

Environmental, Social & Governance Report

2018



In accordance with Article L225-102-1, amended by Order 2017-1180, our group is henceforth subject to the new obligation to publish a consolidated ESG Report, due to the level of turnover and the average number of employees, particularly at the level of its French subsidiary SNF SA.

Consolidated sales: €3 billion

For the preparation of this first ESG Report, only the significant French, American, Chinese, Korean and Indian subsidiaries were taken into account. They represent more than 95% of the group's global turnover.

Consolidated workforce: 6,200



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POLICY OVERVIEW

SNF, headquartered in Andrézieux, France, is the largest polyacrylamide (PAM) manufacturer in the world. Our entire company production volumes represent 48% of global PAM production (by all producers), and we lead production on all continents we are present. Our polyacrylamide-based, water-soluble polymers treat drinking water and wastewater. Additionally, they play a significant role in other markets such as enhanced oil recovery, oil drilling and production, mining, paper, agriculture, textiles, and personal care. The scarcity of natural resources is the driving force behind most SNF's businesses. Our products treat and process water for more than 750 million people around the world and help thousands of industrial sites clean and recycle their water. With customers in more than 130 countries and over 1,000 products, SNF is instrumental in preserving natural resources, encouraging reuse and recycling, and improving efficiencies within industrial processes.

To meet the needs of our customers and to minimize transportation and supply interruptions, SNF has built strategically-placed, manufacturing sites and distribution networks throughout the world. Currently, SNF operates 20 production sites on four continents, including seven primary plants:

- Riceboro, Georgia and Plaquemine, Louisiana (USA)
- Andrézieux, France
- Taixing and Rudong, China
- Ulsan, South Korea
- Vizag, India.

SNF employs over 6,200 people worldwide in its various subsidiaries, with a growth policy respectful of all people and the environment.

SNF is a significant player in the water treatment market and all related applications. Numerous actions carried out over the last several years in the field of Sustainable Development, particularly regarding environmental, social, and economic issues (i.e., energy balance, carbon footprint, sustainable development, social balance) reflect who we are as a company and are evident in our activities.

Our policies on Sustainable Development and Corporate Social Responsibility are a continuation of our commitments to: • Be among the most successful companies in terms of safety

• Comply with applicable environmental legislation and regulations, as well as other social and economic requirements

• Minimize the environmental impact of our activities, particularly by optimizing energy consumption (gas, electricity, and water)

• Advocate actions to avoid environmental degradation, limit our carbon footprint, as well as minimize our dependence on and use of natural resources

• Continue to monitor and evaluate performance, environmental, social, and economic indicators

• Raise awareness and motivate employees and partners to work or operate responsibly

- Prevent corruption
- Provide proper training in line with job requirements

• Communicate (internally and externally) impacts of our activities, particularly as it relates to our customers for the proper handling, use, and disposal of our products

• Make the best use of feedback from customer and field experiences for the benefit of all

• Instill and encourage a Safety mindset throughout all levels and locations of the company to minimize risks and accidents, both on and off work.

The implementation of these commitments requires periodic evaluation of our performance, which we regularly disseminate through communication, recommended actions, and training (as necessary) to all staff and partners. Objectives are periodically reviewed and updated, taking into account the evaluation results obtained, new scientific knowledge, best available techniques and technology, and changes in the economic/social context.

SNF Group's Chairman/Chief Executive Officer and the Executive Committee, including U.S. leaders/executives, fully support a commitment to ESG Values. This commitment ensures that social, environmental, and ethical principles are understood and managed consistently by all stakeholders. The resulting policies are endorsed and validated by the members of the Executive Committee, which is also responsible for ensuring communication, implementation, and monitoring compliance of these policies throughout our organization.

SNF's Director of Sustainable Development presents an annual report which details the purpose, objectives, and results of our ESG data verification. Furthermore, to acquire a management tool and to measure the effectiveness of its sustainable development program, SNF is setting up a ESG reporting structure and protocols with the appointment of a manager for each significant subsidiary.

Concerning the parent company's duty of vigilance and care, SNF has carried out an in-depth examination of the risks of severe violations of human rights and fundamental freedoms, as well as the health and safety of individuals and the environment to supplement existing reasonable due diligence measures. These risks were examined in consultation with the department heads of Human Resources, Occupational Health and Safety, Environment, Legal, Purchasing, Control, and Internal Audits.

Presented below are the main risks to which SNF believes it has most exposure as of the date of this document. These risks are categorized according to their probability or potential, negative impact. It is worth noting that the themes related to the fight against food insecurity, fight against food waste, responsible equitable and sustainable food, and respect for animal welfare are deemed irrelevant as it relates to SNF's activities, and therefore, are not included.

In addition to the internal risk assessment, SNF called upon EcoVadis to perform an evaluation of customer and supplier risks based on our products purchased and sold within the various countries. This risk analysis focused on the following areas: environmental, social, ethical, and supply chain. The final results and recommendations will be published and communicated in June 2019 to allow SNF to establish action plans. The findings of the preliminary analysis did not indicate that any areas posed a high risk.

SNF Production data are included and displayed in graphical form, accounting for 97% of SNF's total production volume. The various graphs show metric tonnes of products produced by our primary manufacturing sites. 2015 was chosen as the reference year on an index 100 basis, by which all data was compared.



2018 Sales per Legal Company (M€)

RISK ANALYSIS

RISK	REASON	POLICIES IMPLENTED
Industrial Risks (SEVESO High Level)	Major industrial accident with potential safety hazard for the surrounding popula- tion and the employees	Safety Management System, Risk Analysis, Process Change Management Safety process harmonization of all group facilities Periodic emergency safety exercises together with state services (firefighters, prefecture, DREAL)
Resources Consumption (water, gas, etc.)	Resources scarcity	Energy saving policy ISO14001 certified sites Environmental action plan
Risk of accidental pollution	Accidental or ongoing hazardous subs- tances spills or releases into the environ- ment	Environmental Policy Emissions in water, air and waste generation monitoring and reduction Water and air treatment units implemented on all sites
Health and safety	Formal notice or penal sanction Regulatory non-compliance	Regulatory watch
Health and safety	Incorrect risk assessment Failure to analyze the risks	Single occupational risk assessment document Occupational risk assessment annual update Recording of actions, preventive measures and risk control
Health and safety	Work accidents or occupational diseases: • Insufficient knowledge of instructions • Non compliance to instructions • Non updated procedure	New employees initial training Retraining of all permanent workers Audits and preventive visits Analysis of all work accidents, whatever the severity Recording of all incidents and near misses Analysis of all reported occupational diseases

RESULTS	INDICATORS
No industrial accidents at SNF for over thirty years	None
Improved energy efficiency in production workshops Wash water reduced Utilities optimized Increased recovered waste Decreased waste per tonne produced	Waste recovery (energy from waste) Waste recycling (others) Water Electricity and Natural gas consumption
Decrease of hazardous substances released into water and air per tonne produced	CO ₂ emissions Emissions of volatile organic compounds Wastewater discharges Products with High COD released into water Suspended solids released into water Releases of nitrogen into water Dust emission Hazardous solid wastes emission Non-hazardous solid wastes emission
Complying with the applicable regulations on site	Regulatory compliance %
Reduce work accidents and Occupational illnesses	% of actions performed regarding occupational risk assessment
Knowledge increase and upgrade Corporate culture and staff commitment Compliance with instructions and procedures Keeping H&S procedures and documents up-to-date Avoiding further work accidents Avoiding further occupational diseases	Initial trainings progress % Performed retraining % Number of weekly safety updates published Planned audits performed % Number of unannounced audits Analyzed work accidents % Benign, without or with lost time injuries frequency rate Lost time injuries severity rate Number of occupational diseases reported PSR factors barometer

1/ OUR SOCIAL POLICY

1.0. POLICY

SNF men and women form a unique community in terms of their expertise, profession, nationality, role and personality.

SNF social policy is headed towards:

The individual development of its employees

Social development through actions focusing on collective working conditions improvement.

Each of its 6,200 employees (in approximately 80 countries), participate in SNF success, performance and development, as a world leader in its field.

SNF human resources policy offers its employees the opportunity to develop within an innovative and global group and aims to attract and retain the best talents. It implies creating and maintaining a social environment that offers good working conditions and fair treatment at all times.

This policy is based on individual development actions and constant improvement of collective working conditions.

Individual development includes recruitment, training and career opportunities. Its purpose is to strengthen the skills and know-how of each individual. To this end, the career management policy offers career paths that strengthen the expertise of employees and also that of SNF Group. The training policy complements these actions by providing the necessary and new theoretical knowledge for the development of the various professions.

Actions focused on collective working conditions are part of a logic of permanent progress. They include all actions to improve employee health and safety and working environment. They also strive to establish a high quality social climate in order to prevent conflicts through social dialogue. The diversity of origin, profile and training of SNF employees is also reinforced. Moreover, SNF ensures compliance with the constitutive texts, treaties, conventions, laws and regulations in force in the countries or territories where it operates.

1.1. EMPLOYMENT AND WORK ORGANIZATION

Through its human resources policy, SNF strives to offer its employees varied career prospects and opportunities, in particular by promoting transfers between subsidiaries and activities and by developing their skills.

The table below details for the last three years: the total workforce and its distribution by geographical area, gender and age, qualification, recruitment trends as well as the annual worked hours per employee.

It only relates to SNF group major companies. Each person attached to one of its companies by an employment contract (trainees and temporary workers excepted) is recorded in its workforce.

The recruitment policy aims to provide the group with the best skills to support its development. With a view to constantly enrich its recruitment, SNF maintains privileged relationships with the best training programs for all its businesses. To this end, SNF organizes site visits in connection with universities, target engineering schools and technical education institutions, with numerous opportunities for internships and apprenticeship contracts.

In all countries, SNF practices working hours that comply with legal and professional requirements. Employees work fulltime and to a lesser extent on a part-time basis, mainly at their request.

In the event of an increase in activity or particular difficulties, SNF may, in accordance with local legislation, use fixed-term contracts, overtime hours, subcontractors or temporary staff.

EMPLOYMENT

WORKFORCE PER COUNTRY	2016	2017	2018
SNF France	1,118	1,201	1,281
SNF China	752	781	799
SNF Korea	145	150	147
SNF India	132	139	143
SNF USA	1,469	1,775	1,936

WORKFORCE PER	2016		2017		2018	
GENDER	Women	Men	Women	Men	Women	Men
SNF France	107	1,011	116	1,085	133	1,148
SNF China	240	512	254	527	277	522
SNF Korea	11	134	12	138	12	135
SNF India	2	130	2	137	2	141
SNF USA	234	1,235	284	1,491	343	1,593

WORKFORCE PER	201	6	201	.7	2018			
SPC	Management	Employee	Management	Employee	Management	Employee		
SNF France	478	640	533	668	560	721		
SNF China	157	595	160	621	155	644		
SNF Korea	36	109	40	110	39	108		
SNF India	27	105	39	100	31	112		
SNF USA	489	980	567	1,208	606	1,330		

RECRUITEMENT PER COUNTRY	2016	2017	2018
SNF France	41	83	80
SNF China	53	29	18
SNF Korea	9	5	-3
SNF India	-4	7	4
SNF USA	-39	306	161

WORKFORCE PER AGE		1	Women	1		Men					Women			
AGE	<25	25-29	30-39	40-49	>50	<25	25-29	30-39	40-49	>50	<25	25-29	30-39	
SNF France	11	17	31	30	18	64	151	291	320	185	14	12	36	
SNF China	7	62	89	80	2	19	91	220	174	8	9	44	100	
SNF Korea	2	6	3	0	0	7	21	34	61	11	0	9	3	
SNF India	0	1	1	0	0	12	26	58	26	8	0	1	1	
SNF USA	2	23	77	59	73	25	132	306	330	442	15	46	88	

1.2. SOCIAL RELATIONS

SNF is committed to respecting the fundamental freedoms of its employees, such as the right of association and expression. It also protects the confidentiality of its employees' personal data and respects their privacy as defined in its code of conduct and business ethics.

Among the fundamental principles and rights at work, trade union rights and collective bargaining are a factor for social progress, which SNF promotes wherever it operates. Thus, in addition to complying with the legal and regulatory provisions of the countries in which it operates, SNF Group facilitates the creation of employee representation in order to implement any appropriate collective bargaining. In countries where legislation does not provide for representatives of employees, local bodies may be created.

As part of its social policy, SNF develops a permanent dialog with employee representatives at the level of all its constituent entities, while respecting local cultural and legislative specificities. SNF seeks a direct dialogue with its employees whether directly, through their representatives or in the form of internal surveys. Collective bargaining takes place in accordance with national specificities in terms of employee representation and the legal framework. SNF pursues a negotiation policy that enables all employees to improve their social status in line with the Group's development and the macro-economic context.

The main negotiating topics are related to overall remuneration (salaries, pension, health expenses, employee saving plans and other social benefits), job and skills management, quality of life at work, occupational safety and health.

Percentage of SNF employees in major subsidiaries benefiting from employee and/or trade union representation:

- France: 100%
- United States: 35.5%
- China: 98%
- Korea: 53%
- India: 0%

1.3. HEALTH AND SAFETY

In the conduct of its operations, SNF places safety and the protection of health and the environment at the core of its priorities. SNF group has thus committed itself to the RESPONSIBLE CARE approach, a voluntary approach set up by the chemical industry for the responsible management of activities and products, based on a dynamic of continuous progress.

SNF group places employee health and safety at the core of its values and considers that all accidents at work are preven-

table. In a preventive and continuous improvement approach, SNF is committed to ensuring good working conditions for every worker, in particular thanks to workplace analysis about health and safety risk as well as accident typology.

SNF has the same level of safety requirements for the personnel of external companies operating on its industrial sites as for its own employees. Thus, every one systematically participates in awareness-raising actions on the development of the safety culture and the Group's safety initiatives and programs.

2017						2018										
				Men					Women	•		Men				
40-49	>50	<25	25-29	30-39	40-49	>50	<25	25-29	30-39	40-49	>50	<25	25-29	30-39	40-49	>50
33	21	74	163	312	323	213	12	15	47	36	23	70	178	342	328	230
100	1	24	72	223	198	10	12	29	116	117	3	20	53	205	222	22
0	0	6	24	35	61	12	1	7	4	0	0	1	22	39	53	20
0	0	7	22	69	31	8	0	1	1	0	0	3	23	74	28	13
64	71	101	213	370	352	455	30	61	115	65	72	151	239	388	369	446

Moreover, the monitoring of SNF safety performance includes both employees and external companies' staff accident rate.

SNF has also made the prevention of hardship a priority with the implementation of a dedicated program on ergonomics at the workstation for several years. Well-being and quality of life at work also constitute an important axis for personnel health protection.

People's safety

The behavioral approach represents a major focus of risk control and prevention. The development of a safety culture that makes everyone aware of their responsibility and the importance of their behavior is at the heart of SNF approach, and relies on various tools.





1.4. TRAINING

SNF is committed to creating working conditions that promote personal and professional development and provides its employees with the appropriate tools to achieve this objective and improve their performance. The Group practices annual individual appraisal interviews at global scale, which provide an opportunity to set the year's objectives and to reflect with the hierarchy on the wishes of each employee regarding his or her career development. The exchange between the employees and the managers also serves to review the trainings completed and, on the basis of this analysis, to define the training courses for the coming year to complete the employee's knowledge and skills. All categories of employees benefit from it. The talks with career managers provide an opportunity to review the employee's career path, his or her expectations and SNF professions in which he or she could develop. Vocational training concerns all employees, regardless of their profession, level of responsibility and age. It makes it possible to acquire or develop the skills necessary for the position, to facilitate the evolution towards a new position and to meet the company's expectations in terms of technical expertise or managerial practice. As a result, all employees have access to training for the duration of their professional career. Specific professional training programs are designed for employees with the aim of enhancing their skills in the areas of management, health, safety, the environment and SNF businesses.

1.5. CAREER MANAGEMENT

Career management is the main focus of SNF human resources development. It allows employees to diversify their experience as part of their professional career and thus ensure a constant enrichment of their skills, which is essential to the group's development.

Career management thus fulfills a dual mission:

• It ensures that SNF has the skills it needs today and in the medium term to carry out its development successfully

• It supports the employees in building their professional career; this involves enabling them to increase their skills and implement their projects according to opportunities and possibilities within SNF Group.

SNF career management policy is adapted to each of the Group's entities in accordance with their own standards and needs.

These principles are as follows:

- Give each employee the means to be the pilot of his career and provide him with the necessary support at each step
- Implement a proactive internal promotion policy
- Identify and develop potential in order to promote responsibility and professional development
- Promote functional mobility
- Enable everyone to progress and enrich their experience and their knowledge.

1.6. LISTENING AND DIALOG

SNF strives to develop listening and consultation with employees, whether directly in the form of internal surveys or through employee representatives.

In addition, two collective agreements have been concluded as part of the contractual policy, mainly in France. Outside of France, collective bargaining takes place in accordance with national specificities in terms of staff representation and the legal framework. SNF pursues a negotiation policy that enables the improvement of the social status of employees in line with the Group's development and the macro-economic context.

The main negotiating topics in 2018 are related to overall remuneration (salaries, pension, health expenses, employee saving plans and other social benefits), job and skills management, quality of life at work, occupational safety and health, equality and diversity as well as social dialog.

1.7. DIVERSITY AND EQUALITY OF OPPORTUNITIES, EQUAL TREATMENT

As part of its policy of non-discrimination and the promotion of professional equality and diversity, SNF constantly fights against all forms of discrimination and encourages diversity, which is an asset for its worldwide activity. Employees are solely recruited on the basis of SNF group needs and their own qualities, as defined in its code of conduct and business ethics.

Professional equality, along with the prevention of discrimination in general, is a strong focus of the Group's human resources policy. SNF therefore pays particular attention to ensuring professional equality between men and women, promoting the integration of employees with disabilities and respecting the principle of non-discrimination on grounds of age and nationality.

For this reason, SNF relies on job definitions to preserve equality and business consistency, as well as a recruitment policy based on the unique criterion of the applicant's competence for the position.

Diversity is very important for SNF group in terms of team performance and the attraction of talent. To strengthen its image, SNF group has two objectives in this area: increasing the proportion of women and recruiting employees of non-French nationality in the managerial and executives framework.

Consequently, SNF Group is committed to developing local skills and know-how and promoting local employment at all levels, including management teams.

SNF group ensures that women benefit from the same career development opportunities as their male counterparts, and also promotes a policy of professional and wage equality. To this end, SNF has set itself the mission of:

- Strengthening the non-discrimination principle in access to employment
- Ensuring equal pay principle
- Promoting and facilitating professional careers
- Promoting women to senior management level.

In France, an agreement on professional equality between men and women and diversity was concluded on 7 December 2017 for the year 2018 with a revision in 2019; this agreement mainly concerns recruitment and integration, remuneration and promotion, access to training and balance between professional and personal life. SNF continues to strengthen its policy for women recruitment and promotion.

In the United States, SNF Group strives to offer the same career opportunities to its employees, based on merit, quality and skills. This policy applies to recruitment, job assignments and any other events affecting the employment contract.

In China, SNF group ensures that there is no discrimination based on ethnic origin, gender, age or nationality. In the event of discrimination or harassment, human resources have provided employees with the means of alerting and processing any complaint immediately. In Jiangsu province, a special regulation on the protection of women at work is applied.

In Korea, on the basis of the legislation applicable to companies, SNF group prohibits any discrimination between employees, regardless of their status or potential incapacity. Training is also regularly organized, particularly in connection with the prevention of risks of harassment in the workplace.

In India, SNF group is committed to strict compliance with the applicable anti-discrimination laws and has implemented a non-discrimination policy in its administration manual to ensure that employees have the same professional opportunities based on merit, qualifications and skills.

2/ OUR ENVIRONMENTAL POLICY

2.1. GENERAL ENVIRONMENTAL POLICY

SNF Group's products help to preserve natural resources. Similarly, our manufacturing processes are designed to minimize the environmental impact of our activity. Our main monomer is thus produced enzymatically at room temperature and under atmospheric pressure. Given the large volumes involved, this biological catalysis process makes SNF one of the pioneers in soft chemistry. On all its industrial sites, SNF constantly strives to reduce its environmental footprint. As a result, our unit consumption of water, gas and electricity steadily decreases in relation to the volumes produced. Thanks to rigorous monitoring of their discharges, SNF industrial sites implement relevant actions.

Most of our industrial sites are ISO 14001 certified.

2.2. POLLUTION AND WASTE MANAGEMENT

The Group has an active policy of controlling and reducing the impact of its activities on emissions into the air, discharges into water and waste production.

In this context, substance releases are identified and quantified by type of discharge, in order to implement appropriate measures to control them in compliance with regulations in the countries where SNF operates. The reduction of emissions from its industrial sites thus implies that consumption of raw materials, energy and natural resources be optimized, thereby reducing waste and the production of waste. It also involves improvements in production units and process modifications, thanks to new know-how and patents.

2.2.1. AIR EMISSIONS

SNF strives to limit as much as possible its emissions of the most polluting compounds, namely greenhouse gases (GHGs), volatile organic compounds (VOCs) and substances responsible for acidifying the air (nitrogen oxide and sulfur dioxide) as well as dust.

For each of the 2018, 2017, 2016 fiscal years, the quantified direct GHG emissions are presented in the graph below. To reduce its impact on global warming, SNF group has undertaken a series of actions, including the implementation of after treatment devices for its emissions in most of its plants, the setup of systematic research programs on refrigeration units and the replacement of boilers with more efficient equipment.



Volatile Organic Compounds (VOC) Emissions

SNF plants have taken various actions to reduce their VOC emissions by:

• Collecting and treating effluents containing it (the most commonly used technique is based on the installation of a thermal oxidizer and vents washing)

• Regular leak detection campaigns and the removal of identified emissions. SNF Group also reduces its emissions of substances contributing to air acidification by:

- Using low or very low sulfur fuels or natural gas instead of fuel oil in boilers
- Implementing new burner technologies containing little nitrogen oxide.



2.2.2. DISCHARGES INTO WATER

Reducing its discharges into water is an important part of SNF environmental objectives, particularly for effluents with high chemical oxygen demand (COD) and suspended solids (SS) discharges.

SNF Group constantly seeks water use optimization and the efficiency of its treatment, from the initial design to the daily operation of the facilities, thanks to cutting-edge technologies and the development of innovative solutions.

It also ensures compliance with applicable laws and regulations or the consideration of evolution projects such as BREF (Best Available Techniques Reference) in Europe and CWW (Common Waste Water), as well as research into the implementation of effluent pre-treatment to reduce the COD load sent to the wastewater treatment plants.

SNF Group limits use of chemical treatments in refrigeration towers by favoring a treatment with ultraviolet rays and hydrogen peroxide at most of its industrial sites.







2.2.3. WASTE, RECYCLING AND REUSE

Waste production results from SNF Group industrial activities; it is nevertheless controlled at all stages of its activity and when possible, recovery or recycling channels are sought.

SNF makes an effort:

• To reduce waste at source, by designing products and processes that generate as little waste as possible

• To recycle its waste into a product line in compliance with **REACH** regulation

120 100 100 80 60 55 40 20 0 Evolution 2018 vs Evolution 2015 vs Evolution 2016 vs Evolution 2017 vs 2015 2015 2015 2015

Dust



Non-Hazardous Waste 120 100



Hazardous Waste

2.2.4. NUISANCES, NOISE AND OTHERS

The priority of SNF group's environmental policy is to consider the nuisances related to its activities towards local residents living near its industrial sites.

Every year, these disturbances are reduced, in particular through filter improvements.

Improvements are also constantly made on noise protection devices, such as low noise emission towers or silencers on air compressors and refrigeration units.

In order to reduce visual pollution (smoke) fuel oil has been replaced in all our sites by gas boilers.

SNF group has also set up real-time communication with its stakeholders on any event having a noise, visual or olfactory impact outside its industrial sites. Moreover, on most of SNF sites, complaints from local residents are taken into account, studied and action plans are put in place in liaison with local authorities.

• To optimize waste recycling into energy, in particular as an alternative fuel in boilers, instead of traditional fuels

- To recycle solvent and optimize cleaning cycles
- To install filters to reduce sludge volumes.

2.2.5. SUSTAINABLE USE OF RESOURCES

Reducing the environmental impact of SNF Group's industrial sites consists in optimizing the use of raw materials, energy and natural resources such as water. New manufacturing units are designed to integrate the environmental footprint in the choice of processes and equipment.

In addition, SNF pays particular attention to the operating conditions of its products and invests in development and

maintenance, in order to reduce the consumption of water, energy resources and raw materials in its industrial sites.

The mining sector is an important activity of SNF group. Mineral extraction sites often operate in remote locations, at altitude or in desert areas, and therefore poor in water; SNF products reduce the mining industry's water needs, optimize the extraction process and limit its environmental impact.

2.2.5.1. RAW MATERIALS CONSUMPTION

SNF wishes to contribute to an optimized consumption of non-renewable raw materials used in its manufacturing processes. Thus, non-compliant products are recycled in other



production to ensure that a waste itself becomes the raw material for another manufacturing.



2.2.5.2. WATER CONSUMPTION

SNF Group uses water for its industrial activities, in particular in its reaction-based manufacturing processes, the cooling of production facilities, the washing of products and equipment and the production of steam. Today, to produce one tonne of finished products, water requirements are 20% lower than they were ten years ago. In particular, tank washing has been optimized by further recycling the water and developing new washing methods (using washing nozzles reduces water requirements by 75% for this application).

The group wishes to contribute to optimizing the consumption of fresh water from the urban network; SNF has therefore changed its production practices to reduce water consumption and has developed closed networks through recovery. The Group constantly monitors consumption, installing flow meters, detecting leaks, upgrading fire circuits, recovering rainwater and recycling water from boiler washings or condensates.

More than 80% of the water used is discharged into the natural environment and most of SNF Group's industrial sites are located along rivers rather than in water stress zones.



2.2.5.3. ENERGY CONSUMPTION

SNF uses various energy sources in the context of its industrial activities. Gas accounts for 75% of the Group's energy consumption, mainly on sites that produce powders, the rest is electricity consumption. SNF Group continuously seeks to optimize energy consumption and costs, from the design and purchase of energy-efficient equipment, to energy management and compliance with laws regulations and other energy efficiency requirements.



In particular, SNF has initiated the replacement of conventional lighting with LED lighting.

In addition to the energy aspects of this program, SNF Group also aims at strengthening the competitiveness of its industrial sites through these savings.

Electricity Consumption



2.2.5.4. OPTIMAL USE OF INDUSTRIAL SOILS

SNF strives to limit its footprint on soils by optimizing industrial surfaces to preserve agricultural, urban and forest areas.

The Group ensures the responsible management of soil and groundwater pollution resulting from historical contaminations on operating sites that have been sold or taken over. Thus, when the activity of the French subsidiary was transferred from Saint-Étienne to Andrézieux-Bouthéon, SNF completely cleaned up the site of pollution caused by the previous owner, and not by SNF group activities.

2.2.5.5. CLIMATE CHANGE

The evolution of the world population, the development of urbanization, rising living standards, including the rising number of cars and air travel and the industrial acceleration of emerging countries, are all contributing to global warming and climate change. Fighting against global warming is thus a major issue that mobilizes the entire international community.

SNF endeavors to actively participate in these efforts, replacing travel by videoconferencing systems, in particular for the holding of Boards of Directors. In addition, SNF Group has chosen to produce in countries where its markets are located in order to limit pollution caused by transport, especially maritime transport (most ships using heavy fuel oil).

To fight global warming, SNF Group has created a range of super-absorbent polyacrylamides that can retain up to 300 times their weight in water and thus, after being buried in the ground by ploughing, constitute a water reserve like a sponge. These products enable dry regions to stabilize their agricultural production and provide a solution to the future challenge of feeding nine billion people in 2050.

2.2.5.6. DEVELOPMENT AND PROTECTION OF BIODIVERSITY

For SNF, biodiversity protection consists in protecting fauna, flora and all plant and animal species that could be impacted by emissions related to its activities.

The actions implemented include reducing discharges from each site into water, subsoil and air. SNF Group therefore carries out a periodic analysis of the sites to identify their impacts on the environment and on all animal and plant species. Moreover, from the design stage, new manufacturing units integrate environmental impact into the choice of processes and equipment, optimizing capacity over the energy required to produce.

Although SNF has limited land tenure, it takes various actions to contribute on its own scale to the development of biodiversity by promoting the planting (greening) and development of local species in its industrial sites unoccupied land. For example, the expansion of Andrézieux-Bouthéon industrial site has given rise to major compensatory measures, namely a fifty-year long-term lease over a hundred hectares, all managed by Rhône-Alpes Conservatory of natural areas (CNRA) for the protection of fauna and flora, at a cost of €1,200,000, to be borne by SNF Group. In addition, SNF acquired eighty hectares of wooded area, which it sold for a symbolic franc to the municipality of Andrézieux-Bouthéon in return for amending the local urban planning program to allow a twenty hectares site extension. SNF Group has thus preserved the plant and animal ecosystem near the site.

RATIO BY TONNES PRODUCED (BASE 100 INDEX 2015)



3/ OUR CORPORATE SOCIAL RESPONSIBILITY (CSR)

3.1. CSR COMMITMENTS TOWARDS SUSTAINABLE DEVELOPMENT

Reducing the environmental footprint of the Group's activities is a major commitment. To achieve this, SNF has changed its industrial practices with the aim of limiting its emissions and optimizing its consumption. SNF Group relies on a Sustainable Development Department, reporting directly to the Executive Committee, which includes the Product Safety and Environment Department as well as Sustainable Development.

The increase in the world population and its standard of living, on the other hand, is leading to increased consumption and therefore a scarcity of the planet's raw materials, including water.

SNF main activity is water treatment. Population growth, increasing urbanization and massive irrigation have a strong impact on water demand and affect access to drinking water. Access to quality water for the world's population is a major challenge of this century. A leader in the manufacturing and application of water-soluble polymers, SNF Group has developed a range of more than a thousand products that help to preserve our natural resources, promote recycling and improve the efficiency of industrial processes. The polymers produced by SNF Group have several complementary functions: flocculation to separate solids and liquids, viscosification and friction reduction contributing to significant energy gains.

Our products are used in all areas where water is present, namely drinking water production, wastewater treatment, sludge dewatering, oil and gas extraction, mining, agriculture, paper, textile and cosmetic products. SNF has put chemistry at the service of nature, because its products play an essential role in preserving our environment and in ensuring access to energy. In this way, they contribute to carrying out and achieving our ambition: to improve the daily lives of everyone, everywhere in the world.

Thanks to its research and development units and the numerous patents filed, SNF Group constantly improves its performance with the idea of producing more and consuming less. In 2018, the group filed around 100 patents. About forty patent projects are in progress, several of which are being drafted. Most of the research and development is carried out in France at the Andrézieux site.

3.2. PURCHASES, SUPPLIERS AND SUBCONTRACTING

SNF Group takes into account social, environmental and CSR challenges in its purchasing policy in order to build lasting, balanced, sustainable and trust-based relationships with its suppliers and subcontractors; these relationships must develop in the clarity, respect and good faith of the negotiated contractual terms, including those relating to intellectual property. SNF Group's responsible purchasing approach is guided by the ethical principles of its Code of Conduct.

SNF uses subcontracting for the manufacturing of certain finished products on behalf of the Group and mainly for the maintenance operations that are covered by contracts. As part of the SNF Group's purchasing policy, subcontractors are subject to the Supplier Code of Conduct and Purchasing General Terms and Conditions.

3.3. COMPLIANCE AND ETHICS

SNF Group has a Code of Business Conduct and Ethics. It complies with all international agreements and applicable laws, in particular in France the so-called «Sapin2» law. The Code of Conduct includes the following key points:

No employee shall directly or indirectly offer, provide or accept any undue advantage, whether pecuniary or of any other nature, designed to facilitate or obtain a business relationship, in particular with persons holding public authority, business intermediaries, customers' employees and political parties

• All employees must comply with the regulations on the import and export of goods and services

• All employees must scrupulously comply with the competition law rules in all countries where SNF operates.

SNF recognizes the importance of the protection of human rights both in the conduct of its activities and in its relations with third parties. It is committed to meeting the standards and principal international frameworks, namely: the International Bill of Human Rights, the principles of the International Labor Declaration (ILO), the Organization for Economic Cooperation and Development (OECD) general guidelines for multinational companies, the ten principles of the United Nations Global Pact, as well as the «Responsible Care» program.

3.4. A CITIZEN AND PHILANTHROPIST CORPORATION

In an increasingly connected environment, SNF Group, as a responsible economic player, strives to develop close links with all its stakeholders. Throughout the world, the Group uses local communication to build trust and quality relationships with its immediate environment. Thanks to this dialog, expectations of the local population are better understood and better integrated into SNF Group's strategy. Going beyond the strict regulatory framework, this pioneering approach to local relations actively develops dialog and exchange at the local level in all countries where SNF Group is present.

To improve the image of the chemical industry and reinforce the social acceptability of its plants, SNF Group:

Listens to understand the expectations. The identification of the concerns of local residents is essential to better respond to their possible concerns about industrial or chemical risks
Dialogs and provides information on the Group's activities. SNF develops exchanges on the nature of the activities, products, manufacturing processes, life and projects of its sites
Prevents risks and constantly progresses. SNF Group is committed to developing a culture of risk prevention, with simulations of incidents or accidents with the local health and safety teams.

As far as possible, SNF opens its doors to the public, in particular to explain the solutions that chemistry can bring to everyday life.

Throughout the world, SNF Group makes strengthening relations with the world of education a priority; it thus carries out actions toward young people, in collaboration with the educational community to promote scientific culture and the professions of chemistry. The group regularly welcomes interns under employment-study contracts and doctoral candidates.

In France, SNF participates in the financing of a green-way in Saint Bonnet les Oules to facilitate the safe movement of pedestrians and cyclists.

SNF group also subsidizes:

• Educational institutions, in particular the Catholic University of Lyon and the Jean Monnet University of Saint-Étienne

- Sports associations
- Charities.

In the United States, SNF group contributes to local community programs such as:

- Youth sports programs for young people
- Historical heritage Celebrations
- Educational assistance programs.

SNF group's US sites make direct contributions to the national cancer research «Relay for Life» and participate in fund raising events. They also fund universities to support research and development in applications related to water treatment and engineering studies.

In China, SNF Group is involved in the financing of Guangdong South China University and provides financial support to villages affected by poverty.

METHODOLOGICAL NOTE

The implementation of indicators by SNF group makes it possible to monitor emissions and consumption relevant to its business in relation to the regulatory requirements set out in Articles R.225-105 and R.225-105-1 of the French Commercial Code; they also oversee the evolution of emissions and consumption and the results of the policies implemented.

SNF group has chosen to publish ratios on a consolidated basis, and not by geographical area.

For the purpose of calculating the ratios, SNF Group uses the regulatory definition in force in each country in which these data are collected.

SNF considers that the trend in the ratios, currently published on a consolidated basis, gives a true and fair view of the evolution of these indicators at Group level.

As the weight between our plants in the USA, France and other countries varies only slightly over the period, even though the definition may not be exactly similar from one region to another, it would not question the trend in the ratio over the same period, especially since most of these ratios are published in a base 100 index.

ENVIRONMENTAL INDICATORS

CO, EMISSIONS

France: Annual emissions are calculated by taking into account the national emission factors listed in the table in the Annex to the Order of 31 October 2012 on the verification and quantification of emissions reported under the greenhouse gas emission trading scheme.

USA: The emission factors used are based on the US EPA 40 CFR 98 regulation.

VOLATILE ORGANIC COMPOUNDS (VOC) EMISSIONS

France: VOC emissions are calculated/measured in accordance with the prefectorial decree of authorization of activities AP No. 88-DDPP-19, on the basis of the definition of VOCs determined by Annex III of the decree of 2 February 1998.

The frequency of measurement is biannual. An average is then calculated for the year.

USA: VOC emissions are calculated / measured according to US EPA 40 CFR 51.100(s) federal regulations. The emission factors used are derived from EPA regulations.

The frequency of measurement is annual.

HAZARDOUS AND NON-HAZARDOUS WASTES

France: Hazardous wastes are defined by Article R. 541-8 of the Environmental Code. They are reported by an asterisk in the list of wastes mentioned in article R. 541-7.

An annual declaration of wastes is carried out on the online declaration site of the Ministry in charge of conventional installations as defined by the Decree of 31 January 2008. **USA:** The reporting of hazardous wastes in the United States is conducted in accordance with US EPA 40 CFR 262 on a bi-annual or annual basis.

There is no obligation to report non-hazardous wastes. The data provided for audit purposes do not include plant wastes, metal wastes or universal wastes (batteries, light bulbs, etc.).

RECYCLED WASTE (ENERGY AND OTHER)

The calculation is carried out on a spontaneous basis, since SNF group greatly values waste recovery.

The importance of the factors used varies according to the sites typology of production.

France : The classification into recovery categories is based on Annexes II-A and II-B of the Directive no. 75/442/EEC of the Council of 15 July 1975, which Article R.541-7 of the Environmental Code refers to. **USA**: The wastes recovered into energy include the wastes sent off-site for incineration with recovery of energy and combination (mix) of fuels with recovery of energy. Other recovered wastes are those from which resources are derived (such as solvent recycling).

WATER CONSUMPTION

These consumptions are established on the basis of meter readings made by the suppliers for each site.

CHEMICAL OXYGEN DEMAND

France : The calculation methods and factors are based on the French NF T90-101 standard of February 2001.

SOCIAL INDICATORS

TOTAL WORKFORCE

The total workforce is the number of employees as of December 31 of each year.

MOVEMENTS OF WORKFORCE (STAFF)

Staff movements are calculated on the basis of staff entries and exits for the calendar year.

USA: Staff movements in the United States exclude temporary workers and trainees, and include staff in Canada, Jamaica and Colombia.

USA: The count includes the trainees as well as staff in

Canada, Jamaica and Colombia.

INDICATORS RELATED TO HEALTH AND SAFETY

NUMBER OF DAYS OFF-WORK

France : Days off-work are counted in calendar days.

USA: Days off-work calculation is determined by the federal law (Occupational Safety & Health Act).

USA : Measurements are made on the basis of the current standard.

USA: The 2018 data is based on estimates of past years due to

damage on a meter.



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