030, significantly reduce the number of people affected by disasters, including water-related disasters

CITIES : 11.b By 2020, substantially increase the number of cities adopting policies towards resource efficiency (including water) and general management of resilience to disasters (including drought and flooding)



SUSTAINABLE PRODUCTION : 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes and significantly reduce their release into water, air and soil



CLIMATE : 13.1 By 2030, strengthen resilience and adaptive capacity to climate-related hazards and natural disasters (including water-related disasters)



OCEANS : 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities (through rivers)

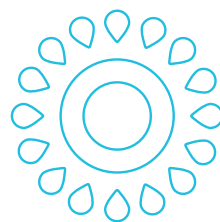


ECOSYSTEMS : 15.1 By 2020, ensure the conservation of terrestrial and inland freshwater ecosystems



WE WILL NOT ACHIEVE THE SDGs WITHOUT ACHIEVING THE TARGETS RELATED TO WATER

Remaining challenges



6.1 Access to drinking water



- **INTERNATIONALLY** : 30% of the global population does not always benefit from services that ensure easy, regular access to quality drinking water (**JMP2017**).
- **IN FRANCE** : although almost all French inhabitants have access to drinking water, over two million of them do not permanently dispose of quality drinking water in line with legislation (**MSS2015, MTES 2016**). In addition, some do not have easy access, such as homeless people. On the French island of Mayotte, 15% of inhabitants do not have a domestic water supply (**JMP 2017**).

6.2 Access to sanitation



- **INTERNATIONALLY** : 4.5 billion people, or 60% of the global population, do not have toilets with adequate evacuation and treatment facilities (**JMP 2017**).
- **IN FRANCE** : Although almost all French inhabitants have access to sanitation, in French Guiana, 42% of inhabitants do not have access to adequate sanitation, and 10% do not even have access to basic toilets (**JMP 2017**).

6.3 Water quality and the fight against pollution



- **INTERNATIONALLY** : 80% of wastewater around the globe is discharged into the environment without treatment. In low-income countries, only 8% of wastewater undergoes treatment (**WWDR 2017**).
- **IN FRANCE** : In metropolitan France, while the majority of the population has access to collective sanitation facilities, only 60% of domestic on-site sewage facilities (i.e. not connected to the public sewers) conform to health and environment protection obligations (**SISPEA 2017**).

Read more about France's SDG challenges in
ASTEE's detailed analysis (only available in French).

www.astee.org



6.4

6.5

Integrated water resources management for sharing between different users



- **INTERNATIONALLY** : 20% of the world's population lives on an unexploited aquifer (WWDR 2014). Global energy demand is set to rise 40% by 2030 (WWDR 2017) and global food demand will go up by 60% by 2050 (WWDR 2016), increasing the pressure on the water resource.

60% of the 276 international river basins on the planet do not come under a cooperation management framework (WWDR 2012).

- **IN FRANCE** : Management in France is by basin, including transboundary basins (Rhine, Meuse, etc.). However, certain rivers in French Guyana are not subject to regular institutionalized cooperation between riparian countries.

6.6

Protect and restore water-related ecosystems



- **INTERNATIONALLY** : In 2017, 28% of the 86,313 species studied by experts are under threat and 42% of these are amphibians (IUCN, 2017).

- **IN METROPOLITAN FRANCE** : only 44% of water bodies have reached the objective of good ecological status established by the European water framework directive (ONEMA, 2015). Two major challenges exist: controlling diffuse pollution, in particular resulting from agriculture; and ensuring a balance between available water and withdrawals.

6.a

6.b

Develop international cooperation and mobilize funds



- **INTERNATIONALLY** : the funding required to achieve universal access to drinking water and sanitation is estimated to be three times higher than current investments (WORLD BANK 2016).

- **IN FRANCE** : France has set itself a goal of increasing state development aid from 0.38% in 2016 to 0.55% of gross national product in 2022.

13

Manage risks related to climate change



- **INTERNATIONALLY** : 40% of the world's population will face water shortages in 2050 (OECD 2012). 90 % of all natural risks are related to water, and their frequency and intensity are growing (WWDR 2012).

- **IN FRANCE** : by 2050, climate scenarios indicate a drop of 10% to 40% of average annual flows in water courses in mainland France (EXPLORE 2070), along with much more intense and numerous rain events, and more frequent heat waves.

Solutions from French water stakeholders

Water stakeholders are mobilized to achieve the targets of the Sustainable Development Goals in France and around the world.

Discover French initiatives in all kinds of areas (the state, local authorities, scientists, NGOs, companies, etc.) that are directly contributing to reach the targets of SDG 6 and the other SDGs related to water.

For each target, we describe a selection of projects. Other French stakeholders are also active in the area: you can find them in the "Water Expertise France" section on the website : www.partenariat-francais-eau.fr/en



Ensuring access to water and sanitation for all

6.1

6.2

ALSO MEANS CONTRIBUTING TO THE FOLLOWING SDGs:



By ensuring the human rights to water and sanitation



By reducing malnutrition problems



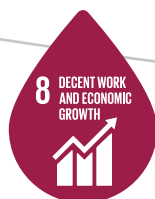
By reducing diseases (including diarrhoea) and encouraging bodily hygiene



By limiting school absenteeism due to health and hygiene issues and allowing girls to continue school after puberty



By reducing the time spent collecting water, which is mostly left to women and girls



By boosting employment: 3 out of 4 jobs depend on water



By reducing existing inequalities thanks to adequate toilets for women, old and disabled people



By developing sustainable cities thanks to suitable water and sanitation systems



By developing international development projects related to water



FRENCH WATER STAKEHOLDERS SOLUTIONS



Build and operate cutting-edge facilities



France has internationally recognized expertise in designing, building, managing and maintaining facilities in the drinking water and sanitation sectors, ranging from treatment to catchment, storage and distribution.

In France, local authorities are responsible for water supply and sanitation. To provide this public service, they call on experts from the public and private sectors (engineering firms, equipment constructors, agent companies). The two global leaders in the sector – **SUEZ** and **Veolia** – draw on innovations from French research laboratories and small and medium-sized enterprises.



Ensure constant access to drinking water through technological and social innovations



New tools and software programs are being developed for an increasingly efficient, long-lasting water and sanitation service.

The start-up **UDUMA**, initiated by **ODIAL SOLUTIONS**, is the first private operator to offer sub-Saharan African villagers a durable water service charged on consumption. Over 500,000 Malians will benefit from this service over the next 15 years. UDUMA draws from technological innovations, including the E-PUMP, launched in April 2017 in Burkina Faso. These first manual water pumps to be equipped with meters and data recorders are connected to a web observatory developed by **AQUASYS**. Users send text messages to transmit information and facilitate maintenance.



Support local entrepreneurs to open up access to drinking water around the world



New social entrepreneurship models are being developed: a way of opening access to drinking water in the world while fostering populations' economic development.

Since 2004, the NGO **1001 Fontaines** has been recruiting, training, equipping and supporting micro-entrepreneurs in Cambodia, Madagascar and India to provide inhabitants with safe drinking water. The running of the plant is entrusted to a local operator that produces drinking water and sells it in canisters or jerry cans in the village. The aim? To reach 1 million beneficiaries by 2020.



Respond to humanitarian crises



When man-made or natural crises affect a population, humanitarian NGOs act quickly to provide immediate access to water and sanitation. At the same time, they launch infrastructure rehabilitation and local capacity building actions to build the resilience of population for future shocks.

In 2017, faced with the magnitude of the cholera epidemic that affected the Democratic Republic of Congo, the teams of the NGO **Solidarités International** mobilized urgently. Chlorination at water points, distribution of hygiene kits, rehabilitation and construction of wells and latrines have made it possible to stem the spread of the disease in areas destabilized by conflict. Where possible, **Solidarités International** also tries to address the structural problems that prevent the eradication of cholera, endemic in some provinces. Thus, its teams rehabilitate the water network of a city of more than 140,000 inhabitants, provide support for local production of chlorine, and train health authorities and communities to fight against cholera.



Improve the living conditions of the most vulnerable people



NGOs and development stakeholders take action on the field with development projects, linked with awareness campaigns on hygiene, capacity building of local stakeholders and support to civil society.

In response to cases of acute malnutrition in the huge majority of its countries of intervention, the NGO **Action against hunger** applies the “Wash-Nutrition” strategy, aiming to improve the water-sanitation-hygiene conditions in nutritional centers and for at-risk communities. It supplies water treatment and handwashing kits for domestic purposes and gives advice to families of malnourished children in order to enhance children treatment and decrease the risks of relapse. This principle is applied in a variety of countries such as India, Nepal, Burma, Chad, Sierra Leone, or in the eastern region and Tapoa Province of Burkina Faso.



Discover [Programme Solidarité Eau's SDGs guide](http://www.pseau.org/en/agenda-2030) featuring an explanation of indicators and targets 6.1 and 6.2.
www.pseau.org/en/agenda-2030



Reducing pollution and improving water quality

6.3

ALSO MEANS CONTRIBUTING TO THE FOLLOWING SDGS:



By improving the quality of soil and agriculture



By limiting the impacts on health



By improving working conditions for washerwomen



By producing energy sources using residues from water treatment plants (biogas, sludge)



By improving living environments in cities



By cutting down pollution in oceans and protecting rivers from pollution



By preserving biodiversity through protecting rivers and wetlands

FRENCH WATER STAKEHOLDERS SOLUTIONS



Act upstream to avoid pollution



Protecting groundwater and rivers improves the quality of resources, reduces the need for water treatment, and preserves our natural heritage.

The water protection strategy set up by **Eau de Paris** involves a transition towards agricultural practices that preserve water quality. It is based on a close partnership with farmers located in areas that feed into the water catchment, coupled with an incentive scheme involving technical support, provision of farming land, and support to develop sustainable channels. This “win-win” system is based on the trust and motivation of stakeholders, who receive active support from the Seine-Normandy basin agency.



Develop increasingly cutting-edge techniques to tackle pollution



Advanced membranes (ultrafiltration, reverse osmosis); advanced oxidation process (ozonation, activated carbon, UV treatment); phyto-purification, etc.: treatment plants are constantly equipped with new technologies to improve their purification performance.

Continental Europe, through France (but also Denmark, Germany and Switzerland), is pioneer in monitoring and improving of the quality of treated water, thanks to innovative solutions. In Lausanne, the advanced treatment selected eliminates more than 80% of the incoming micropollutants in the treatment plant (400,000 population equivalent), to preserve the environment and the quality of the water resource. The City of Lausanne has commissioned **SUEZ** and its partner **TECHFINA** to modernize the plant. This improvement of the treatment plant allows for the preservation of Lake Geneva, the main drinking water resource in the city.



Lead sanitation into the era of the circular economy



At the core of urban dynamics, wastewater treatment plants transform effluents (water, sludge, phosphorus, ash, etc.) into energy (heat source, bio-energies) and raw materials to supply surrounding territories..

SIAAP - the greater Paris sanitation authority- anticipates and innovates to reintroduce water of good quality, whilst protecting biodiversity and controlling its energy footprint. Thanks to the optimization of existing processes and the heat recovery from pretreated wastewater or sludge recovery boilers, the SIAAP is not only 40% energy-autonomous, but also supplies the nearby district with heat. To further this approach, a multi-sectoral partnership with **SYCTOM** aims to recycle other organic inputs in treatment plants, such as organic household waste or equine manure.



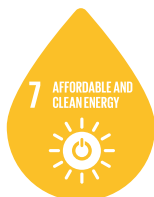
Sharing water resources between users thanks to sustainable water management

6.4 6.5

ALSO MEANS CONTRIBUTING TO THE FOLLOWING SDGS:



By ensuring sustainable and environmentally friendly agriculture that ensures healthy, nutritive, and sufficient food



By ensuring energy production, which needs water to operate [nuclear & thermal power, hydroelectricity, fossil energy]



By facilitating industrial activities that require water for cleaning, waterway transport, heating or cooling circuits, etc.



By supplying sufficient water to satisfy the needs of urban growth



By ensuring responsible production in terms of impacts on water



By responding to climate challenges with good water



By reducing conflict and forced migration

FRENCH WATER STAKEHOLDERS SOLUTIONS



At river basin scale, include all parties involved in water management

In France, since 1964, a key component of the French water management system has been consultation and cooperation between the different water stakeholders [elected parties, industries, farmers, associations, citizens, administration, etc.].

Mainland France is divided into 6 hydrographic basins, and a similar system exists in the overseas French territories under four **Water Offices**. In each basin, a **basin committee** gathering all stakeholder groups involved in water management defines a water management policy. The policy is based on the principle of a balanced management of water with targets in terms of restoring and protecting aquatic environments. The **Water Agencies** provide financial support for implementing this basin policy.



Make water secure for different uses



Balanced management of water aims to accommodate its uses in terms of civil security, drinking water supply, the aquatic environment, and economic usage (agriculture, industry, energy, transport, tourism, etc.).

Based on a winning combination of water and energy, **Electricité de France (EDF)**'s mission in the Durance-Verdon basin is to produce renewable energy while accommodating the other uses of water. Durance-Verdon is therefore organized with a focus on inclusive management and sharing of water, involving consultation of all stakeholders located in the valleys.



Save water



Sensors to locate leaks in real time; surveillance tools; decision-support tools, etc. Companies, engineering firms and research institutes deploy solutions to optimize and preserve water.

Urbasense offers companies and local authorities a way to economize irrigation water and reduce the risk of overwatering green spaces and irrigated crops, thanks to autonomous connected sensors combined with expert data analysis.



Promote economical, efficient irrigation



Water governance, precision irrigation, subsurface drip irrigation, sensors, reuse of treated urban water, etc. French stakeholders contribute to economic and social development by supporting change through technical innovation and institutional reform.

Created in 2013 by the **French Development Agency (AFD)** and run by **AFEID (French agency for water, drainage and irrigation)**, COSTEA is a multi-stakeholder platform that groups all of the expertise on irrigation available in France and overseas (institutional actors, project contractors, academic research and teaching, engineering firms, irrigator representatives, civil society organizations, etc.) and makes it available to partners in the South and for political dialogue between AFD and its partners, through capitalizing and producing knowledge.



Support the sharing of transboundary waters



With over forty years of experience in integrated river basin management, France supports institutional reinforcement and long-term planning and investment programmes in transboundary basins.

Its partners include several river basin organizations and cooperation frameworks, such as the Lake Chad Basin Commission (LCBC), the Niger Basin Authority, the Nile Basin Initiative, the International Commission of the Congo-Oubangui-Sangha Basin, the Senegal River Basin Development Organization, the Volta Basin Authority, and the Mekong Commission. The French **Ministry of Europe and Foreign Affairs** and the **Ministry for the Ecological and Inclusive Transition** also support the implementation of cooperative management schemes for transboundary aquifers, such as in the Northwestern Sahara aquifer system.



Protecting and restoring water-related ecosystems

6.6

ALSO MEANS CONTRIBUTING TO THE FOLLOWING SDGS:



By improving water quality, and so protecting people's health



By protecting aquatic environments, which helps them resist climate events



By reducing pollution in oceans and protecting rivers from pollution



By preserving biodiversity through protecting rivers and wetlands

FRENCH WATER STAKEHOLDERS SOLUTIONS



Carry out hydrological monitoring to better understand water resources

In the knowledge that better understanding leads to better management, research bodies and companies develop tools to acquire data, water information systems and hydrological models.

With solid expertise in the field of land science, the geological survey **BRGM** develops scientific tools to improve our understanding of aquifers, such as measurements of water table levels using a network of automated piezometers, and digital models to anticipate changes in levels. It is also the national operator of the ADES databank and creates software for exploiting data to characterize or identify water quality trends.



Promote and develop nature-based solutions



In the last 20 years, solutions developed in France include the restoration of wetlands, recovery of flood storage areas, revegetation of cities, and the development of mangroves in coastal areas, all of which are based on ecosystems for the wellbeing of humans and biodiversity.

To limit the problems of dried-out periods, erosion and flooding, action has been undertaken to re-meander and clear structures on the Pisancelle River. This pilot site is supported by the **Seine-Normandy Water Agency** and the **French Agency for Biodiversity**. The reestablishment of a winding course closer to the river's natural state has led to a rapid recolonization by aquatic fauna and improved the quality of neighbouring land, to the benefit of farmers.



Develop non-conventional water sources to preserve water



In the face of global changes and greater pressures on water, developing new solutions (reusing treated water, replenishing water tables, desalinating, etc.) increasingly offers an avenue for the future.

At the French research institute, **Irstea**, agricultural irrigation system specialists work on developing effective solutions for reusing treated waste water (REUT) adapted to the specific needs of local authorities. For example, Irstea researchers are working with the city of Montpellier to create a method to evaluate the social and economic impacts of REUT projects. Irstea has set up experimental REUT platforms to irrigate agricultural parcels in order to optimize procedures and study the dispersion of contaminants in the environment. They are also working with the **companies Canal de Provence** and **Ecofilae** on cooperation methods using participative tools to define with stakeholders and citizens the merits of the planned uses.



Establishing the means for successful implementation



ALSO MEANS CONTRIBUTING TO SDG 17:



By paying special attention to funding, partnerships, science and technology, institutions, capacity building, cooperation, etc.

FRENCH WATER STAKEHOLDERS SOLUTIONS



Finance the means to achieve the SDGs and adapt to climate change

Sovereign loans to states, direct loans to public companies or local authorities with or without state sovereign guarantees, credit lines for banks that can then be used to finance smaller projects, loans to the private sector, guarantees, etc.

These are tools put in place by the **French Development Agency (AFD)** to finance SDGs. The AFD also provides tools to accompany states and contracting authorities: subsidies to provide technical assistance and capacity building, training courses at the AFD's development campus, exchanges and sharing of knowledge. .



Mobilize decentralized resources to develop water supply and sanitation services

A French law allows Water Agencies, cities and water supply utilities to devote up to 1% of their water and sanitation budgets to international solidarity projects in development countries, alongside French and international NGOs.

In 2016, in France, 28 million euros were mobilized thanks to international action by local authorities and water agencies, adding to 1.2 billion euros of national public aid for development from the French Development Agency. The **Programme Solidarité Eau (Ps-Eau)** facilitates the measure by producing guides and accompanying those involved in decentralized cooperation



Discover [the French Water Partnership's new publication on French training courses on water](http://www.partenariat-francais-eau.fr/en/our-productions/), aimed at international students and professionals.

www.partenariat-francais-eau.fr/en/our-productions/



Support capacity building through vocational and academic training and institutional cooperation

In France, hundreds of training courses exist on water and sanitation management; they are adapted to foreign students and professionals.

The French National Water Training Centre run by the **International Office for Water (IOWater)** trains over 6,000 professionals working in water, waste and the environment. This training center offers managers, engineers, technicians and field operators involved in water, sanitation and waste a range of indispensable courses to successfully manage and evolve in their positions and functions.



Ensure citizen monitoring of the implementation of goals

The adoption of the 2030 Agenda constitutes a major political commitment that is not always put in place rapidly. Given the challenges of reaching the SDGs, civil society can play a major role to ensure that decision-makers respect their engagements.

With its international partners, End Water Poverty and Watershed, Coalition Eau has launched a civil society initiative to follow up on the accountability of governments. Studies are undertaken in around thirty countries to analyze the way that governments render accounts on the implementation of SDG 6 at national level. The recommendations will work to improve transparency, public information, and the participation of civil society in national implementation processes.



Take into account changing behaviour patterns and perceptions to improve water management

Human and social sciences can be used to understand water issues as a whole, by reflecting on societies' relationships with water.

The **National Center for Scientific Research (CNRS)**, with the support of the **Martinique Water Office** and the **French Agency for Biodiversity**, chose to study the relationship between humans and their environment to identify potential levers for action, putting the human (user/stakeholder) component back at the centre of the definition of need and action.



Taking urgent action to combat climate change and manage water-related risks

ALSO MEANS CONTRIBUTING TO THE FOLLOWING SDGS!



By limiting drought risks to improve agriculture



By satisfying water requirements in the long term and reducing pollution in case of floods



By improving cities' resilience to flooding



By maintaining biodiversity



By avoiding forced migration due to climate change

FRENCH WATER STAKEHOLDERS SOLUTIONS



Achieve carbon neutrality



To respect Paris Agreement commitments, water stakeholders use their imagination to reduce carbon emissions and create new forms of energy (solar, biomass, hydrokinetic).

SEDIF - the greater Paris drinking water authority - fosters innovative projects that promote sustainable development: it is the first public water utility in France to have achieved carbon neutrality. Today, it compensates its residual emissions by supporting projects through the purchase of carbon credits. It has just made the voluntary move of adopting its own Climate Water Energy Plan, illustrating its commitment to reducing the consequences of climate change, and undertaking concrete actions to implement an energy-saving strategy. For example, a heat pump has been set up on the site of the new Villejuif Reservoir to supply energy to heat and cool the installations. A photovoltaic pilot will shortly be set up in the Choisy-le-Roi factory to produce some of the energy required to treat drinking water, consumed on the site.



Monitor water resources on a global scale



To act effectively, knowledge of water resources is vital. French stakeholders have specific expertise in collecting, processing and enhancing data.

Launched in 2016, a working group involving seven French institutions (**AFD**, **IOWater**, **IRD**, **CNES**, **BRLi**, **CNR**, **IRSTEA**) works on spatial hydrology, developing applications and services that use data from the satellite programme SWOT. By 2020 it will supply spatio-temporal variations of water levels in the major rivers, lakes and oceans.



Anticipate climate change and future scenarios



Understanding and analyzing climate change can help to anticipate decisions. Hydro-climatic models can simulate the impacts of climate change on aquatic environments and water resources in order to draw up the appropriate adaptation strategies.

The portal "DRIAS les futurs du climat", developed by **MeteoFrance**, provides answers for socio-economic actors concerned by adapting to climate change. It supplies regionalized climate projections produced by French climate modelling laboratories. Climate information concerning mainland France and its overseas territories is published in different graphic and digital formats.



Improve farmers' adaptation to drought risks



All aspects of food security (access, availability, quality, regularity) are affected by a decrease in the availability of water for irrigation and a drop in agricultural production.

In Tsihombe, a remote zone of southern Madagascar, the climate is generally dry and arid. However, in recent years, rainfall has been half the seasonal average, with an impact on harvests. the NGO **Islamic Relief France (SIF)** set up a project to improve food security in 2014, by restoring irrigation systems, distributing inputs and introducing techniques and crops adapted to the changing climate. Water entry and drainage canals have been rehabilitated to make better use of the water available, extend cultivated areas, multiply the number of rice paddies, and secure rainy season crops.



Increase resilience to deal with flood risk



Developing knowledge and attitudes towards risk, improving forecasts and preparation for disaster management, considering long-term flooding risks in land and urban planning, reducing the vulnerability of territories, improving the resilience of public services, carrying out studies and pilot studies, etc.

In total, 166 projects are led by the **Local public basin institution of Seine Grands Lacs (EPTB Seine Grands Lacs)** and implemented by around twenty stakeholders as part of a programme to prevent flooding. The initiative, which lasts 6 years up to the end of 2019 and has a budget of €100 M, aims to reduce flood risks in the Paris area.



Analyze cities' vulnerabilities



Identifying a city's vulnerability thanks to risk modelling, mapping and analysis of socio-economic weak spots is a way of improving its resilience in the face of climate risks.

Veolia, working as part of the Rockefeller Foundation's 100 Resilient Cities initiative, has developed a method to help cities anticipate and deal with disasters, thus improving their attractiveness. During five months of study on the pilot site in New Orleans, Veolia analyzed over 200 of the town's assets. Its partner, Swiss Re, used a risk-simulation model to draw up a map of the territory, which the city employs to understand its vulnerable areas and improve protection of its critical infrastructures.

Discover **FWP's publication** that shares
water and climate solutions.
www.partenariat-francais-eau.fr/en/our-productions/



THEY ARE THE FWP MEMBERS



Government and Public Institutions

Ministry of Europe and Foreign Affairs
Ministry for the Ecological and Inclusive Transition
Ministry of Agriculture and Food
Ministry of Solidarity and Health
Ministry of Economy and Finances
Adour Garonne Water Agency
Artois Picardie Water Agency
Loire Brittany Water Agency
Rhin Meuse Water Agency

Rhone Mediterranean and Corsica Water Agency
Seine Normandy Water Agency
French Development Agency – AFD
French Agency for Biodiversity - AFB
AFEPTB – French Association of public river-basin territorial agencies
Business France
Caisse des Dépôts et Consignations
EPTB Seine Grands Lacs



NGOs, non-profit Organizations and Foundations

1001 Fontaines
Academy of ethics
Action Against Hunger – ACF
AFITE
Aquassistance
Association Africa Tomorrow
European Scientific Association for Water and Health - ASEES
The Center of Information for Water - C.I.eau
Cercle Français de l'eau
Coalition Eau (Water Coalition)
Eau sans Frontières
Electriciens sans frontières - ESF
ETC Terra
Foundation for World Agriculture and Rurality – FARM
Foundation Terre d'Initiatives Solidaires
Green Cross France & Territoires

HAMAP
Hydraulique Sans Frontières
Institut Méditerranéen de l'eau – IME
IPEMED
pS-Eau
French alliance for cities and territorial development – PFVT
Prospective 2100
(Re)sources
Reseau Projection
Secours Catholique - Caritas France
Secours Islamique France
SEVES
Solidarity Water Europe
Solidarités International
Teragir
UP2Green
Water Embassy



Local Authorities

Cités Unies France (French United local governments)
Council of the Herault Department
Grand Lyon Metropole
City of Paris

Office of water of Martinique
SEDIF (Drinking water service for the Greater Paris area)
SIAAP (Greater Paris Sanitation Authority)



Economic Stakeholders

AQUASURE
AQUASYS
Aqua-Valley
BRL Engineering
Canalisateurs of France
Cluster Eau & Climat
Com'Publics
DK-Dox France
Ea-éco-entreprises – France Water team
Eau de Paris (Paris Water)
Eaux de Grenoble Alps
Electricité de France EDF
EpE – Entreprises pour l'environnement

FP2E (Professional Federation of French Water Companies)
Group Société des Eaux de Marseille
Labaronne-CITAF
MAGEO Morel Associés
MTD Pure Water
NUTRISET SAS
SAUR
SUEZ
Sun Water Life
Tenevia
Urbasense
Veolia
Vergnet Hydro
WaterClean ENR



Technical, Scientific, Research and Training Organizations

ARCEAU
AgroParisTech - Pulpit water for all
CNES – National Center for Space Studies
CNRS Institute Ecology and Environment
French Water Academy
French Association for Water, Irrigation and Drainage - AFEID
Scientific and Technical Association for Water and the Environment - ASTEE

BRGM
Ecole nationale des ponts et chaussees
GEMCEA
IRSTEA
International Office for Water - IOwater
Institute of Research for Development
Hydrotechnical Society France
Meteo France



French and International Individuals

AND ABOUT FIFTY FRENCH AND INTERNATIONAL EXPERTS, INCLUDING
PARLIAMENTARIANS

WATER AND YOU: HOW SUSTAINABLY CONNECTED ARE YOU?

Take the quiz! Tick the boxes that apply to you to measure your commitment to water today and discover other ways to get involved on an everyday basis.

At work, within my organization:

- ☐ I facilitate water supply and sanitation services thanks to new technologies
- ☐ I help local entrepreneurs around the world access drinking water
- ☐ I find solutions for humanitarian crises related to water
- ☐ I leave no one behind through water and sanitation services
- ☐ I develop techniques to combat water pollution
- ☐ I foster circular economy
- ☐ I work proactively to avoid pollution
- ☐ I promote and/or participate in stakeholder participation within the same basin
- ☐ I secure water for different uses
- ☐ I manage my water consumption carefully
- ☐ I implement efficient irrigation
- ☐ I work for the sharing of transboundary waters
- ☐ I carry out hydrological monitoring to improve knowledge of water resources
- ☐ I encourage the use of nature-based solutions
- ☐ I develop alternative water sources to preserve the water table
- ☐ I raise funds to develop water and sanitation projects
- ☐ I help to build capacities
- ☐ I consider human and social factors in water management
- ☐ I ensure that decision-makers implement the SDGs
- ☐ I work to reduce my organization's carbon emissions
- ☐ I carry out modelling to anticipate changes in the climate and water
- ☐ I work to improve resilience to flood risk
- ☐ I help farmers deal with drought risks
- ☐ I set up monitoring and warning systems to improve reactions to natural catastrophes

In my everyday life:

- ☐ I eat less meat, which needs a lot of water to be produced
- ☐ I opt for showers rather than baths
- ☐ I do not let the water run while I do the washing-up or wash my hands or teeth
- ☐ I avoid wasting paper and choose recycled paper which requires less water and energy to produce
- ☐ I use water-efficient domestic appliances (washing machine, dishwasher, etc.)
- ☐ I have placed a regulator on my taps and water-saving devices on the toilet
- ☐ I use rainwater to water my plants and opt for water-saving devices like drip irrigation, mulching and grass cuttings during heat waves to retain dampness in the soil
- ☐ I use natural fertilizers instead of fertilizers containing polluting pesticides to preserve the water table
- ☐ I do not let taps drip and regularly check for leaks
- ☐ I do not throw oil, paint, solvents, medication, etc. down the sink or toilet and use less detergent to avoid sending them into the wastewater system
- ☐ In the garden, I water early in the morning or late in the evening to avoid water evaporation

Your score:

0 POINT : Were you unwilling to do the test due to lack of time or inclination?
No problem, but we hope that you will be more proactive when it comes to water!

1 - 7 POINTS : Everyone can act for water, every action counts!
The most important is to be involved. .

8 POINTS AND OVER : Well done, you are clearly concerned about water at your organization and in your daily life. We are counting on you to pursue your efforts and raise awareness around you.

