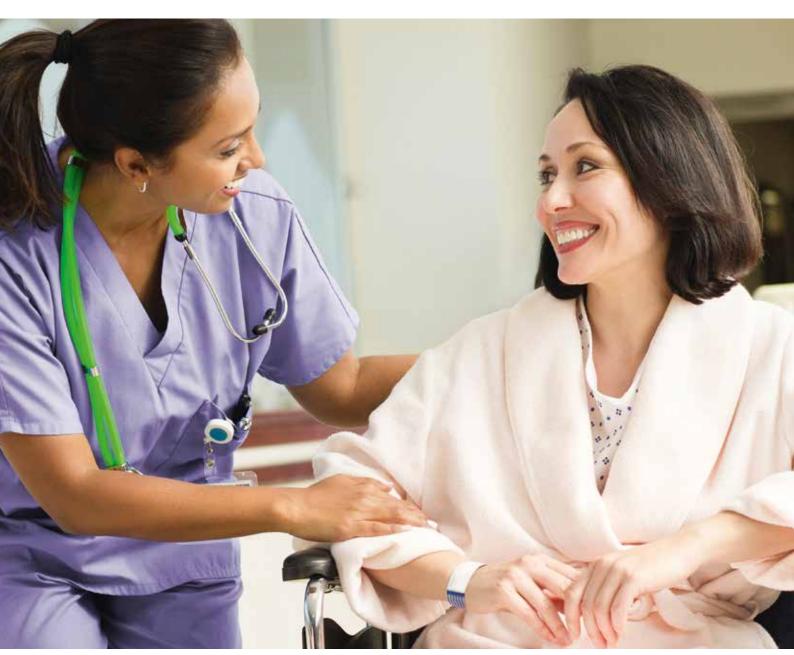
# CORPORATE SOCIAL RESPONSIBILITY

Chapter 4 of the 2016 Document de référence\*



(\*) This is a free translation into English of the "Chapitre 4. Responsabilité sociale, environnementale et sociétale" of our 2016 Document de référence issued in French and is provided solely for the convenience of English-speaking readers.



# Corporate Social Responsibility



4.1.	SOCIAL INFORMATION	2
4.1.1. 4.1.2.	Employment Organization of work	2 11
4.1.3. 4.1.4. 4.1.5.	Social dialogue Training and career development Equal treatment	12 13 16
4.1.6.	Promotion of and compliance with International Labour Organization (ILO) Conventions	18
4.2.	INFORMATION ON HEALTH, SAFETY AND THE ENVIRONMENT	19
4.2.1. 4.2.2. 4.2.3.	General policy on health, safety and the environment Information on health and safety in the workplace Environmental information	19 22 27
4.3.	INFORMATION ON EXTERNAL COMMITMENTS TO PROMOTE SUSTAINABILITY	37
4.3.1. 4.3.2.	Local, economic and social impact of Sanofi's activities Relations with stakeholders	37 39
4.3.3. 4.3.4.	Subcontracting and suppliers Fair business practices	44 45
4.3.5.	Other initiatives to support human rights	51
4.4.	HOW CORPORATE SOCIAL RESPONSIBILITY INFORMATION IS	<b>5</b> 0
	REPORTED: METHODOLOGICAL NOTE	53
4.5.	REPORT BY INDEPENDENT THIRD PARTY ON THE CONSOLIDATED HUMAN RESOURCES, ENVIRONMENTAL AND SOCIAL INFORMATION	
	INCLUDED IN THE MANAGEMENT REPORT	57

This chapter forms an integral part of the French-language Rapport de Gestion (Management Report), in accordance with Articles L. 225-102-1 and R. 225-104 to R. 225-105-2 of the French Commercial Code relating to companies' obligations of transparency with regard to corporate social responsibility. It takes account of the implementing decree of Articles 70 and 173 of French law No. 2015-992 of August 17, 2015 on energy transition towards green growth, which specifies disclosures to be made about significant sources of greenhouse gas emissions and the circular economy, including measures to counter food waste. This chapter has been verified by an independent third party that has been accredited by the French Accreditation Committee (COFRAC) and belongs to the network of one of our statutory auditors. Their report, which includes an attestation of disclosure and an opinion on the fair presentation of the information in this chapter, is presented in "Section 4.5. Report by independent third party on the consolidated human resources, environmental and social information included in the management report".

The information provided in this chapter is organized in accordance with implementing decree No. 2012-557, except that information on health and safety in the workplace is included in the "environment" section because health, safety and environmental issues share a common governance system at Sanofi (for more information, please refer to the concordance table at the end of this report).

Our Corporate Social Responsibility (CSR) strategy focuses on three key pillars: Public Health and Access to Healthcare, Communities, and Healthy Planet. This strategy is in line with our overall strategy (see "Item 4.B -Overview - B.1 Strategy" of our 2016 Annual Report on Form 20-F) and places the patient at the heart of our approach.

Our CSR reporting complies with the French "Grenelle II" legislation and with Global Reporting Initiative guidelines. Sanofi is also a signatory of the United Nations Global Compact. Each year, we report on our progress in upholding the 10 principles established by the Global Compact. In 2016, our "Communication on Progress" for 2015 retained its Global Compact Advanced Level status, accompanied by an attestation of external assessment by the peer review process.

In addition to the information available in this chapter, our CSR commitments, priorities, goals and initiatives are described in our annual CSR report and related resources (factsheets, brochures, videos, etc.) available on our website at http://en.sanofi.com/csr/csr.aspx.

# 4.1. Social information

Sanofi's Human Resources policy focuses on five strategic pillars:

- building the next generation of leaders at Sanofi (see Section "4.1.4. Training and career development");
- developing our employees' key competencies and skills in order to facilitate the success of our diversified activities (see Section "4.1.4. Training and career development");
- · improving our organizational efficiency in a changing and increasingly competitive environment (see Section "4.1.1 Employment 1.B New hires and departures");
- putting individual and collective performance center stage and bringing goals, results and compensation into alignment (see Section "4.1.1 Employment 1.C Compensation"); and
- · embedding the Sanofi culture across our entire workforce to ensure that our values, attitudes and principles are reflected in what we do, while respecting the diversity and heritage of our different activities (see Sections "4.1.3 Employee relations", "4.1.5 Equal treatment" and "4.1.6 Promotion of and compliance with International Labour Organization (ILO) Conventions").

The social information provided below is based on the consolidation of worldwide data from all fully consolidated subsidiaries of Sanofi (see Section "4.4. How corporate social responsibility information is reported: Methodological note"). For several years, certain indicators have been disclosed for a representative sample of five countries (Germany, Brazil, China, the United States and France), which together account for nearly 59.1% of the Company's employees.

The exchange of Sanofi's Animal Health business (Merial) for Boehringer Ingelheim's Consumer Healthcare business was completed on January 1, 2017. Consequently, Merial data are still included in the 2016 data, but have been separately identified where possible.

#### 4.1.1. Employment

# 1.A. Total workforce

The total workforce contributing to Sanofi's operations includes employees under contract (all employees who have a contract with Sanofi, including interns and apprentices with contracts), as well as temporary staff and third-party outside sales forces. As of December 31, 2016, the total workforce was 121,789 people, compared with 123,499 as of December 31, 2015 (-1.4%); these figures include Merial.

# Distribution of employees under contract by activity and region

Employees under contract	Worldwide		Europe <sup>(b)</sup>		United States		Emerging markets <sup>(c)</sup>		Other countries(d)	
as of December 31 <sup>(a)</sup>	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Employees under contract	113,816	115,631	49,865	50,012	16,819	17,098	41,122	42,172	6,010	6,349
%	100%	100%	43.8%	43.2%	14.8%	14.8%	36.1%	36.5%	5.3%	5.5%
Distribution by activity										
Pharmaceuticals	80.4%	81.2%	80.7%	81.3%	72.2%	73.0%	85.6%	86.1%	64.9%	68.9%
Vaccines	13.5%	13.1%	13.4%	13.3%	18.1%	17.9%	10.0%	9.7%	25.7%	22.8%
Animal Health	6.1%	5.7%	5.9%	5.4%	9.7%	9.1%	4.4%	4.2%	9.4%	8.3%

<sup>(</sup>a) Animal Health is included in the distribution of employees under contract by activity and region. Excluding Animal Health, total employees under contract were 106,859 in 2016 and 109,089 in 2015.

As of December 31, 2016, Sanofi had a total of 113,816 employees under contract, down 1.6% year-on-year.

Pharmaceuticals, Human Vaccines (Vaccines) and Animal Health activities accounted for 80.4%, 13.5% and 6.1% of employees under contract, respectively.

The three countries where Sanofi has the most employees under contract are France (27,465 employees, 24.1% of our total employees under contract), the United States (16,819 employees, 14.8%) and Germany (9,095 employees, 8%).

Germany is closely followed by China, with 9,008 employees (7.9%). We are continuing to expand our presence throughout the rest of the world, particularly in emerging markets: China, Brazil and India collectively account for 19,439 employees, or 17.1% of the worldwide total.

Our workforce fell slightly year-on-year in all regions, by 0.1% in Europe, 0.3% in the United States, 0.9% in emerging markets, and 0.3% in other countries.

#### Distribution of employees under contract by function and region

	Worldwide Europe <sup>(b)</sup>		United States		Emerging markets <sup>(c)</sup>		Other countries <sup>(d)</sup>			
Distribution by function(a)	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Sales forces	28.4%	29.5%	10.6%	11.6%	25.4%	27.6%	50.5%	50.4%	32.9%	37.5%
Research and development	14.1%	14.1%	19.9%	19.7%	19.6%	19.9%	4.7%	5.0%	15.0%	14.7%
Production	39.5%	39.6%	53.3%	53.3%	33.4%	33.3%	26.7%	27.4%	30.7%	28.4%
Marketing and support functions	18.0%	16.8%	16.2%	15.4%	21.6%	19.2%	18.1%	17.2%	21.4%	19.4%
Total employees under contract as of December 31	113,816	115,631	49,865	50,012	16,819	17,098	41,122	42,172	6,010	6,349

<sup>(</sup>a) Animal Health is included in the distribution of employees under contract by function and region. Excluding Animal Health, total employees under contract were 106,859 in 2016 and 109,089 in 2015.

As of December 31, 2016, Sales Forces, Research and Development, Production, and Marketing and Support Functions accounted for 28.4%, 14.1%, 39.5% and 18.0% of our total employees under contract, respectively.

Employee numbers in Research and Development and Production were stable year-on-year in 2016. Sales Forces saw a decline in employee numbers.

Marketing and Support Functions reported an increase in headcount across all regions.

<sup>(</sup>b) Western Europe and Eastern Europe excluding Eurasia (Russia, Ukraine, Georgia, Belarus, Armenia and Turkey).

<sup>(</sup>c) World excluding United States, Canada, Western and Eastern Europe (apart from Eurasia), Japan, South Korea, Australia, New Zealand and Puerto Rico.

<sup>(</sup>d) Japan, South Korea, Canada, Australia, New Zealand and Puerto Rico.

<sup>(</sup>b) Western Europe and Eastern Europe excluding Eurasia (Russia, Ukraine, Georgia, Belarus, Armenia and Turkey).

<sup>(</sup>c) World excluding United States, Canada, Western and Eastern Europe (apart from Eurasia), Japan, South Korea, Australia, New Zealand and Puerto Rico. (d) Japan, South Korea, Canada, Australia, New Zealand and Puerto Rico.

# Distribution of employees under contract by gender

	Worldwide		Euro	Europe <sup>(b)</sup>		United States		Emerging markets <sup>(c)</sup>		untries <sup>(d)</sup>
Distribution by gender <sup>(a)</sup>	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Women	45.8%	45.5%	48.5%	48.4%	50.0%	49.3%	41.2%	41.1%	43.0%	41.4%
Men	54.2%	54.5%	51.5%	51.6%	50.0%	50.7%	58.8%	58.9%	57.0%	58.6%

- (a) Animal Health is included in the distribution of employees under contract by gender.
- (b) Western Europe and Eastern Europe excluding Eurasia (Russia, Ukraine, Georgia, Belarus, Armenia and Turkey).
- (c) World excluding United States, Canada, Western and Eastern Europe (apart from Eurasia), Japan, South Korea, Australia, New Zealand and Puerto Rico.
- (d) Japan. South Korea. Canada. Australia. New Zealand and Puerto Rico.

The overall percentage of female employees within the Company (45.8%) rose slightly compared with 2015 (45.5%).

The percentage of female managers (whose role involves supervising direct subordinates) was 41.4% in 2016, compared with 40.3% in 2015 (see Section "4.1.5. Equal treatment").

#### Distribution of employees under contract by age bracket

Distribution by age bracket <sup>(a)</sup>		Worldwide		
(employees under contract)	2016	2015		
Under 21 years	0.3%	0.3%		
21 to 30 years	17.7%	18.4%		
31 to 40 years	31.8%	32.4%		
41 to 50 years	29.7%	29.5%		
51 to 60 years	18.6%	17.6%		
Over 60 years	2.0%	1.8%		

(a) Animal Health is included in the distribution of employees under contract by age bracket.

The average age of our employees (41 years and 4 months) was six months higher than in 2015 (40 years and 10 months). A total of 74.0% of our employees are aged between 26 and 50, more than in 2015 (73.8%). In 2016,

17.7% of our employees were aged between 21 and 30, and 12.5% between 26 and 30. 49.8% of our employees were aged 40 or under, fewer than in 2015 (51.1%); 20.6% were aged over 50, more than in 2015 (19.4%).

# Worldwide distribution of employees under contract by length of service

ears of service <sup>(a)</sup>		Worldwide		
(employees under contract)	2016	2015		
> 35	1.6%	1.4%		
31-35	3.0%	2.9%		
26-30	5.1%	4.8%		
21-25	6.4%	6.7%		
16-20	9.9%	9.0%		
11-15	14.6%	14.0%		
6-10	18.2%	20.1%		
1-5	30.9%	29.3%		
<1	10.2%	11.8%		

(a) Animal Health is included in the distribution of employees under contract by length of service.

The average length of service is 10 years and 5 months, higher than in 2015 (10 years and 3 months).

The average length of service of employees is higher in Europe (14 years and 4 months) than in other countries (10 years and 9 months), the United States (8 years and 11 months) and Emerging Markets (6 years and 4 months).

The average length of service of female employees (10 years and 4 months) is three months lower than that of male employees (10 years and 7 months). 59.3% of employees have ten years' service or less, compared with 61.2% in 2015.

# 1.B. New hires and departures

#### New hires and departures by region(a)

	World	Worldwide Europe <sup>(b)</sup>		United	States	Emerging markets(c)		Other countries(d)		
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Total number of new hires	13,521	15,856	4,439	5,829	1,661	2,215	6,824	7,213	597	599
Total number of departures	15,128	14,070	4,558	4,938	2,127	1,687	7,528	6,805	915	640

- (a) Data on movements (new hires and departures) cover more than 98.7% of the reporting scope, but do not include (i) companies that were consolidated for the first time or acquired during the year or (ii) movements relating to companies not included in the Convergence platform, for which data on new hires and departures are not collected. In addition, the data do not include in-house transfers. However, Animal Health is included in the data for new hires and
- (b) Western Europe and Eastern Europe excluding Eurasia (Russia, Ukraine, Georgia, Belarus, Armenia and Turkey).
- (c) World excluding United States, Canada, Western and Eastern Europe (apart from Eurasia), Japan, South Korea, Australia, New Zealand and Puerto Rico.
- (d) Japan, South Korea, Canada, Australia, New Zealand and Puerto Rico.

Sanofi hired 13,521 new employees in 2016, 52.9% of them on permanent contracts. A total of 15,128 employees left Sanofi, the main reasons being resignations (41.6%), layoffs (36.2%), expiration of fixed-term contracts (19.0%) and retirement (3.2%).

Among the reasons for employees leaving during the year were:

- the divestment of an industrial facility and a reduction in our sales forces in Italy;
- our new "Forward" strategic roadmap to 2020, which aimed at improving our efficiency and performance and protecting our competitiveness, especially in Europe;
- the life cycle of mature products, which led to some structural adjustments in Europe (outside France);
- the restructuring of sales forces within our Diabetes and Cardiovascular operations in the United States under the "Forward" transformation program;
- the ongoing strategic restructuring of support functions and sales forces associated with parent expiries in Japan;
- the divestment of an industrial facility in Argentina, the synergies generated by the "Forward" transformation program in Brazil and Colombia, and the geopolitical situation in Venezuela which had a significant impact on headcount; and
- a reduction and redeployment of our sales forces following adjustments to our product portfolio and geographical coverage in India and Pakistan.

Of the total number of resignations, 23.5% were voluntary departures of employees on fixed-term contracts (72.8% of which were in China, where new employment contracts are generally renewable fixed-term contracts) and 76.5% were voluntary departures by employees on permanent contracts, representing a 4.2% turnover rate for permanent contract employees.

#### Supporting employees during reorganizations in France

In 2016, as part of the strategic roadmap for 2020, Sanofi implemented a program to adapt the organizational structures within a number of entities, based primarily on voluntary departures under the end-of-career leave scheme.

• Sanofi Aventis Groupe (SAG): During 2016, SAG informed and consulted the employee representative bodies on an adaptation and reorganization plan, scheduled for completion in 2017 and involving voluntary departures: a total of 278 employees eligible for end-of-career leave signed up for the scheme, 16 of whom qualified for the "long career" scheme. Departures are being phased over the period from October 1, 2016 to October 1, 2017. The reorganization is being accompanied by the deployment of a new organizational structure, involving five Global Business Units (GBUs) and verticalized global support functions.

In anticipation of the exchange of Merial for Boehringer Ingelheim's Consumer Healthcare business, the 63 SAG employees who spend more than half their time on Merial business were offered a contract of employment with Merial effective October 1, 2016; 36 of them accepted.

• Sanofi Aventis France (SAF): The voluntary departure plan announced at the start of 2016 was completed, and included the highest possible number of voluntary departures achievable through the end-of-career leave scheme (178 employees) and the mobility leave scheme (45 employees).

Some other entities adapted their organizational structures to address specific needs:

Sanofi Chimie: In the second half of 2016, management embarked on an information and consultation procedure for a plan to merge CEPIA (Commercial & External Partnership Industrial Affairs), API (Active Pharmaceutical Ingredients) and dedicated development activities, within the Chemistry and Biochemistry department. The plan continues the organizational change implemented at the start of 2016, which spilt production facilities into two groups, one for captive chemistry operations and the other for third party chemistry operations. The aim was to adapt to the specific characteristics of the captive and third party markets, and to fully leverage the growth potential of the third party API market to improve our bottom line.

The new organizational structure went live at the start of 2017, at which point the asset-for-share exchange procedure began. A total of 55 employment contracts are being transferred from Sanofi Winthrop Industrie to Sanofi Chimie.

Sanofi Winthrop Industrie (SWI): During 2016, SWI informed and consulted the employee representative bodies on a reorganization and adaptation plan scheduled for completion in 2018, and also negotiated a majority agreement on support measures involving internal job transfers and voluntary departures.

Under the agreement, which has been validated by DIRECCTE (the regional body responsible for employment matters), 652 eligible employees left under the end-of-career leave scheme, 117 of whom qualified for the "long career" scheme. These departures will be phased over a period to the end of 2017.

Alongside this adjustment in headcount, SWI has also initiated industrial optimization measures at its production and distribution facilities, in order to attain its performance objectives and protect its competitiveness.

- Sanofi Pasteur: A new master agreement on working hours, replacing the previous agreement, was signed in 2016. The new agreement incorporates undertakings on jobs and investment in France: conversion of 120 fixed-term contracts at industrial sites into permanent contracts, and investment projects including construction of a new building dedicated to influenza vaccine at the Val-de-Reuil facility.
- Sanofi Aventis Recherche et Développement (SARD): In June 2016, the Central Works Council was informed and consulted about "R&D 2.0", an adaptation program designed to maintain and improve R&D productivity. The adaptation measures, which involved no changes in headcount or job losses, were implemented in mid-2016. A dedicated training budget of €1 million was allocated to support these measures.

In October 2016, the Central Works Council was informed and consulted about the proposed spin-offs at the Toulouse site. This proposal is in line with the strategy developed since 2013, and is intended to enable the platforms on the site to operate as standalone units by setting up dedicated biopark-type entities. This proposal has no impact on jobs.

#### 1.C. Compensation

Sanofi's compensation policy is designed to reward individual and team contributions, while also taking overall economic results into account. It aims to promote a culture of performance and reward the competencies that underpin our development. The compensation of the Chief

Executive Officer and the Chairman of the Board is described in "Item 6.B. - Compensation" of our 2016 Annual Report on Form 20-F.

#### 1.C.a. Objectives of Sanofi's compensation policy

The objectives of our compensation policy are to:

- align with local market practices to ensure competitive, attractive compensation in all countries where we operate;
- maintain a strong connection between our Company's performance and our employees' contributions to that performance, while ensuring that employees are treated fairly; and
- maintain a balance between short-term performance and medium/long-term performance.

This policy is based on the principles used by the Board of Directors to determine the compensation of the Chief Executive Officer (see "Item 6.B. - Compensation" of our 2016 Annual Report on Form 20-F).

These principles are applicable essentially to all managers.

#### Alignment with market practices

Sanofi aims to assess market trends for each component of compensation:

- base compensation: assessed in terms of absolute value and year-on-year changes;
- employee benefits: primarily plans providing for retirement benefits, reimbursement of medical expenses, and death and disability benefits;
- short-term variable compensation: a target level of annual variable compensation; and
- medium/long-term variable compensation: mainly includes stock options and performance shares taking into account potential share dilution, the number of beneficiaries and the grant price.

Market benchmarking is generally performed for each country. We compare our practices with those of our local competitors, first and foremost our competitors in the pharmaceutical sector but also competitors in other sectors depending on the business activity in question.

Each year we take part in compensation surveys in the various countries where we operate. These surveys are conducted by reputable consulting firms in order to obtain reliable information on local compensation practices. The information collected is used to position jobs at Sanofi relative to the market.

Our aim is to align average compensation levels with the benchmark market median while allowing for broad variations based on individual performance or an employee's command of his/her duties.

#### Strong connection between company performance and employee contributions to that performance

All variable compensation, whether short-term or medium/ long-term, is subject to the attainment of performance criteria that reflect key factors for our success. Performance indicators, which are generally financial indicators, are always measurable, quantifiable, specified in advance and made known to the beneficiaries.

A global performance management process is applied across the whole of Sanofi. That process was revised in 2016 in order to align on the strategic roadmap for 2020, and the new organizational structure based on Global Business Units (GBUs) and global support functions. The process involves setting individual objectives, and assessing the progress made towards those objectives and the professional conduct demonstrated in pursuit of them. Individual and team goals are set at the beginning of the year, and progress is assessed at the end of the evaluation period before compensation decisions are made.

# Balance between short-term performance and mediumto long-term performance

#### **Short-term performance**

Nearly 35,000 employees are covered by an annual individual variable remuneration (IVR) plan, which is the same across all activities and all countries. Target variable remuneration levels are primarily based on local market practices. They range from 5% to more than 50% for senior executives, with an average of 15%. Sales representatives are covered by a separate compensation system based on the performance of their sales unit.

The IVR budget is determined by reference to Sanofi's overall performance, and is allocated between each GBU and support function on the basis of their respective results.

Sanofi's overall performance is now judged by reference not only to growth in sales and business net income but also to the quality of our R&D pipeline, the success of new product launches and our ability to optimize cash flow.

Finally, the new IVR plan takes account of the ability to cooperate transversally, act for change and develop people.

The annual budget available for variable remuneration is determined based on the level of attainment of key performance indicators (KPIs) specified in advance within each organization.

 The actual results achieved for each objective in 2016 are measured, and expressed as a percentage. The

results for each KPI are used to calculate an overall score for Sanofi, and for GBUs and global support functions.

- The total IVR budget is calculated on the basis of the Sanofi score and allocated between the GBUs and global support functions to reflect their respective performances. All budgets are calculated at Sanofi senior management level.
- Each GBU or support function decides on the amount to be distributed to its managers according to its own criteria and performance. Individual IVR bonuses are then determined by line managers based on their evaluation of the employee's performance, within the limit of the available budget.

Performance indicators are generally financial indicators such as sales growth, operating profit or cost control. In R&D, the KPIs applied are designed to measure our capacity to innovate and successfully launch new products; they include the quality of our pipeline, progress on key development programs and other key projects, and utilization of the R&D budget. For Industrial Affairs, performance is measured using a combination of indicators aligned with the production system and reflecting variances between budgeted and actual costs.

The five indicators used to measure Sanofi's overall performance are:

- business net income (see definition in "Item 5 A.1.5. Segment information - 3/ Business Net Income" in our 2016 Annual Report on Form 20-F), which measures our profitability;
- · sales growth, measured against the projected growth rate for the year;
- R&D outcomes, which demonstrate our ability to innovate:
- the cash conversion rate, which measures our ability to convert our profits into cash; and
- the level of sales of new products, which reflects our ability to conduct successful product launches.

A specific weight is allocated to each indicator. These performance indicators are used for all senior executives eligible for IVR, in addition to indicators specific to their entity.

#### Medium/long-term performance

In 2016, performance shares and stock options were granted to nearly 7,700 employees. These grants are conditional on employees' attainment of performance criteria over three financial years and their continued employment at Sanofi.

The performance criteria are determined by reference to two indicators measured for Sanofi as a whole: business net income and return on assets (ROA). The first is assessed relative to the budget set at the beginning of the year, and the second relative to a target set by the Board of Directors at the beginning of the period.

An additional performance criterion, total shareholder return assessed against a panel of competitors, is also used in determining the compensation of the CEO.

By granting performance shares or stock options and choosing performance criteria, the creation of value becomes a shared interest for beneficiaries and shareholders alike

For senior executives, the medium/long-term variable compensation component is similar to the short-term variable compensation component.

In accordance with market practices, the number of employees entitled to performance shares and/or stock options is limited in order to ensure that share dilution remains at acceptable levels while offering employees competitive compensation.

#### Non-discrimination

Sanofi is careful to avoid any discrimination (e.g. based on gender) in the compensation paid in respect of a given position at equivalent levels of individual performance.

Where disparities exist, we may allocate specific budgets to rebalance compensation levels. For example, in France in 2016, some of our operations allocated up to 0.1% of their total budget to adjustments such as reducing the pay gap between men and women.

#### **Employee share ownership**

We regularly offer employee share ownership plans in order to:

- build employees' loyalty and motivation;
- foster employees' unity and sense of belonging to the Company;
- enable employees to share in the Company's growth and success; and
- align employees' and shareholders' interests.

As of December 31, 2016, 1.43% of Sanofi's capital was held by employees, representing a market value of €1.37 billion as of that date. Employees have become shareholders primarily through top-up contributions into the employee savings plan, issues of free shares, and capital increases reserved for employees (the most recent of which was in 2016).

On March 3, 2016, our Board of Directors approved "Action 2016", an employee share ownership plan offered to all Sanofi employees in countries where such plans are feasible from a legal and tax standpoint. The aim of the plan is to associate employees more closely with Sanofi's success, and increase the level of employee share ownership.

Under the plan, employees could subscribe for Sanofi shares at a 20% discount to the market price. As a top-up contribution, employees subscribing for five to nine shares received one extra free share, and those subscribing for ten or more shares received two extra free shares. In return, the shares are subject to a five-year lock-up period. Over 24,000 employees in more than 80 countries signed up to the plan, investing a total of €101 million and subscribing for 1.8 million shares.

#### **Employee benefits**

Sanofi strives to ensure that all employees worldwide receive high-quality benefits covering health, pension, incapacity, disability and death. These benefits comply with national regulations, are adapted to local cultures and provide the coverage that best meets employees' needs. In all countries, employees (as well as, in general, their spouses and children) receive a good level of reimbursement of medical expenses as well as death benefits.

In the vast majority of countries, Sanofi also offers benefits covering temporary or permanent incapacity. In France for example, all Sanofi employees, irrespective of the type of contract they hold (fixed-term or permanent, part-time or full-time), are entitled to the same medical and welfare benefits from the moment they are hired.

On a regular basis, we take part in a comprehensive market survey, conducted in over 60 countries, to ensure that the employee benefits we offer are in line with current local practices.

We also make sure that our employee benefit plans are designed for the long term.

In order to limit employee-related liabilities, Sanofi prefers defined-contribution plans over defined-benefit plans.

As regards "insured" plans, we seek to optimize funding and reduce administrative costs by the use of programs such as insurance pooling, through our captive insurance company.

Sanofi has had a dedicated Employee Benefits Steering Committee since 2010. The purpose of the Committee, which is chaired by our Chief Financial Officer and our Executive Vice President, Human Resources, is to:

- review and approve our overall employee benefits strategy;
- review and approve the implementation or amendment of any defined-benefit plan, irrespective of its cost; and
- review and approve the implementation or amendment of any defined-contribution plan above a limit set in advance by the Committee.

Whenever possible, Sanofi provides personalized employee benefit programs (medical, vision, dental, etc.) that allow employees to adjust their coverage according to their family situations and personal needs. These types of programs have been instituted in China, the United States and the United Kingdom, for example.

In certain countries, medical benefits also include programs focusing on prevention, vaccinations, screening (diabetes, skin cancer, etc.), nutritional advice, well-being, etc. In the United States, our employees have the option of joining our comprehensive wellness program, Health in Action.

In addition, Sanofi continues to encourage work-life balance for all employees worldwide. In France in 2016, we improved the long-term care coverage offered to our 27,000 French employees, intended to help them if a spouse or parent becomes dependent.

In addition to the three key benefits already provided in 2015 (a support hotline, a long-term care fund to provide assistance in the event of partial or total incapacity, and a dependency insurance policy offering an annuity and emergency lump sum), employees can now be gifted days off to support a parent or spouse who is diagnosed with a terminal illness or is faced with a catastrophic loss of independence.

Employees can be credited up to 50 days' leave (renewable once) thanks to the solidarity of their colleagues in the entity where they work. Days gifted in this way are treated as hours actually worked for the purposes of entitlement to paid leave, days in lieu and the employee savings plan. Three employees have been awarded gift days since the scheme started.

Covering 11,000 retirees as well as 27,000 current employees in France, this innovative dependency insurance program was awarded the "Compensation & Benefits" trophy in the "Solidarity Commitment" category.

In addition to medical, disability and death benefits, we offer retirement benefits in all countries where this is standard industry practice (more than half of the countries where we operate).

For example, in France, Sanofi has set up an optional collective retirement savings plan (PERCO) that supplements statutory plans and encourages employees to voluntarily save for retirement. Under the plan, Sanofi tops up employee contributions by 250% up to a specified limit. Top-ups and limits are established, and fund management decisions taken, jointly by Sanofi management and the trade unions.

Sanofi also offers a medical and travel assistance plan for employees whose jobs require them to travel abroad, regardless of the country where they work. This plan also covers emergency evacuations and repatriation.

#### 1.C.b. Principal compensation policy indicators

At Sanofi, we provide fair compensation for our employees in accordance with standard industry practices. In order to ensure the best possible living standards, employee compensation generally exceeds the legal minimum wage in the countries where we operate.

As indicated in Note D.24 to our consolidated financial statements, personnel costs (primarily compensation and the related social security contributions) totaled €9,113 million in 2016 (excluding personnel costs for the Animal Health business, which amounted to €0.6 billion in 2016). This compares with €9,716 million in 2015 (including €0.6 billion for the Animal Health business).

#### Average wages for the lowest paid

A comparison of the legal minimum wage in a given country or business sector with the average gross annual base pay (not including special bonuses, team bonuses, profit-sharing bonuses, etc. paid in addition to wages) of the 15% lowest paid employees shows that Sanofi employees have a substantial advantage. This indicator has not changed over the years, and was disclosed in detail from 2011 onwards; each year, it has fallen within a range from 1.6x (in France) to 3x (in the United States) of the legal minimum wage in the relevant country. Consequently, we have decided to stop disclosing this information country by country.

# Salary increase budgets

Each year, Sanofi establishes salary increase budgets (the distribution of which may vary depending on the employee category) taking into account:

- merit increases;
- collective increases in countries where they apply; and
- increases for promotions, and automatic increases provided for by collective agreements.

Budgets are established on the basis of several criteria:

- market trends anticipated by competitors and reflected in annual compensation surveys;
- inflation forecasts; and
- internal economic constraints specific to each country.

Annual salary increase budgets therefore reflect a trade-off between market observations and the cost to Sanofi. In 2016, salary increase budgets were as follows: 1.9% in France (including automatic increases to reflect changes in the rank, age and skills profile of the general workforce, and a dedicated 0.1% budget to tackle the wage gap; 2.0% in the United States; 10.5% in Brazil; 1.5% for managers and 4.5% for non-managers in Germany; and 6.8% in China. These budgets are comparable with those of our competitors.

Salary increase budgets <sup>(a)</sup>	Germany <sup>(b)</sup>	Brazil <sup>(c)</sup>	China	France U	nited States
2012	Managers 2.5% Non-managers 4.1%	6.8%	9.0%	3.0%	2.3%
2013	Managers 2.0% Non-managers 1.0%	6.8%	8.0%	2.2%	2.0%
2014	Managers 2.0% Non-managers 4.5%	6.8%	8.0%	2.0%	2.0%
2015	Managers 1.5% Non-managers 4.0%	7.3%	8.0%	1.5%	1.9%
2016	Managers 1.5% Non-managers 4.5%	10.5% <sup>(c)</sup>	6.8%	1.9%	2.0%

- (a) Approved salary increase budgets in a country apply to all activities within that country, so Merial had the same budgets in 2016.
- (b) Germany: mandatory sector-wide increase for all non-managers (valid for 12 or 18 months depending on the year).
- (c) Brazil: a budget of 8.0% was initially approved, but this was revised upward to 10.5% during the year to take account of the higher-than-expected inflation

# Collective variable compensation

In addition to individual variable remuneration, some countries and activities offer collective compensation.

Since 2007, our Industrial Affairs organization has been developing a performance-based collective compensation scheme known as the Annual Progress Plan (APP).

The plan is intended solely for employees who are not already eligible for another type of variable compensation (individual bonuses or another type of collective variable compensation such as voluntary profit-sharing).

The APP is designed to compensate eligible employees according to the collective performance of their production site relative to objectives set at the beginning of the year. As of 2016, the APP was in place at 31 sites in 22 countries. The amount distributed may be up to 20% of the base pay of each recipient, depending on the site's performance.

In addition to the system within Industrial Affairs, other collective variable compensation systems are in place in Germany, Brazil and France:

• In Germany, an agreement negotiated with the Central Works Council has led to a collective profit-sharing incentive system for non-managerial staff. The target amount of this incentive represents 6% of base pay, and the final bonus is linked solely to the Company's performance.

- In Brazil, the aggregate amount of profit-sharing is calculated based on performance indicators and pre-established objectives (sales, market share, etc.). The target amount for each employee is approximately one month's base pay.
- In France, two collective variable compensation plans are in place:
  - The first is statutory profit-sharing (participation), which is determined on the basis of the profit generated by all Sanofi's French entities. This plan uses a special calculation method that is more advantageous for employees than the method prescribed by law.
  - The second is voluntary profit-sharing (intéressement). It was introduced at Sanofi under a three-year agreement (from 2014 to 2016) with trade unions. Sanofi's management and the trade unions determine the key performance indicators (KPIs) to be taken into account and the aggregate amount to be distributed to the employees who worked for Sanofi during the year in question.

In 2016 the aggregate amount distributed to employees in France under the statutory and voluntary profit-sharing initiatives was €162.4 million, with individual amounts ranging between €5,301 and €8,425.

Collective variable compensation (France) <sup>(a)</sup>	2016	Change (%)	2015	Change (%)	2014
Voluntary + statutory profit-sharing	€162.4m	+5.9%	€153.4m	-9.3%	€169.1m
Minimum bonus: voluntary + statutory profit-sharing	€5,301	+4.6%	€5,069	-5.0%	€5,338
Maximum bonus: voluntary + statutory profit-sharing	€8,425	+9.6%	€7,690	-7.1%	€8,277

(a) The amount distributed to employees in France under the voluntary and statutory profit-sharing schemes includes the Animal Health business.

The reduction in the aggregate amount of collective variable compensation distributed in 2015 (versus 2014) was due partly to the repeal of the statutory profit-sharing bonus.

The minimum amount of collective variable compensation paid by Sanofi in France represents the equivalent of 2.7 months of base pay for the lowest-paid employees.

Finally, Sanofi also tops up employees' voluntary contributions to the employee savings plan in France.

# **Country-specific initiatives**

Finally, several countries offer plans that help employees and their families in their daily lives (employee assistance, subsidized childcare, special rates for various services, etc.).

• France: For the last six years, a personalized comprehensive compensation overview has been sent to each employee in France. This document gives details of the compensation received during the previous year: salary plus individual and collective variable compensation, employee savings plans, retirement savings plans, employee benefits and employee share ownership plans, as well as specific benefits offered by Sanofi.

Since 2014, we have operated a program that provides assistance to employees who support dependent parents, which is the subject of a collective agreement with trade unions in three areas:

- an insurance policy providing employees with an annuity in the event they become dependent themselves, for which spouses and ex-employees can also sign up;

- a support hotline for information on benefits, placement assistance, legal assistance, etc.; and
- emergency financial assistance (for parents or spouses).
- The following schemes are offered in the United States:
  - the "MyAwards" program, set up in 2013 and open to all employees. The program enables managers to reward staff performance through a non-monetary points-based system. Points earned under the program can be converted to purchase goods, trips, tickets to events, etc.;
  - the "Health in Action" program has been enhanced, and incorporated into a more comprehensive strategy rebranded as "Thrive, My Well-Being at Sanofi"; and
  - the "Your Total Rewards" platform, which gives employees a comprehensive overview of their compensation including base salary, short- and longterm variable compensation and medical cover. They can also assess Sanofi's contribution to their total earnings.
- Brazil: The "Progredir" program is under way to assess sales force career paths and align their salary scale with industry practices. The country has also reviewed the pay grade structure in order to align on industry practices, as well as the catalogue of job descriptions.

# 4.1.2. Organization of work

# 2.A. Organization of working time

	World	Worldwide		Europe <sup>(b)</sup>		United States		markets(c)	Other co	untries <sup>(d)</sup>
Workforce as of December 31 <sup>(a)</sup>	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Employees under contract										
	113,816	115,631	49,865	50,012	16,819	17,098	41,122	42,172	6,010	6,349
Distribution by type of contract										
Permanent contracts	88.8%	89.2%	92.2%	92.7%	99.9%	100%	79.0%	79.4%	95.7%	96.3%
Fixed-term contracts	11.2%	10.8%	7.8%	7.3%	7.1%	0%	21.0%	20.6%	5.3%	3.7%
Part-time										
Number of part-time employees	4,417	4,440	4,199	4,177	124	139	26	50	68	74
Full time equivalent	3,317	3,368	3,160	3,171	84	96	22	44	51	57
Number of temporary staff										
	5,689	5,725	2,603	2,456	1,002	1,101	1,803	1,929	281	339

<sup>(</sup>a) Animal Health is included in these figures.

<sup>(</sup>b) Western Europe and Eastern Europe excluding Eurasia (Russia, Ukraine, Georgia, Belarus, Armenia and Turkey).

<sup>(</sup>c) World excluding United States, Canada, Western and Eastern Europe (apart from Eurasia), Japan, South Korea, Australia, New Zealand and Puerto Rico.

<sup>(</sup>d) Japan, South Korea, Canada, Australia, New Zealand and Puerto Rico.

The percentage of fixed-term contracts (11.2%) was 0.4 of a percentage point higher than in 2015. The ratio of temporary staff to permanent contract employees was 5.6%, unchanged from 2015.

A total of 4.4% of our permanent contract employees work part-time, a higher proportion than in 2015 (3.8%). The majority of our part-time employees are women (83.0%), a slight decrease compared with 2015 (84.4%).

In the countries where we operate, the average working week is generally set by law.

In France, working time is set by law or collective agreements. In 2016, the theoretical average annual working time was 1,561 hours (compared with 1,554 hours in 2015).

#### 2.B. Absenteeism

As affirmed in our Social Charter, achieving a trade-off between better working conditions and the need to adapt to our environment is a key imperative for Sanofi. The Charter also states that the health and safety of all is an obligation for Sanofi and its employees, and all necessary resources must be deployed to safeguard health and safety. Monitoring absenteeism provides a means of measuring employee satisfaction and engagement in the workplace.

We monitor absenteeism locally in line with the relevant regulations; because those regulations vary from country to country, it is not meaningful to report them on a worldwide consolidated basis. Consequently, we have decided to stop disclosing absenteeism data for the five countries on which we report in detail (Germany, Brazil, China, the United States and France).

# 4.1.3. Social dialogue

In all countries where Sanofi operates, we strive to combine economic performance with good employee relations, which we believe are inseparable.

With regard to respect for people, Sanofi's social responsibility is based on the fundamental principles of the Company's Social Charter, which outlines the rights and duties of all Sanofi employees. The Social Charter addresses Sanofi's key commitments towards our workforce: equal opportunity for all without discrimination, the right to health and safety, respect for privacy, the right to information and professional training, social protection for employees and their families, freedom of association and the right to collective bargaining, and respect for the principles contained in the Global Compact and in International Labor Organization (ILO) conventions.

Labor relations within Sanofi are based on respect and dialogue. In this spirit, management and employee representatives meet regularly to exchange views, negotiate, sign agreements and ensure that agreements are being implemented. In 2015, Sanofi implemented a worldwide policy on freedom of association (see Section "4.1.6 Promotion of and compliance with International Labour Organization (ILO) Conventions").

Five countries (Germany, Brazil, China, the United States and France) together accounted for 59.1% of the Company's workforce as of December 31, 2016, and hence can be taken as a representative sample. Social dialogue is structured differently from country to country, as local circumstances call for a differentiated approach. Information, consultation and negotiation processes may take place at national, regional or company level and may be organized on an interprofessional or sectoral basis, or both. Social dialogue may be informal or institutionalized, or a combination of both methods. Whatever the situation, Sanofi encourages employees to voice their opinions, help create a stimulating work environment and participate in decisions aimed at improving the way we work. These efforts reflect one of the principles of the Social Charter: that improvements in working conditions and the need to adapt to our environment go hand in hand.

#### 3.A. Social dialogue in Europe

Sanofi's European Works Council (EWC), which includes 40 members and 40 alternates, represents employees who work in European Union countries. In 2016, the EWC met in March, July and October to be informed about Sanofi's strategic objectives, financial performance, and the growth prospects for its various activities. The EWC also received regular updates on key topics such as employment in Europe and reorganization proposals.

In addition, interim meetings with EWC officers provide an opportunity for regular or one-off briefings based on developments affecting Sanofi.

And in each European country concerned, negotiations were held with employee representative bodies throughout 2016 to explain any proposed changes.

Social dialogue in France: The France Group Committee, made up of 25 members, 25 alternates and trade union representatives, met in February, April, June and December 2016. During those meetings, the committee was kept abreast of the strategy, operations, financial situation and labor changes at Sanofi in France, and reorganization proposals within Sanofi.

# Overview of collective agreements in France

In 2016, two new agreements (including one on disabilities) were signed. In addition, 18 amendments to existing agreements were signed with trade union representatives in France, covering issues such as longterm care and support for employees who are also carers, profit-sharing (statutory and voluntary), and top-ups under the employee savings plan. In 2016, 100% of our employees in France were covered by collective agreements.

Under the agreement on employment of young people and seniors (contrat de génération) signed in October 2013, Sanofi implemented action plans involving a three-year commitment to hiring at least 500 new employees under permanent contracts, of whom 40% will be young people (aged 30 or under, 25% of whom will be hired following work-study contracts) and 10% will be seniors (aged 50 and over). We also planned to hire 20 post-doctoral researchers under fixed-term contracts for research projects with our R&D teams.

Three years after implementation of these action plans, Sanofi has hired 2,541 people on permanent contracts in France, of whom 45% are aged below 30 and 5% are aged 50 and over). In addition, 30 post-doctoral researchers were hired on fixed-term contracts from January 2014 through September 2016.

Social dialogue in Germany: Employees are represented through the Works Council or the Employee Representatives Committee, delegates to which are elected by the employees for a four-year term under the social partnership in the Germany chemistry sector.

In 2016, constructive negotiations were successfully conducted with local and central Works Councils on a number of major restructuring programs. These included the "Forward" and "Bishop" programs, and a plan to reduce sales force headcount. As part of the Forward program, an internal collective agreement could be signed in order to establish guidelines for working in the Global Business Units. The rollout of new systems including eBuy, OneLMS and Workday was also discussed with the Central Works Council. In consultation with the Berlin Works Council, a pilot project was started to assess the feasibility of part-time working among the sales force. In 2015, 61% of employees were covered by collective agreements and 21 internal collective agreements were signed.

# 3.B. Social dialogue in other countries

Brazil: Employees are represented by industry-wide trade unions. Trade union representatives are elected by pharmaceutical company employees for a term of four or five years; they have guaranteed job security, and cannot be dismissed by the company during their term of office.

Sanofi Brazil currently has 95 employees representing trade union organizations registered with the Labor Ministry. Their role is to lead collective bargaining negotiations on issues such as wages and benefits.

In addition, Brazilian labor law requires companies to establish an internal committee, made up of employee representatives elected for a two-year term, to discuss and negotiate specific matters such as profit-sharing agreements and the prevention of workplace accidents. In 2016, 100% of employees were covered by collective agreements and 16 internal collective agreements were signed.

China: In accordance with the principle of freedom of association, Sanofi China has backed the implementation of employee representation at its industrial sites. Initiatives are devised and organized on a regular basis by employee volunteers, with the support of management at headquarters and at regional offices. Social media are also used to motivate younger generations of employees. In 2016, 21% of employees were covered by collective agreements and four internal collective agreements were signed.

United States: In the absence of elected employee representatives, various committees give employees an opportunity to voice their opinions to management and participate in decision-making processes. In addition, all employees can sign up and belong to Employee Resource Groups that work on a variety of issues and initiatives to promote employee engagement, development and retention (see Section "5.D. Other measures to promote diversity and equal opportunity").

# 4.1.4. Training and career development

# 4.A. Training and career development strategy

Training, personal growth and career development are crucial for bolstering our employees' skills and nurturing in-house talent; these efforts play a vital role in our human resources strategy.

In recent years, the Sanofi human resources teams have introduced the One HR model to harmonize processes and practices across all our subsidiaries and activities on a world scale. The recent roll-out of the Workday software solution has standardized our performance review and talent identification processes worldwide, instilling a shared culture that promotes career development.

In order to foster this culture of learning and career development, we have adopted principles that recognize the crucial role that managers play in the development of their teams, in particular through succession planning and internal mobility. In concrete terms, this involves regular discussions about performance, personal growth opportunities, career options and succession planning. This is achieved through a combination of managerial assessment of upskilling progress with training programs.

During 2016, Sanofi established the foundations for a global approach to career development and leadership encompassing talent management, the development of management and leadership skills and cross-disciplinary training programs, with the overall aim of optimizing our initiatives and improving our operational efficacy.

The key objective of this global approach is to ensure that our leaders understand and develop the competencies and qualities that are essential to Sanofi's success. In parallel, our cross-disciplinary training programs are helping propagate Sanofi's culture in the areas with the greatest impact on the way our business is organized.

#### 4.B. Achievements in 2016

#### 4.B.a. Principal developments in training programs and other resources

Any company that wants to succeed in the healthcare sector must develop, acquire and strengthen professional competencies. This is why we are continually developing new training programs. In recent years, we have developed in-house academies and management/ leadership programs in our various business units and regions.

In 2014, the Compliance Executive Committee tasked an in-house team with developing a single global training solution. The brief was for that solution to be available to all of our people, and to be fully compliant with regulations in terms of best training practices. Ultimately, this solution will replace the variety of training management systems currently used by Sanofi. We opted for a Software as a Service (SaaS) solution, which offers scope for regular functional updates and uses state-of-the-art technology. At the end of the selection process, the Cornerstone SaaS platform was identified as the preferred solution. The workshops needed to establish the target configuration have now been completed, enabling work to start on the configuration of the system. The solution, to be known as ILearn, is due to go live in the third quarter of 2017.

Adopting a single harmonized solution for managing all our training activities worldwide will boost career development for our people by offering consistent, standardized modules on specific topics, while also providing robust reporting methods and expanding digital training options such as e-learning, social learning and mobile learning.

# **Expanding our training options: Sanofi Academies**

In 2016, our training programs were spread across 15 Sanofi Academies. Following an internal reorganization during the year, the roles of some of our academies were reallocated to support functions or regions.

The following are just a few examples of the ongoing developments in our Academies during 2016:

• Biotech Campus: Our Biotech Campus has now been subsumed into a broader and more structured cooperative network of teaching professionals drawn from all Sanofi activities involved in biotechnologies: Specialty Care Operations Learning & Development, Sanofi Pasteur MTech "iKnow", R&D Hub France Learning & Development, Human Resources France Learning & Development. In a high-tech business that needs to remain at the cutting edge of innovation, this network has a critical role in supporting our people as they deal with the pace of development in fast-changing or emerging fields. The network contributes to:

- ensuring that our people remain highly qualified;
- continually developing the skill set of employees at the heart of our biotech activities, along the whole length of the bio-medicines value chain; and
- offering training to any of our support functions that are impacted by biotechnologies.

In 2016, 1,128 employees took part in the 93 sessions offered in France, representing a total of 16,712 training

We also introduced a Competency Based Learning (CBL) initiative within our Specialty Care operations, which uses software to assess gaps in our employees' technical skills. The CBL program combines selfassessment with managerial evaluation, and is based on highly detailed job descriptions. Where skill gaps are identified, they are used to build a training program tailored to each individual.

- Market Access: The Market Access (MAx) Academy remains focused on three pillars: building strategic market access capabilities, promoting a collaborative culture across the Sanofi in-house network (especially with the R&D, Marketing, Commercial Operations, Regulatory Affairs and Finance teams), and pooling knowledge in this area. During 2016, the MAx Academy developed new training programs covering operational pricing, case studies, and patient quality of life. The Academy is also developing new e-learning modules to enhance our expertise in dealing with new international audiences.
- LEAN: The key event of 2016 was the transformation of the LEAN Academy, which has now become the Sanofi Manufacturing System (SMS). A series of "SMS Onboarding" sessions were held, to tell participants what SMS covers and how to make smart use of the many solutions it offers. Hundreds of "SMS Ambassadors" then passed the message on throughout Industrial Affairs, in conjunction with their Management Committee. Strong emphasis was placed on managerial input and on essential change management support, with a view to achieving targeted outcomes. All in all, four new modules were added to the previous year's training menu as Sanofi supported people through the changes. Over 250 employees from all around the world received this training.

• Launch Excellence: As part of the internal reorganization of Sanofi, the roles of the Launch Excellence (LEx) Academy are now handled at Global Business Unit (GBU) and regional levels.

#### Maintaining our global leadership pipeline

We continued to develop our leadership program during 2016, and also launched new initiatives.

- "Business for Tomorrow" and "Leading for Tomorrow": These programs, launched in 2014, serve to reinforce and coordinate management practices among our senior executives in today's market, where fleetness of foot and flexibility are essential. So far, 168 senior executives have followed the LFT program, and 176 the BFT program.
- "Evolution Center for Excellence" and "Evolution Center For Leadership": Launched in 2013, these programs help develop our pipeline of future leaders and provide a resource for in-house recruitment, while also giving our senior executives an opportunity for networking and for sharpening their career development objectives. So far, 280 senior executives have followed the "Excellence" program, and 802 the "Leadership" program.
- "Impact", "Influence" and "Inspire": These three programs, launched respectively in 2011, 2014 and 2015, are aimed at senior executives. "Impact" helps them communicate more effectively. So far, 1,054 senior executives have followed this program.

- "Influence" develops their capacity to work and exert influence others is a matrix-based organizational structure. So far, 370 senior executives have followed this program. "Inspire" is intended to make senior executives better team leaders; so far, 232 of them have followed this program.
- "Management Essentials": This program, covering 30 countries in six regions, was launched in 2015. Around 1,500 first-level managers followed the "Management Essentials" program, to help them get the best performance out if their teams and operate more effectively in a complex environment. This program harmonizes our leadership development programs at every level, promoting a culture of continuous training and feedback. As such, it is playing a key role in feeding our talent pipeline. A greater diversity of managers has now received training in leadership principles, and each of them now has a clear and sound plan to help them achieve excellence in leadership.
- "Leadership Essentials" is a new program piloted in 2016 with 65 second-level managers (i.e. managers who manage other managers) in Europe and Asia. This program consolidates the basis for a future generation of authentic strategic leaders, and encourages commitment and upskilling among second-level managers.
- "Challenge your bias" has been devised to raise awareness among senior executives of the importance of fostering a welcoming, inclusive work environment. This year, 185 of our most senior executives attended this workshop.

#### 4.B.b. Training worldwide

The training data presented below cover five countries (Germany, Brazil, China, the United States and France), which account for 59.1% of Sanofi's workforce as of December 31, 2016 and hence can be taken as a representative sample.

Training data – 5 countries <sup>(a)(b)</sup>	Germany	Brazil	China	United States	France
Total number of hours of training	343,490	178,951	254,417	575,251	471,511
Total number of participants <sup>(c)</sup>	507,051	58,753	182,494	421,301	77,252

<sup>(</sup>a) The data include all Sanofi entities, except for Animal Health activities which have been excluded this year for each of the five countries.

In Germany, a total of 343,490 hours of training were provided in 2016 (vs 314,094 in 2015), with 507,051 participants (vs 477,902 in 2015). The average number of hours spent on training in 2016 was 0.68 per participant (vs 0.66 in 2015); this figure is low due to a high volume of short online training courses.

In Brazil, a total of 190,868 hours of training (including Merial) were provided in 2016 (vs an estimated 169,095 in 2015), with a total of 62,607 participants.

<sup>(</sup>b) For Animal Health activities (Merial training data only): in Brazil, 11,917 hours of training were provided to 3,854 participants. In China, 2,133 hours of training were provided to 1,246 participants. In the United States, 2,801 hours of training were provided to 1,015 participants. In France, 43,941 hours of training were provided to 7,339 participants. The Animal Health business has been discontinued in Germany.

<sup>(</sup>c) The total number of participants is higher than the total number of employees. When one employee takes part in three training sessions, that counts as three participants.

The average number of hours spent on training in 2016 was 3.05. This figure is lower than in 2015 because of an increased proportion of online training programs which are shorter, but reach a larger audience. In 2016, 54% of training hours were delivered face to face (excluding Merial) and 46% online.

In China, including Merial, 256,550 hours of training (vs 368,254 in 2015) were provided in 2016 to 183,742 participants (vs 170,712 in 2015), giving an average number of training hours of 1.4 (vs 2.2 in 2015). The main focuses of these programs were specific skills training (products, diseases, marketing, etc.), cross-disciplinary competencies, and leadership. The only increase in the number of hours and participants was in leadership training, reflecting the rollout of worldwide programs like Management Essentials. The number of online training sessions increased, and there was a shift in the training strategy: most programs are no longer compulsory, and are now tailored to business needs. In 2016, 37% of training hours were delivered online (excluding Merial) and 63% face to face.

In the United States, including Merial, 578,052 hours of training (vs 721,262 in 2015) were provided to 422,316 participants (vs 407,898 in 2015). The average number of hours per session for each participant was 1.4 hours (vs. 1.7 in 2015), reflecting extensive use of short online training sessions. Online training accounted for 59.5% of total training hours (excluding Merial), and face to face sessions for 40.5%.

In France, including Merial, 515,452 hours of training were provided in 2016 (vs 490,579 in 2015) to 84,591 participants (vs 79,792 in 2015). The average number of training hours was 6.1, the same as in 2015.

In total, 22,992 employees received training (vs 21,567 in 2015).

#### 4.1.5. Equal treatment

# 5.A. Diversity policy

The Diversity Department, which reports to the Executive Vice President Human Resources, was created in 2007, and Sanofi continues to harness the diversity of its workforce to drive the development of innovative solutions that better address the needs of patients.

Our diversity policy outlines our principal commitments with regard to non-discrimination, equal opportunity and the promotion of diversity, as well as our commitment to monitoring the progress of our diversity measures on an annual basis.

Our diversity policy is implemented through our network of diversity delegates and partners. Outside France, this network comprises 55 diversity delegates (73 in 2015) across more than 65 countries and all of our entities, including Merial. These delegates translate our overall policy into concrete measures adapted to the local context in each country. In 2016, the entire network was invited to a three-day forum in London, attended by 38 employees representing over 20 countries. Our diversity network in France comprises 39 diversity and/or disability delegates across all of our French sites and entities, including Merial.

In-house communications and building awareness among all Sanofi employees about the importance of this policy continued during global events such as International Women's Day and the International Day of Persons with Disabilities, as well as during local initiatives.

In 2016, we began a program of workshops targeting bias and stereotyping for all Executive Committee members and their teams. This program will be rolled out more extensively around the world in 2017.

A diversity intranet and our corporate website (in the "Our Responsibility" pages) provide an opportunity to illustrate not just our commitments, but also examples of best practice from various countries and entities. These practices cover a vast range of subjects and showcase a variety of complementary initiatives. Also in 2016, a collaborative diversity platform was made available to all of our employees.

# 5.B. Gender equality at work

The promotion of gender equality lies at the core of Sanofi's strategy, and bringing more female talent on board is one of the individual variable remuneration objectives for Executive Committee members. In 2016, we continued to uphold our commitment to promote gender equality at Sanofi. As of December 31, 2016, 45.8% of our workforce including Merial and 41.4% of managers (whose role involves supervising direct subordinates) were women, compared with 45.5% and 40.3%, respectively, in 2015 (see Section "4.1.1. Employment").

As of September 30, 2016, 26% of our 434 senior executives (including Merial) were women, versus 21% in 2015.

Since 2014, the Global Gender Balance network has operated through correspondents across all of Sanofi's regions and functions worldwide, helping implement local initiatives to promote gender balance and equality at work. The network is administered by a board of seven members, three of whom also sit on the Executive Committee.

Numerous initiatives to promote gender balance and equality at work were introduced in 2016, in various countries and activities. For example:

• Support for gender equality campaigns: for the sixth consecutive year, Sanofi was a sponsor of the Women's Forum in Deauville, and a delegation of 30 men and women from Sanofi attended the event. Since 2010, more than 180 employees have taken part in this event, giving them the opportunity to become ambassadors of this approach within Sanofi. We also sponsored and attended Women's Forum events in Dubai, Mexico and Mauritius in 2016.

#### Organizing events at country level, such as:

- In over 35 countries, Sanofi hosted events to mark International Women's Day including conferences and debates, employee/management meetings, examples of women's career paths within Sanofi, promoting women's and gender balance networks, and sharing information across various media. The day was also celebrated with the in-house Gender Balance Awards, handed out to ten female employees and to five international initiatives.
- For the first time ever, nine corporate charitable foundations, including Sanofi Espoir, got together to mark International Women's Day by releasing a landmark series of video portraits of inspirational women from around the world under the title Elles ont toutes une histoire ("We Are Women").
- Sanofi was also involved in conferences and debates on gender balance issues, including the Women in Healthcare conference in Paris featuring a member of our Executive Committee and a member of our Board of Directors, and a workshop in Japan with a member of the board of our Global Gender Balance network
- In Germany, for the third consecutive year, a special day was devoted to gender balance issues as part of a special diversity week.
- In Paris, with the support of Executive Committee members, Sanofi launched a second wave of the WoMen@Sanofi mentoring program, which involved 254 people and included the provision of training to the mentors.

# 5.C. Employment and integration of people with disabilities

Sanofi remains committed to employing people with disabilities, placing a particular emphasis on the following goals, while ensuring respect for local cultures and compliance with local regulations:

- · priority support for employees with disabilities to ensure that they retain their jobs;
- · depending on the job profile, the continued hiring of employees with disabilities, regardless of the nature of their disability;
- improved information and communication, as well as ongoing efforts to raise awareness about disabilities;
- maintaining ties with the sheltered employment sector;
- ongoing actions to provide better accessibility to buildings and information.

# 5.C.a. Employing people with disabilities

Sanofi always applies local regulations (if any) in identifying which of our employees have disabilities.

Overall, Sanofi employs 2,198 people registered as having a disability, in 44 countries (compared with 2,252 in 2015). These include:

- 466 outside Europe (525 in 2015), mainly in the United States (278), Brazil (100), Japan (41) and Egypt (34);
- 572 in European countries with more than 30 employees (other than France), versus 545 in 2015. primarily in Germany (423), Italy (78) and Turkey (40);
- 1,160 in France, versus 1,182 in 2015.

On its transfer to Boehringer Ingelheim effective January 1, 2017, Merial signed up to a collective agreement with Handiem, an organization that places people with disabilities in jobs in the medical sector. Consequently, people with disabilities employed at Merial were not included in the statutory declaration of employees with disabilities filed by Sanofi in 2016.

#### 5.C.b. Initiatives taken in 2016

In France:

- Events were organized at 22 Sanofi sites to mark Disability Employment Awareness Week November 2016 (compared with 30 sites in 2015 and 22 in 2014).
- 2016 was also the final year of the third group-wide agreement on retaining and recruiting people with disabilities, which ran from 2013 to 2016. During the year, we reaffirmed our commitment on disabilities by initiating the process of renewing the agreement. The fourth agreement, which runs from 2017 to 2020, was signed internally with trade unions on December 7, 2016. It covers five areas: retention, hiring, employee awareness programs, collaboration with the sheltered employment sector, and accessibility (work-stations and information). The agreement is being submitted to DIRECCTE (the regional body responsible for employment matters) for approval.

#### Across Sanofi worldwide:

 Ahead of the International Day of Persons with Disabilities, we issued a special kit to subsidiaries in all countries where we operate, to help them prepare for the event. The kit included video testimonies made by three employees with disabilities, produced as part of the "Good Morning Sanofi" series of diversity videos, plus an international version of our disability brochure and a list of recommendations for organizing awareness-raising events.

 We are also continuing to tackle the issue of disabilities through the Enfants de Sanofi non-profit organization. During 2016, Enfants de Sanofi helped 71 employees who have children with disabilities in 21 countries, providing support with healthcare, special education, institutional care and home care.

# 5.D. Other measures to promote diversity and equal opportunity

Sanofi has initiated projects in various areas to promote equal opportunity, prevent discrimination and foster an inclusive culture for all our employees. Examples include:

- The ongoing "Good Morning Sanofi" series of videos, made by and for our employees. These portray the diversity of our people throughout the world in terms of cultural diversity, work-life balance, gender equality and minorities, for example. Over 20 videos can now be viewed on our intranet sites, the corporate website and YouTube. The series has received five awards from external bodies.
- The specific Lesbian, Gay, Bisexual and Transgender (LGBT) diversity policy, which aims to challenge stereotypes about sexual minorities, remains in place. An associated training program was provided in Paris, while numerous initiatives were taken in conjunction with civil society in the United States, Sanofi's LGBT policy was marked 100/100 in the 2017 Corporate Equality Index.
- Introducing young people to the world of work regardless of their origins is a major challenge for the future. Sanofi is developing partnerships to help meet this challenge: internships, apprenticeships, work-study contracts and Volunteer for International Experience programs all give young people an insight into working life and how business works (see Section "4.1.3.A. Social dialogue in France").
- In France, 79 employees took part in sponsorship initiatives focused on equal opportunity. Nos Quartiers ont des Talents aims to make it easier for people from deprived neighborhoods to enter the workforce, the Institut Télémague supports talented and motivated students from underprivileged backgrounds, while Job dans la Ville helps troubled young people find their place in society and begin their careers.
- In the United States, employees can volunteer to join one of nine Employee Resource Groups, each of which focuses on a specific issue such as Generation Y, cancer, diabetes, sexual orientation or help for carers. Similar initiatives, instigated by our employees, have begun in other countries such as Russia, the Czech Republic, Italy and Brazil.

# 4.1.6. Promotion of and compliance with **International Labour Organization (ILO) Conventions**

Sanofi's Social Charter and Code of Ethics (see Section "2.B. - Control Environment" of the Report of the Chairman of the Board of Directors, presented as Exhibit 99.1 to our Annual Report on Form 20-F, available on our website at http://en.sanofi.com/investors/regulated\_info\_france/ french\_security\_report/french\_security\_report.aspx) set out our employees' fundamental rights under the principles of the UN Global Compact and the relevant ILO Conventions:

- freedom of association and recognition of the right to collective bargaining;
- elimination of all forms of forced labor;
- elimination of child labor; and
- · elimination of discrimination in employment.

In addition to our Social Charter and Code of Ethics, we have also established a Suppliers Code of Conduct, which refers to the following ILO conventions:

- ILO Conventions 138 and 182 on child labor;
- ILO Conventions 29 and 105 on forced labor;
- ILO Conventions 14 and 106 on weekly rest;
- ILO Conventions 95, 131 and 135 on wages and employee benefits;
- ILO Conventions 87 and 98 on freedom of association, protection of the right to organize and collective bargaining; and
- ILO Conventions 100 and 111 on equality of opportunity.

In 2015, three new internal policies on freedom of association, prohibition of forced labor and prohibition of child labor were approved and rolled out. They seek to establish processes for identifying and controlling the risk of violations of these rights at the operational level, and require the implementation of due diligence processes and grievance procedures for potential victims.

For those policies, which apply also to working conditions at our subcontractors and suppliers, internal controls have been put in place in five specific areas: respect for freedom of association and the right to collective bargaining; the elimination of all forms of forced labor; the abolition of child labor; the promotion of diversity; and wellbeing in the workplace.

The Code of Ethics invites all Sanofi employees to report any doubt they may have regarding potentially illegal or unethical practices to their supervisor or our Ethics & Business Integrity department.

In addition, a targeted audit program for suppliers has been in place since 2007 (see Section "4.3.3. Subcontracting and suppliers").

# 4.2. Information on health, safety and the environment

Our methodology for reporting health, safety and environmental data is presented in Section "4.4. How corporate social responsibility information is reported: Methodological note").

# 4.2.1. General policy on health, safety and the environment

Our Health, Safety and Environment (HSE) policy is established by our HSE Department, which oversees implementation of the policy throughout all our entities and sites worldwide.

# 1.A. Presentation of our HSE policy

Sanofi's manufacturing and research operations are subject to increasingly stringent health, safety environmental laws and regulations. Those laws and regulations are complex and rapidly changing. worldwide master policy on health, safety and the environment is intended to promote the health and wellbeing of the employees and contractors working on our sites, and respect for the environment.

During 2016 we continued to promote the policy among people working on our sites and our subcontractors, as we consider it to be an integral part of our commitment to corporate social responsibility. Our master policy lays down 78 rules in key fields: HSE management (21 rules), good practices in workplace safety (13 rules), process safety (10 rules), industrial hygiene (12 rules), health in the workplace (8 rules) and protection of the environment (14 rules). Most of these rules are covered by standards and methodological guides, so that they can be implemented at all our sites and entities worldwide.

The HSE Department carries out regular audits of Sanofi entities and subcontractors to check that the rules established centrally are being applied locally. Information relating to the audit process is set out in Section "1.C. Audit and Certification" below. In addition, all assignments performed by the HSE Department in connection with establishing, implementing and checking the application of HSE policy may be subject to audit by our Internal Audit Department.

# 1.B. Organization of our HSE function

Following the transition to global support functions as part of the "Forward" project, we have reorganized our global HSE function around three pillars:

- HSE Experts: about 40 experts in environmental protection, industrial hygiene, industrial toxicology, workplace safety, fire safety, industrial risks and occupational health, who intervene across all of our sites. Their role is to establish HSE policy and general objectives, play a leadership and coordination role in implementing the policy and meeting the objectives, maintain and develop expertise, and report to management on overall HSE performance.
- HSE Business Partners: around ten employees are responsible for developing HSE strategy within each company entity, working with the HSE experts and regional HSE managers. Their roles include consolidating and reporting data and performances, and carrying out risk assessments.
- Regional HSE managers: around 30 people in six regions provide operational support to the sites in their region.

The global HSE function is backed up by:

- · a dedicated HSE department within each of our 140 or so industrial and research sites(1) (excluding headquarters and administrative offices), and around 600 employees who run and implement HSE programs at site level:
- occupational health services, either in-house or outsourced, offering medical coverage appropriate to the nature of occupational risks.

The five European sites classified as Seveso III establishments have specialized response resources, implemented by standby crews and employees who have received second response training.

Finally, each site establishes and maintains its own emergency response plan by considering site-specific risks that need to be prevented, and internal or external resources that would be deployed or called upon in response to those risks.

Our HSE expertise relies on committees of in-house experts:

• Our "ECOVAL" committee assesses the environmental impact of the active pharmaceutical ingredients included in products marketed by Sanofi. It has developed an environmental risk assessment methodology, in line with regulatory expectations, and runs programs to collect the necessary data for such

assessments. Assessments have been conducted for products launched since 2006, in accordance with regulatory requirements. Sanofi exceeds current regulatory requirements by conducting additional environmental toxicity tests on products launched prior to 2006 to obtain additional data when the available data are insufficient. These tests have enabled us to supplement or update product assessments, and determine the environmental risks resulting from the use of our products by patients. In addition to these assessments, the HSE Department is working on more innovative projects to monitor environmental impacts by testing new technologies available on the market or by developing scientific partnerships with academia.

- Our "TRIBIO" committee is responsible for classifying all biological agents according to their degree of pathogenicity. It establishes rules for their containment, and preventive measures to be respected throughout Sanofi (see "Item 3.D. - Risk Factors - Environmental Risks of Our Industrial Activities" in our 2016 Annual Report on Form 20-F). This committee also plays a role in assessing the environmental risks associated with biological agents. Through audits, the committee ensures that environmental risks remain under control and that in-house and international standards are applied. The committee also helps develop training programs to maintain levels of expertise within the Group.
- Our "COVALIS" committee is responsible for assessing hazards and classifying all active pharmaceutical ingredients and synthesis intermediates handled at our sites. This covers all the active ingredients produced at our sites or subcontracted to third parties. In addition, important issues involving raw materials or other substances with no regulatory occupational exposure limits are also reviewed. The committee establishes occupational exposure limits that are applicable throughout Sanofi.

# 1.C. Audit and certification

We systematically monitor regulatory developments in HSE for all of our industrial and scientific activities. Our global HSE function runs audit programs to assess compliance with local administrative and regulatory requirements and with our 78 internal HSE rules. The purpose of these audits is to:

- help our sites and activities establish HSE priorities and action plans;
- · measure site performance against our internal rules and regulatory requirements;
- provide senior management with an objective and documented overview of how our HSE policy is being applied, and of the performance of our sites and subsidiaries;

- · identify, promote and organize good practices developed by our sites and subsidiaries; and
- check that HSE management systems and HSE programs are being implemented.

These HSE audits are performed throughout the year by three Sanofi Lead Auditors certified by the International Register of Certified Auditors (IRCA). They are supported by Sanofi employees (94 in 2016, including 4 from Merial), who usually conduct one HSE audit a year (four or five days, depending on the nature and size of the entity being audited). All these employees, who have recognized HSE experience, take a special HSE audit training program. The program is accredited by IRCA, and for some internal auditors leads to individual IRCA certification (in 2016 Sanofi had 21 certified auditors, and 90 certification applications pending).

In 2016, our in-house teams carried out 52 full scope HSE audits at Sanofi sites (including 3 Merial sites). In addition, 10 biosafety audits were conducted by our in-house experts, including 2 at Merial. Finally, 111 in-depth preventive visits (including 7 at Merial) and 91 specific visits (including 18 at Merial) were conducted with the assistance of technical experts from our insurers.

In addition to internal verifications and audits, Sanofi sites are also subject to regular inspections by local authorities and to regulatory verifications by third parties on specific issues. We believe that we are substantially in compliance with current HSE laws and regulations, and that all environmental permits required to operate our facilities have been obtained.

Through our HSE policy and internal audits, we encourage adherence to our HSE standards, which are specifically tailored to our activities. By complying with these standards, sites may if they wish obtain official recognition of their commitment through international certifications (ISO 14001, ISO 50001, OHSAS 18001, etc.).

#### 1.D. Training and awareness initiatives

We invest in training and awareness programs designed to embed environmental protection, and the prevention of health and safety risks, into all our professional activities.

In general, all new joiners receive initial HSE training appropriate for their job profile so that they can perform their work in strict compliance with the rules. Depending on their jobs, employees may then follow other training modules specifically related to their position (such as eco-driving for medical and other sales representatives, or chemical risks for employees who work with chemicals).

Founded in 2012, the Sanofi HSE Academy enables all employees to access the training programs developed and approved by the global HSE function (other than regulatory training). During 2016, approximately 4,860 employees received training from our HSE Academy (including 160 from Merial).

Key training programs include:

- "HSE Culture", which aims to instill an HSE culture in all of our people across all Sanofi entities. Nearly 8,630 people have completed this program since it was launched in 2003.
- The "Leadership and Safety Culture" cycle, offered by the European Center for Executive Development, which is aimed at site managers and executive committee members. This program, launched only recently, has already been completed by 201 people.
- The "Achieving a Culture of Excellence in HSE and Quality" (ACE) program, adapted from an existing program on "Human and Organizational Management of Safety" (HOMS) originally launched in 2012. The ACE program is being rolled out across all Sanofi sites worldwide, starting with executive committees and then cascading down to site managers and supervisors. A total of 730 employees followed the ACE program during 2016 (in Belgium, Canada, Colombia, Germany, France, Hungary, Indonesia, Mexico, Singapore, Spain, the United States, the United Kingdom and Vietnam). The program is being rolled out over three years.

These programs are backed up by specific expert training provided to employees reflecting the nature of their job:

- In occupational hygiene, using training modules supplied by the Occupational Hygiene Training Association (OHTA) to improve on-site competencies. Since 2012, Sanofi employees across all continents have completed 346 weeks of training and exams (not including the 41 weeks completed by Merial employees). This ongoing training program helps our employees towards obtaining an internationally recognized qualification as an occupational hygiene technician.
- In biosafety, with the rollout of three training programs for employees at sites exposed to biological risk (a basic module, a Bio Safety Officer module and a module for quality control lab staff).
- In HSE incident analysis, to train a network of experts on in-depth incident investigation. Following two pilot sessions in France and Germany in 2016, this program will be rolled out in 2017 to train one to three experts (depending on the size of the site) on each site.

• Road safety training for medical reps (see section "2.B.d. Road Safety").

Starting in 2016, HSE has been hosting a dedicated online platform offering a range of e-learning modules to promote a more mature approach to risk assessment, accident investigations and reporting within commercial operations. Other modules are also available to train employees on how to use software, such as our proprietary application listing biological agents present on our sites.

These training programs are supported by various awareness initiatives delivered throughout the year via the HSE intranet, plus newsletters and one-off campaigns to highlight specific issues or events at site level.

# 1.E. Resources devoted to the prevention of environmental risks and pollution

Capital and operating expenditures devoted to preventing environmental risks and contamination are part of the overall expenditures incurred on the implementation of Sanofi's HSE policy.

HSE operating expenditures amounted to some €224 million in 2016. These included payroll expenses for HSE staff, consumables, energy and labor at treatment installations, the cost of waste treatment and recycling, environmental taxes, studies and audit services.

We are continuing with our proactive approach, built on a 10-year environmental strategic plan for all chemicals and biochemicals sites. This approach has enabled us to prepare a detailed prioritized list of the environmental challenges for each site, including both regulatory and local issues, and then determine the resources needed to manage the risks identified. The findings derived from this approach are used to prepare action plans and capital expenditure budgets, which are being gradually implemented and monitored for each site.

Environmental fines imposed on Sanofi in 2016 were immaterial.

# 1.F. Provisions and guarantees for environmental risks

Applicable environmental laws and regulations may require Sanofi to eliminate or reduce the effects of chemical substance discharge at our various sites. The sites in question may belong to Sanofi, and may be currently operational, or may have been owned or operational in the past. In this regard, Sanofi may be held liable for the costs of removal or remediation of hazardous substances on, under or in the sites concerned, or on sites where waste from activities has been stored, without regard to whether the owner or operator knew of or under certain circumstances caused the presence of the contaminants, or at the time site operations occurred the discharge of those substances was authorized.

As is the case for a number of companies in the pharmaceutical, chemical and agrochemical industries, soil and groundwater contamination has occurred at some of our sites in the past, and may still occur or be discovered at others. In Sanofi's case, such sites are mainly located in the United States, Germany, France, Hungary, the Czech Republic, Italy and the United Kingdom. As part of a program of environmental surveys conducted over the last few years, detailed assessments of the risk of soil and groundwater contamination have been carried out at current and former Sanofi sites. In cooperation with national and local authorities, Sanofi regularly assesses the rehabilitation work required and carries out such work when appropriate. Long-term rehabilitation work is in progress or planned at Mount Pleasant, East Palo Alto and Portland in the United States; Merial Barceloneta in Puerto Rico; Frankfurt in Germany; Brindisi in Italy; Dagenham in the United Kingdom; Ujpest in Hungary; Prague in the Czech Republic; Beaucaire, Valernes, Limay, Romainville, Neuville, Vitry, Tours and Merial Toulouse in France; and at a number of sites divested to third parties and covered by contractual environmental guarantees granted by Sanofi.

We may also have potential liability for investigation and cleanup at several other sites. We have established provisions for the sites already identified and to cover contractual guarantees for environmental liabilities for sites that have been divested. In France specifically, we have provided the financial guarantees for environmental protection required under French regulations.

Potential environmental contingencies arising from certain business divestitures are described in Note D.22.e to our consolidated financial statements, included at Item 18 of our 2016 Annual Report on Form 20-F. In 2016, Sanofi spent €81 million (including €0.3 million related to the held-for-exchange Animal Health business) on rehabilitating sites previously contaminated by soil or groundwater pollution.

Due to the changes in environmental regulations governing site remediation, our provisions for remediation obligations may not be adequate due to the multiple factors involved, such as the complexity of operational or previously operational sites, the nature of claims received, the rehabilitation techniques involved, the planned timetable for rehabilitation, and the outcome of discussions with national regulatory authorities or other potentially responsible parties, as in the case of multiparty sites. Given the long industrial history of some of our sites and the legacy obligations arising from the past involvement of Aventis in the chemical and agrochemical industries, it is impossible to quantify the future impact of these laws and regulations with precision (see "Item 3.D. - Risk Factors - Environmental Risks of Our Industrial Activities" in our 2016 Annual Report on Form 20-F).

We have established, in accordance with our current knowledge and projections, provisions for cases already identified and to cover contractual guarantees for environmental liabilities relating to sites that have been divested. In accordance with Sanofi standards, a comprehensive review is carried out once a year on the legacy of environmental pollution. In light of data collected during this review, we adjusted our provisions to €737 million as of December 31, 2016 (including €5 million related to the held-for-exchange Animal Health business), compared with €720 million in 2015. The terms of certain business divestitures, and the environmental obligations and retained environmental liabilities relating thereto, are described in Note D.22. to our consolidated financial statements, included at Item 18 of our Annual Report on Form 20-F.

# 4.2.2. Information on health and safety in the workplace

Since 2012, we have launched a series of initiatives which continue to give us a good level of control over health and safety in the workplace.

#### 2.A. Health

#### 2.A.a. Health impact assessments

From the development of compounds to the commercial launch of new drugs, Sanofi research scientists continually assess the effects of products on human health, especially that of our employees. This expertise is made available to employees through committees responsible for chemical and biological risk assessments, which are used to determine appropriate risk prevention and protection measures for employees.

An in-house lab based in Aramon (France) develops specific analytical methods for pharmaceutical products that enable us to monitor employee exposure via inhalation. All our sites have access to the lab, which received NF EN ISO/IEC 17025 accreditation in 2014 from the French Accreditation Committee (COFRAC) for quantitative analyses of air samples taken at our sites.

In addition, specific resources are allocated to the implementation of the European Union regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). In compliance with the European CLP regulation on the classification, labeling and packaging of chemical substances, we have registered the relevant substances with the European Chemicals Agency (ECHA).

# 2.A.b. Occupational hygiene

Appropriate occupational hygiene practices and programs are defined and implemented by each site in accordance with Sanofi's HSE rules. These practices essentially consist of containment measures and measures for individual and collective protection against exposure at all workstations where chemical substances or biological agents are handled. All personnel are monitored under medical surveillance programs that are based on the results of occupational risk assessments linked to their duties.

This multidisciplinary approach to protecting health in the workplace goes beyond a mere reliance on occupational health services.

#### 2.A.c. Occupational health services

Each site has appropriate internal and/or external medical resources that comply with local regulations, and work with occupational hygiene managers to develop programs to prevent and identify health impacts associated with work practices.

#### **Collective agreement in France**

A collective agreement on the creation of an occupational health service at Sanofi in France was signed in November 2014, approved in November 2015, and subsequently implemented.

This agreement created a new occupational health structure, in response to the opportunities created by occupational health reforms (especially the French Act of July 20, 2011 and the decrees of January 30, 2012) and in light of our plans to gather employees from different Sanofi entities together at new sites (the Sanofi Val de Bièvre Campus and Sanofi Lyon Campus). The goal is to create a sustainable system that both anticipates and adapts to the new geographical distribution of employees. It also helps optimize medical time management.

The aim is to standardize medical surveillance of our employees by increased coordination of medical services, without impairing the independence of occupational physicians. Another aim is to help develop training plans for medical teams, and bring together all those who contribute to health and quality of life in the workplace. Our overarching objective is to protect the physical and mental health of our employees in accordance with the principles and fundamental values contained in the agreement of December 21, 2009 on occupational health within Sanofi in France.

In line with this objective, an initial amendment was signed in April 2016 to bring our Strasbourg research center within the scope of the agreement.

#### International occupational health network

Internationally, we have a leadership team of eight Key Medical Doctors (KMDs), based in the regions where we operate, which develops and harmonizes occupational risk prevention and medical surveillance activities within Sanofi, in compliance with local regulations.

#### 2.A.d. Occupational diseases

Occupational diseases and their causes are divided into categories according to the CEFIC (European Chemical Industry Council) classification system. More than one occupational disease may be reported for a single individual.

For the purposes of prevention, the number of occupational diseases is consolidated for Sanofi as a whole on an annual basis, with the aim of improving year by year the reporting of data based on local regulations that may vary greatly from one country to the next.

As of December 31, 2016, 30 occupational diseases were reported at world level (excluding Merial): in France (28) and North America (2), where reporting and recognition systems are well-established and readily accessible.

In France, recognizing the occupational nature of a disease may require rather lengthy investigations (lasting more than six months). Consequently, only 6 of the 28 diseases reported in France during 2016 had been recognized as occupational by January 20, 2017, as opposed to both those reported in North America.

In line with European statistics - in particular those for France, Italy, Belgium and Spain - one-third of the occupational diseases recognized as such within Sanofi during 2016 were musculoskeletal disorders.

#### 2.A.e. Health and wellness

"Take Care & Bwel!", Sanofi's employee wellness program initiated in 2012, aims to promote healthy lifestyles and prevent or delay the onset of chronic disease by focusing on three pillars: a balanced diet, regular physical activity and prevention of non-communicable diseases, through measures developed with the help of in-house and outside experts.

In 2015, an assessment of the impact of targeted interventions on employee lifestyles carried out with the help of academic experts during a pilot program launched in 2013 at our corporate headquarters found significant changes in behavior, such as choosing healthier food options or taking the stairs more often. This pilot program helped identify the most effective interventions, so that they can be introduced at other sites.

By the end of 2016, the program had already been rolled out in 40 countries in Europe, Asia-Pacific, Africa, South America and North America. In France, the program has been rolled out at our corporate, R&D and industrial sites.

Our goal is to continue expanding the program by supporting sites as they implement good practices and track changes to employee lifestyle choices, while also promoting the use of e-health tools. In 2015, our e-health program was selected by EIT Health (European Institute for Innovation and Technology), as a result of which it received funding in 2016 to develop e-health tools recognized for their scientific value and positive impact on employee education. This led to a pilot program being rolled out in four countries (the UK, France, Spain and China), in which 1,000 employees volunteered to have their lifestyle choices and cardiovascular risk measured using e-health tools. The study is being conducted in collaboration with Oxford University, and the results will be available in 2017

Other measures taken during 2016 included developing novel initiatives to help our employees with lifestyle changes, in particular offering enhanced support in giving up smoking.

#### 2.B. Occupational injury prevention programs

#### 2.B.a. Preventing occupational injuries

We have rigorous policies to identify and evaluate safety risks and to develop preventive safety measures, and methods for checking their efficacy. These policies are implemented on a worldwide scale to ensure the safety of all employees and to protect their health. Each project, whether in research, development or manufacturing, is subject to evaluation procedures, incorporating the chemical substance and process data communicated by the COVALIS and TRIBIO committees described in section 1.B. above. The preventive measures are designed primarily to reduce the number and seriousness of occupational injuries and to minimize the exposure of permanent and temporary Sanofi employees as well as our subcontractors.

Risk assessments of processes and installations are drawn up according to standards and internal guidelines incorporating the best state-of-the-art benchmarks for the industry. These assessments are also used to evaluate compliance with our regulatory obligations. Particular attention is paid to any risk-generating changes such as process or installation changes, as well as changes in production scale and transfers between industrial or research units.

Our laboratories specializing in process safety-testing, which are fully integrated into our chemical development activities, apply methods to characterize the substances produced (intermediate chemical compounds and active ingredients) and model the potential impact of leachable substances in the event of a major accident. These laboratories also determine the parameters for classifying reactions as hazardous, in order to define scale-up process conditions when transferring from development stage to industrial scale. All these processes ensure that our risk assessments are appropriate.

We believe that the safety management systems implemented at each site, the hazard studies carried out and the risk management methods applied are consistent with legal requirements and best practices in the industry.

Our chemical manufacturing sites in Aramon, Sisteron and Vertolaye (France), the facilities at our industrial platform in Frankfurt-am-Main (Germany), and our chemical production facility in Budapest (Hungary) are classified as Seveso III (from the name of the European directive relating to potentially dangerous sites, providing a list of activities and substances and the associated classification thresholds). In accordance with French law on technological risk prevention, the three French sites mentioned above are subject to more stringent safety inspections due to the toxic or flammable materials stored on the sites and used in their operating processes.

#### 2.B.b. Prevention of serious or potentially serious accidents

In 2013, our HSE Department established criteria for determining the potential seriousness of occupational accidents. This enabled us to take more targeted action to reduce the number of potentially serious accidents, and to take account of human and organizational factors in an in-depth analysis of such accidents. The ultimate aim is to focus our efforts on ways to prevent potentially serious accidents, rather than simply reacting after the event. Potentially serious accidents are systematically identified and reported and, since January 2014 have also been subject to an in-depth analysis.

In 2016, we took steps to reinforce our preventive measures and further develop the analytical methodology used to assess the root causes of serious or potentially serious accidents. The goal is to prevent any recurrence of these events, and to develop a safety culture for all Sanofi employees, independent contractor staff and temporary staff

# 2.B.c. Learning from experience (LEX)

The key objectives of our LEX initiative are to:

- · identify the contributing factors of incidents by going back to the root causes rather than purely technical causes, so that future incidents can be avoided or their effects mitigated;
- prevent recurrence by analyzing past events, taking corrective action and sharing lessons from the experience;
- improve performances in all fields by changing operating methods, sharing good practice, and taking account of all technical, human and organizational factors through collective in-depth analysis of incidents;
- · heighten employees' awareness of the hazards and risks inherent in their everyday work environment, tasks, movements, practices and interactions;
- develop robust and consistent methodologies to better protect our business against risks that we have identified and evaluated: and
- value the positive contribution from operational staff to the safety of work tasks, operations and installations.

Learning from experience is based on a dedicated reporting structure, involving an analysis of incidents with potential safety and environmental implications along with the immediate or root causes and suggestions for future action.

The analysis of root causes is a key step in our approach to eradicating potentially serious accidents and incidents. An in-depth analysis training module was developed in 2016 (see Section "1.D. Training and awareness initiatives").

#### 2.B.d. Road safety

As part of our ongoing commitment to road safety, we launched a targeted awareness campaign in 2016. A video featuring the two sponsors of our Road Safety Committee was distributed to our Commercial Operations teams worldwide. It was supported by a media kit dealing with twelve key road safety issues, ranging from speed and the risk of using a phone while driving to the risks faced by pedestrians. The kit is available in English, French and Spanish, and our subsidiaries are gradually translating it into other languages. The aim is to encourage local management to take responsibility for rolling out the twelve modules. Sales forces will follow one module a quarter, familiarizing them with core safety messages and showing them what is expected from them.

Hands-on training courses offered every three years help sales forces improve their techniques for emergency braking and driving in slippery conditions, and to better assess safe following distances, while practicing on a closed track in a safe environment. These courses are backed up by online courses to refresh awareness of key road safety principles.

Our HSE Department has worked closely with our subsidiaries to carry out in-depth analyses of serious and potentially serious accidents in order to improve our prevention policy.

In April 2016, during a ceremony at the Carrousel du Louvre in Paris, our Road Safety Committee presented awards to medical representatives (from Brazil, the Philippines and the United States), to regional managers (from Australia, India, the Philippines and Vietnam) and to HSE managers (from Brazil, Finland and the United Kingdom) in recognition of their exemplary attitude to road safety.

#### 2.B.e. Occupational injury indicators

Lost time injury frequency rate <sup>(a)</sup>	2016	2015
Sanofi employees:		
France (excluding Merial)	3.4	3.7
France (including Merial)	3.3	3.8
World (excluding Merial)	1.7	1.6
World (including Merial)	1.7	1.7
Distribution of worldwide rate by function:		
Industrial Affairs	1.9	1.6
Vaccines	2.0	2.7
Genzyme	0.8	1.3
Research and Development	1.8	1.4
Global Operations	1.6	1.5
Support Functions	0.8	1.8
Merial	1.7	3.0
Independent contractors (excluding Merial)	2.4	2.7
Independent contractors (including Merial)	2.5	2.8
Independent contractors (Merial)	4.4	3.6

<sup>(</sup>a) Number of accidents resulting in lost time of one day or more within a 12-month period, per million hours worked. For non-mobile personnel, accidents occurring during the home-workplace commute are not included in this indicator. However, they are included for medical sales representatives, in accordance with reporting rules. To obtain comparative data, the figures for 2015 have been restated to reflect the scope of the Sanofi group at the end of

The lost time injury frequency rate for our employees is 1.7 (with and without Merial), broadly in line with 2015 if Merial is included (+6.3% without Merial), but has fallen since 2010 (-19% without Merial).

In France, the lost time injury frequency rate for Sanofi employees was 3.3 with Merial (3.4 without), lower than the figures for 2015 (-13.2% with Merial and -8.1% without) and for 2010 (-22.7% without Merial).

The lost time injury frequency rate for the support functions, Genzyme, Merial, Vaccines and independent contractors showed an improvement relative to 2015. The rates for R&D, Industrial Affairs and Global Operations increased, but remain at low levels

We have decided not to publish the severity rate calculated using the criteria defined by French regulations.

Because this rate is calculated solely on the basis of the number of days of lost time, it does not reflect the actual severity of injuries from an international standpoint. This is because for a given injury, the number of days of lost time may vary considerably from one country to another depending on the applicable regulations compensation systems. Consequently, we have decided to publish the total occupational injury frequency rate. This indicator takes into account occupational injuries with and without lost time (i.e. all serious accidents), thereby avoiding the discrepancies arising from country-specific regulatory systems as mentioned above. The total occupational injury frequency rate fell year-on-year, by 17.9% with Merial and by 11.5% without Merial.

Total occupational injury frequency rate	2016	2015
Sanofi employees worldwide (excluding Merial)	2.3	2.6
Sanofi employees worldwide (including Merial)	2.3	2.8
Merial employees worldwide	2.9	6.2

#### 4.2.3. Environmental information

The main objectives of our environmental policy are: to prevent accidental pollution that may occur at production and research sites, minimize the use of natural resources and implement manufacturing techniques designed to reduce the environmental impact of our activities. In order to optimize and improve our environmental performance, we adopt a strategy of continuous improvement at all our sites through the annual implementation of HSE progress plans. We believe that this strategy clearly expresses the commitment of both management and individual employees to health, safety and the environment.

In 2010, we made ambitious commitments to reduce scope 1 and 2 CO<sub>2</sub> emissions by 20%, and water withdrawals by 25%, between 2010 and 2020 (on a constant structure basis).

Our goals also include managing pharmaceutical residues in the environment. At the end of 2015, we had achieved our goal of evaluating our chemical and biochemical manufacturing sites and determining environmental thresholds for a priority list of compounds. During 2016, we extended the evaluation process to sites where we manufacture solid form pharmaceuticals, and launched a number of pilot schemes to identify appropriate tools and resources for the specific management of pharmaceutical substances at those sites.

In 2015, we enhanced and broadened our environmental strategy to include the entire value chain (both in-house and at our suppliers), from raw materials procurement and through manufacturing, transportation R&D distribution to the end of the life cycle of our medicines. Our "Planet Mobilization" project arose out of this ambition to create a new environmental strategy. In 2015, a

steering committee was formed under the leadership of our General Secretary. It comprises members of our senior management team representing many of our key functions including Industrial Affairs, Corporate Social Responsibility, Procurement, Supply Chain, R&D and Communication. Sanofi employees worldwide have been made aware of "Planet Mobilization" through eight launch events in France, the United States and China (in 2015) and Brazil (in 2016). The steering committee has also organized joint strategy-building workshops involving Sanofi employees.

The goal is to create a roadmap that will embed environmental issues more firmly into our decision-making processes, especially by taking into account the circular economy, the impact of climate change on our activities, and how the goods and services we provide are used. The aim is also to promote innovation, reduce costs and limit environmental impacts. Many of our initiatives carried out in recent years already address the challenges of the circular economy (see Sections "4.2.3. Environmental information - 3.A. Sustainable use of resources -3.B. Climate change - 3.C. Pollution and waste management," below).

#### 3.A. Sustainable use of resources

#### 3.A.a. Water consumption

Water used during manufacturing (for fermentation in particular) and heat exchange processes (cooling without product contact) is essentially withdrawn from available watercourses and groundwater. We have specific operating procedures for effectively managing our use of water, and for reducing our consumption through moderation and recycling

Water consumption (m³)(a)	2016	2015
Surface water withdrawal (lakes and rivers) (excluding Merial)(b)	10,295,794	11,182,553
Ground water withdrawal (excluding Merial)(c)	24,448,901	23,448,930
Public water supply withdrawal (excluding Merial) <sup>(d)</sup>	8,638,102	8,856,055
Total (excluding Merial)	43,382,797	43,487,538

(a) Merial:

(b) 121,269 m³ (2015) / 146,401 m³ (2016)

(c) 314,624 m³ (2015) / 477,679 m³ (2016)

(d) 417,866 m³ (2015) / 369,468 m³ (2016)

We have set an ambitious goal of reducing our water consumption by 25% between 2010 and 2020. By the end of 2016, we had reduced our water consumption by 18.3% on a constant structure basis compared with our baseline year (2010).

Water consumption was almost stable in 2016 relative to 2015 (down 0.24%). This overall stability reflects contrasting factors. On the one hand, there was a substantial reduction at four of our sites of more than 1.5 million m<sup>3</sup> in absolute terms, mainly as a result of the switch from an open to a closed circuit at our Frankfurt R&D site in Germany, a change in the activities carried on at our Neuville site in France, and a reduction in consumption at our Vertolaye site in France, representing 7% of total water consumption. However, those reductions were offset by increased usage elsewhere, mainly as a result of higher production volumes at Elbeuf and Vitry Alfortville (France) and Brindisi (Italy).

#### 3.A.b. Water supplies and local constraints

Water is needed for many processes in the production of medicines and vaccines and we are committed to managing this vital resource responsibly, particularly in areas where water supplies are limited.

Our internal HSE standards require all of our sites to create and follow a water management plan. In addition, our internal rules require any sites at potential risk from water scarcity to establish and comply with a plan for reducing water consumption that is tailored to the site's local context and industrial characteristics. This reduction plan must set appropriate goals for reducing water consumption and specify how they will be monitored, as well as any specific investments.

All sites for which there is insufficient knowledge of the local water context or that consume more than one million m<sup>3</sup> per year must perform an appropriate study in order to determine and document whether they are at potential risk from water scarcity. In some cases, sites may be required to conduct in-depth studies on the local water supply situation.

In 2014, we revised and fine-tuned our approach at potentially water-sensitive sites, taking into account the absolute volume of water withdrawn by the site, absolute water stress, and relative water scarcity affecting the site locally.

Further investigations comparing our own local data with a comprehensive independent review were carried out in 2015 and 2016. This enabled us to fine-tune our list of sites potentially at risk from water scarcity, and those where additional investigation is needed at local level to confirm the situation.

In all, nine sites (accounting for 20.9% of our total water consumption in 2016) are potentially exposed to risk from water scarcity, and additional investigation is required at local level for a further ten sites (accounting for 7.9% of our total water consumption) to confirm the actual extent of their exposure.

In addition, two other sites use more than one million m<sup>3</sup> of water per year, accounting for 16.7% of our water consumption. One of those sites (Frankfurt, Germany) has demonstrated that its water supply is not at risk, while the other (Toronto, Canada) has conducted in-depth studies to reduce its consumption.

A four-year work plan was established at the end of 2015 for all of these sites.

Specific studies on water resources and/or internal site consumption are ongoing, for example at the vaccines site in Toronto and the Vertolaye and Elbeuf sites in France. In light of tensions over water supplies in the area around Sao Paulo, Brazil, a special monitoring mechanism has been implemented. Other sites are taking steps to reduce water consumption, such as the facility in Cairo (Egypt) where recycling of water used for rinsing flasks is saving 1,500 m<sup>3</sup> of water a year.

Sanofi has also developed software enabling sites to perform self-assessments to address local water supply issues. Currently, use of this software is concentrated on chemicals and injectables facilities and on sites in Brazil, Colombia and China. Rollout to other sites is ongoing.

Sanofi has been an active participant in the Carbon Disclosure Project (CDP) Water Questionnaire program since its inception. The official ratings awarded Sanofi a B score for 2016 (on 2015 data), in line with the previous year's score. This puts Sanofi in the average range for the sector and highlights the overall soundness of our water strategy, especially as regards our approach to waterrelated risks.

Water is of course one of the key areas covered in our "Planet Mobilization" environmental program. This program calls for ambitious strategic thinking not only for our own sites, but for those of our suppliers who are most affected by water issues.

#### 3.A.c. Energy consumption

Our energy consumption in 2016 was stable compared with 2015. Two of the three sites that recorded lower consumption ceased operations during the year. This reduction in consumption was offset by a significant increase at three other sites: the newly-opened facility at Ho Chi Minh City (Vietnam); Swiftwater Production (United States), which saw an increase in production volumes; and Brindisi (Italy), due to increased use of co-generation, which consumes more energy.

Energy consumption (Gigajoules)(a)	2016	2015
Gas (excluding Merial) <sup>(b)</sup>	8,378,518	8,279,077
Electricity (excluding Merial)(c)	6,081,482	6,363,939
Liquid hydrocarbon fuels (other than methanol) (excluding Merial) <sup>(d)</sup>	248,154	227,558
Renewable fuels (excluding Merial) <sup>(e)</sup>	147,563	42,388
Other (steam, heat-transfer fluids, cooling water, compressed air) (excluding Merial) <sup>(f)</sup>	940,718	1,161,889
Total (excluding Merial)	15,796,434	16,074,851

(a) Merial:

(b) 282,604 GJ (2015) / 266,693 GJ (2016)

(c) 569,700 GJ (2015) / 524,768 GJ (2016)

(d) 62,723 GJ (2015) / 53,046 GJ (2016)

(e) 781 GJ (2015) / 893 GJ (2016)

(f) 150,930 GJ (2015) / 153,105 GJ (2016)

Coal: 38,700 GJ (2015) / 58,018 GJ (2016)

Electricity from renewable sources accounted for 9.3% of our total energy consumption in 2016, slightly more than in 2015. This figure includes, for each country, the renewable proportion of purchased electricity, and the consumption of heat transfer fluids from renewable sources (geothermal energy) and renewable fuels (biomass and waste incinerators) used for heat generation.

By the end of 2016, we had reduced our energy consumption by 13.6% relative to the baseline year (2010).

# 3.A.d. Measures to improve energy efficiency and the use of renewable energies

We apply a comprehensive strategy to address the challenges of diminishing fossil fuel resources and climate change (see also Section "3.B., Climate Change").

Our strategy focuses on three goals:

# **Consume less**

An energy conservation program has been implemented at all our sites, with a specific focus on the air treatment systems that ensure high-quality production environments. These systems are some of our biggest users of energy, accounting for up to 70% of energy consumption at some of our pharmaceutical and vaccine manufacturing sites. In 2013, we signed a three-year industrial collaboration agreement with Schneider Electric to deploy energy performance management tools and carry out feasibility studies in key technological fields such as air treatment, the production and distribution of electricity, heat and cooling, as well as the development of renewable

Our energy efficiency approach covers all our activities, from industrial facilities to our medical rep vehicle fleets, and includes decisions on the methods used for the transportation and distribution of our products.

#### **Consume smarter**

We develop best-in-class equipment at our industrial sites, factoring in the total cost of equipment ownership, especially equipment where energy costs represent the highest proportion of total cost of ownership (motors and lighting). In 2012, we entered into a master service agreement with Cofely to install high efficiency cogeneration units and/or heat production units powered by renewable energies at our European sites. In 2013, the term of the agreement was extended to 2017 and its scope was expanded to include sites in China, Latin America and North America. Cogeneration units went live in 2016 at four sites in Italy (Origgio, Anagni, Brindisi and Scoppito) and in Cologne, Germany.

#### Consume differently (use of renewables)

As part of our strategy to reduce greenhouse gas emissions, we conduct regional assessments relating to the use of renewable energies, based on risk/opportunity analyses (risk of supply shortages versus opportunities offered by government incentives).

Progress toward our three strategic goals (consume less, consume smarter, consume differently) is monitored through extensive, detailed energy consumption metrics that are used to assess our performance.

Launched over ten years ago to coordinate efforts at all our industrial and R&D entities, the Sanofi Energy Network is now fully operational. This expert network meets twice a year for Energy Days, generally at an industrial site, to share the company's strategic vision for energy and explore ways to improve operating methods. In addition, these events provide an opportunity to discuss good practices, talk about any technical problems and monitor progress.

All our industrial activities have an energy task force that meets at least once a year to set goals and establish action plans for their activity to reduce energy consumption and meet CO<sub>2</sub> emissions objectives. Energy managers and/or energy specialists have also been appointed at each site.

#### 3.A.e. Consumption and optimization of raw materials

Solvents, primarily used to synthesize active ingredients and transform them into pharmaceutical products (essentially solid formulations), have the greatest We established environmental impact. have recommendations for proper use at global level. Solvents are selected or substituted on the basis of the extent to which they reduce health, safety and environmental risks.

Solvents used in the production process are either purchased (consumed quantities), or regenerated at Sanofi sites. We encourage process optimization, regeneration (when possible) and waste-to-energy technology in an effort to reduce our consumption of non-renewable raw materials.

As part of our action plan to reduce emissions of volatile organic compounds (VOCs), launched in 2015, we upgraded our reporting procedures during 2016 so that we can now collect VOC data using mass balance analysis of the solvents used. The sites involved are required to apply stricter rules on emissions control, and to implement a solvent reduction plan. Consequently, solvent quantity data are now part of our VOC reporting.

# 3.A.f. Land use

Land use is not a major issue at Sanofi. The only impact we have on land use is through the footprint of our built property, which is very limited compared with other industries. The limited impact of our activities on land, and any claims arising as a result, are described in section "4.2.1.F. Provisions and guarantees for environmental risks".

#### 3.B. Climate change

#### 3.B.a. Greenhouse gas emissions

#### **Scope 1 & 2**

Our strategy to address energy and climate change challenges focuses on three key areas: energy consumption, greenhouse gas emissions, and energy spending. Aware of the dwindling supply of fossil fuels and the impact of their use on climate change (conversion of fossil carbon into atmospheric carbon), we have set a goal of reducing CO<sub>2</sub> emissions: our target is to cut scope 1 and 2 greenhouse gas emissions by 20% (excluding medical rep fleets) by 2020 compared with 2010, on a constant structure basis. This goal is being pursued by all our industrial and R&D sites through a specific policy aimed at improving energy efficiency and the use of renewable energies. The measures taken by Sanofi are described in Section "4.2.3.A.d. Measures to improve energy efficiency and the use of renewable energies".

The combustion of natural gas and liquid hydrocarbons releases carbon dioxide into the atmosphere (direct emissions). The European CO2 Emissions Trading Scheme (ETS), established in accordance with the Kyoto Protocol, concerns five of our European industrial sites for the 2013-2020 period.

Our electricity consumption also generates indirect emissions, made by the suppliers that provide electricity for our sites. Those emissions are calculated based on emission factors published by the International Energy Agency. Indirect emissions resulting from purchases of utilities are included in indirect emissions for each site.

As with our total energy consumption, our total direct and indirect CO2 emissions remained stable year-on-year in 2016.

Compared with our baseline year (2010), direct and indirect (scope 1 and 2) emissions from our manufacturing and research sites (excluding vehicle fleets) have been reduced by 19.4%, close to our 20% objective.

Greenhouse gas emissions (Tonnes of CO <sub>2</sub> e) <sup>(a)</sup>	2016	2015
Direct emissions: fuel (scope 1 – excluding medical rep fleet) (excluding Merial) <sup>(b)</sup>	431,359	424,572
Indirect emissions: production of electricity and other forms of energy (scope 2) (excluding Merial) <sup>(c)</sup>	496,484	514,300
Total (excluding Merial)	927,843	938,872

CO2e = CO2 equivalent.

(a) Merial:

(b) 16,286 tonnes (2015) / 15,112 tonnes (2016)

(c) 35,025 tonnes (2015) / 31,904 tonnes (2016)

Supplementary information: after adding emissions from the medical rep fleet (excluding Merial) to scope 1, total scope 1 emissions are stable year-on-year. Eco-driving action plans and rules on vehicle selection have helped reduce CO<sub>2</sub> emissions from the medical rep fleet by approximately 10%. Total direct emissions (including the medical rep fleet) and indirect emissions of CO2 were reduced by approximately 2% in 2016 relative to 2015.

#### Scope 3

Scope 3 has been calculated (including Merial) for 12 significant categories from among the 15 listed in the Greenhouse Gas (GHG) protocol. Six categories accounted for over 90% of our scope 3 greenhouse gas emissions in 2016.

The 11% reduction in emissions between 2015 and 2016 is mainly due to better understanding of input data, and improvements in the calculation process (reduction of 22% in Category 1, "Purchased goods and services", largely due to the use of emission factors that are more precise and less conservative than the default factor).

The six categories are listed below, in descending order of the volume of emissions.

Category 1 - Purchased goods and services (54% of 2016 emissions)

The most substantial items are purchases of primary and secondary packaging (including medical devices and plastics), and chemical raw materials.

The main area identified for progress is the optimization of packaging materials. Action plans relating to the densification and change in usage of materials have been put in place for various products. This issue will be addressed more fully when we implement our new environmental strategy in 2017.

Category 11 - Use of sold products (10% of 2016 emissions)

The biggest sources of emissions in this category relate to the existence of propellant gases in some of our products, travel undertaken by professionals such as nurses in delivering healthcare, and to a much lesser extent the refrigeration of products (for example vaccines). The metrics for this category are still subject to considerable uncertainty (such as modelling healthcare delivery, and assumptions about refrigeration), but we have already identified areas for improvement such as developing products that are less cold chain dependent. As with the "purchased goods and services" category, our new environmental strategy is also intended to help identify and implement action plans that can reduce the climate change impact of using our products.

Category 2 - Capital goods (8% of 2016 emissions)

This relates to emissions generated to produce capital goods bought or acquired by Sanofi. Work done in conjunction with our Procurement department in 2016 has enabled us to adjust our data, which were under-estimated in 2015.

Category 3 - Fuel and energy-related activities (7% of 2016 emissions)

This category is closely related to scope 1 and 2 energy consumption levels, and is on a downtrend due to action plans already in place (see description in section "3.A.c. Energy consumption").

Category 5 - Waste generated in operations (5% of 2016 emissions)

This category includes emissions arising from the treatment of solid or liquid waste generated, handled or controlled by Sanofi.

Category 9 - Downstream transportation and distribution (5% of 2016 emissions)

Although emissions in this category are minimal, efforts to reduce them have been ongoing since 2009 and continued through 2016 (including the development of long-term barge and sea freight as alternatives to road and air transportation).

Scope 3 (Tonnes of CO <sub>2</sub> e) <sup>(a)</sup>	2016	2015
Category 1. Purchased goods and services(b)&(c)	4,746,971	6,074,832
Category 2. Capital goods <sup>(c)</sup>	696,634	455,357
Category 3. Fuel and energy-related activities(b)&(d)	605,035	682,512
Category 4. Upstream transportation and distribution <sup>(d)</sup>	213,194	263,743
Category 5. Waste generated in operations <sup>(d)</sup>	454,633	445,900
Category 6. Business travel <sup>(b)</sup>	110,259	101,810
Category 7. Employee commuting <sup>(d)</sup>	102,811	103,265
Category 9. Downstream transportation and distribution(b)&(c)	452,584	444,777
Category 10. Processing of sold products <sup>(b)</sup>	184,211	15,502
Category 11. Use of sold products <sup>(d)</sup>	904,707	555,944
Category 12. End-of-life treatment of sold products <sup>(c)</sup>	261,253	71,275
Category 15. Investments <sup>(b)</sup>	N/A <sup>(f)</sup>	640,067
Total <sup>(e)</sup>	8,732,292	9,854,984

<sup>(</sup>a) CO<sub>2</sub>e = CO<sub>2</sub> equivalent.

# 3.B.b. Adapting to the consequences of climate change

Extreme weather caused by climate change could present a risk both to our production facilities and to our distribution chain, right up to delivery of our products to patients. To guard against these risks, our facilities are constructed to the highest standards, using state-of-the-art engineering techniques and taking maximum constraints into account in the design phase. In addition, during site visits, technical experts from our insurers issue recommendations for dealing with extreme weather conditions, such as putting in place emergency flood risk plans. Risks related to natural disasters are also taken into consideration in our crisis management plan, across all levels of our production sites and supply chains.

#### 3.C. Pollution and waste management

# 3.C.a. Measures to prevent and reduce air emissions, wastewater discharge and soil contamination with a serious impact on the environment

#### Air emissions

In addition to carbon dioxide (CO<sub>2</sub>), local pollutants such as sulphur oxides (SO<sub>x</sub>) and nitrogen oxides (NO<sub>x</sub>) are generated by combustion. Most boilers have been converted from coal or fuel oil (energy resources that emit  $SO_x$ ) to gas.

Only SO<sub>x</sub> emissions related to coal and fuel oil combustion are reported. In addition to coal, which is used only at a single site in China, consumption of fuel oil is essentially limited to electricity production for standby generators (plus a few minor uses for heat production). SO<sub>x</sub> emissions fell by 64.1% between 2015 and 2016. This sharp fall arose because the way the calculation formula is devised overstates emissions. In 2016 a number of sites reported data that were closer to actual emissions, sharply reducing reported emission levels. A substantial portion of the year-on-year fall relates to the Shantha site, where there was a variance of 53.5 tonnes between the measured amount for 2016 and the calculated amount for 2015.

Nitrogen oxides (NO<sub>x</sub>) are released during the combustion of liquid and gaseous fuels.

NO<sub>x</sub> emissions from manufacturing processes are immaterial compared with emissions from combustion facilities, and are not included in the consolidated data. The table below presents annual emission volumes resulting from hydrocarbon combustion, based on emission factors. NO<sub>x</sub> emissions fell by 23.7% between 2015 and 2016.

<sup>(</sup>b) Change in calculation method

<sup>(</sup>c) Qualitative improvement in metrics

<sup>(</sup>d) Change in nature of operations

<sup>(</sup>e) GHG Protocol emission categories 8 and 13 (upstream and downstream leased assets) and 14 (franchises) are not material

<sup>(1)</sup> This category is applicable to investors. We own shares in companies that buy from, or sell to, Sanofi. Emissions relating to products and services bought and sold in this way are already included in the other categories. To avoid double counting, this category is regarded as non-applicable in 2016.

Air emissions (Tonnes) <sup>(a)</sup>	2016	2015
Direct SO <sub>x</sub> emissions <sup>(b)</sup> (excluding Merial)	28	78
Direct NO <sub>x</sub> emissions <sup>(c)</sup> (excluding Merial)	409	536

(a) Merial:

(b) 27 tonnes (2015) / 24 tonnes (2016)

(c) 0.7 tonnes (2015) / 2.6 tonnes (2016)

Controlling volatile organic compound (VOC) emissions from drug synthesis and manufacturing activities is a priority for Sanofi. Steps to control these emissions are integrated into each stage of product development, from research to production:

- we are reducing the use of organic solvents by applying green chemistry techniques and key process performance indicators used by our R&D teams;
- · we are also reducing emissions at source through specific adjustments to manufacturing processes and maximum containment of solvent use. See section "3.A.e. Consumption and optimization of raw materials";
- Because manufacturing processes and equipment can never be completely isolated from their environment, residual VOC emissions are captured and treated at special treatment facilities using the best available techniques for the specific physico-chemical properties of the VOCs emitted (cryogenic capture, gas scrubbers, thermal oxidizers, etc.).

#### Wastewater discharge

Industrial effluent wastewater is treated either on-site at our in-house facilities or at municipal water treatment plants under agreements signed with plant operators. The data reported correspond to effluents after internal and/or external treatment. Chemical oxygen demand (COD) is the primary environmental indicator of effluents. If no information on external treatment is available, a 50% purification rate is assumed. All in-house wastewater treatment plants, regardless of type - membrane bioreactors, conventional biological or physico-chemical undergo continuous improvement: sorting of effluents at source and separate upstream treatment for certain waste flows, and optimization of biological treatment with support from our in-house environmental laboratories.

The data reported relate to our Chemistry and Biotech facilities, which generate the majority of the effluents produced by Sanofi.

Wastewater discharge (Tonnes)	2016	2015
COD (excluding Merial) <sup>(a)</sup>	2,412	2,029

(a) Merial: 18 tonnes (2015) / 6 tonnes (2016)

COD rose by 18.9% between 2015 and 2016, mainly as a result of a significant increase at our site in Elbeuf (France) due to a malfunction at our in-house treatment plant. The impact was partly offset by lower COD at our site in Mourenx (France).

At local level, each site is responsible for determining its own effluent management program, based on environmental impact assessments and regulatory impact analyses. These programs involve:

- · characterizing the principal pollutants and sources of effluents;
- · determining the technologies required for each type of effluent; and
- monitoring discharge and performance at treatment facilities.

In response to the issue of pharmaceuticals in the environment (PIE), we have developed an approach coordinated by our HSE Department, which is in line with our own HSE policy and with currently applicable regulations.

Our approach focuses on four key areas:

- improving our knowledge about the impact of our products by performing assessments of environmental hazards and risks, whether required by regulations or conducted on a voluntary basis. Our "ECOVAL" committee is responsible for conducting those assessments, which apply not only to newly marketed products but also to pre-existing products...
- developing our general awareness pharmaceuticals in the environment through research partnerships with academia (such as the University of Montpellier, France) and other stakeholders (such as pharmaceutical industry associations);
- analyzing effluents at our manufacturing sites and assessing their impact on the environment, if necessary devising environmental target values pharmaceutical products via the "ECOVAL" committee and specific analytical methods at one of our in-house labs. Between 2012 and 2015, we conducted a research program at several sites to determine environmental guideline values for 30 compounds

detected in effluents, pre-selected on the basis of hazard level criteria. All of those pre-selected compounds have now been quantified in effluents and assigned an environmental guideline value; and

exploring new technologies for treating these types of micro-pollutants.

In 2014, our site at Vertolaye (France) began installing quaternary micropollutant treatment equipment that uses innovative technology. Because this is the first time this new technology has been used at an industrial site, installation was still ongoing during 2016.

To promote proper disposal practices, Sanofi also supports take-back programs to collect unused medicines from patients. To this end, we have developed a list of tips for patients on "What to do with your unused medicines".

#### Soil contamination

In accordance with our own HSE policy and regulatory requirements, all our sites are equipped with containment systems and/or systems for collecting accidental releases to prevent them from penetrating the soil. All containment systems are built to the highest standards and are covered by appropriate maintenance programs to ensure the integrity of the sites' effluent collection systems. Our sites are also equipped with emergency spill control kits wherever potentially hazardous substances are stored or handled.

We also have a systematic multi-year soil and groundwater monitoring and evaluation program for our sites, both for those with ongoing operations and those being sold. Where necessary, remediation work is carried out following detailed evaluations.

#### 3.C.b. Circular economy

# Waste prevention, recycling and disposal measures

Reducing waste volume and appropriate waste management are important objectives for Sanofi. The key to our policy is to reduce waste generation at source, followed by a systematic examination of recycling possibilities before waste is disposed of in any other manner.

Each site manages its waste according to the following principles:

- reduce waste at source;
- reuse, recycle or recover on-site or with selected subcontractors:
- incinerate, with energy recovery wherever possible; and
- send waste to landfills as a last resort, provided that the landfill is duly regulated and monitored. Landfills used for hazardous waste are audited annually, and those used for non-hazardous waste are audited every three years.

Our waste management program includes procedures to categorize and identify waste generated by each process, and then to collect, sort, treat, store, transport and dispose of each type of waste appropriately. In addition, we keep records of all waste management documents to ensure traceability through final treatment.

Prior to engaging a new waste contractor, the contractor's qualifications, competence and compliance regulations are thoroughly verified for each class of waste.

Integrated country-wide waste management approaches have been implemented in the main countries where Sanofi is present or where the potential synergies are greatest (for example France, Canada and the United States).

Our "Planet Mobilization" project has helped us develop strong and clear guidelines for future policy on waste, with the aim of regarding waste generated from our industrial processes as a potential resource. The proposal is that by 2030 less than 1% of our operational waste will go to landfill, and that over 90% will be reused, recovered or recycled.

# Hazardous waste (Tonnes)(a)

	2016	2015
Recycled hazardous waste (excluding Merial) <sup>(b)</sup>	26,522	35,287
Hazardous waste incinerated with waste-to-energy (excluding Merial)(c)	49,230	39,470
Hazardous waste incinerated without waste-to-energy (excluding Merial)(d)	110,579	105,166
Hazardous waste sent to authorized landfills (excluding Merial)(e)	2,959	2,295
Total (excluding Merial)	189,290	182,218

- (a) Merial:
- (b) 28 tonnes (2015) / 30 tonnes (2016)
- (c) 1,782 tonnes (2015) / 1,632 tonnes (2016)
- (d) 396 tonnes (2015) / 481 tonnes (2016)
- (e) 1,260 tonnes (2015) / 1,302 tonnes (2016)

The 3.9% year-on-year rise in hazardous waste is mainly due to a sharp increase at the Swiftwater Production facility in the United States, reflecting higher production volumes and refurbishment/construction work at the site. This was partly offset by significant reductions at two sites in France: Elbeuf (reclassification of one category of waste as non-hazardous) and Mourenx (where an unusually high level of waste was destroyed in 2015).

Hazardous waste sent to landfills represents 1.5% of the total hazardous waste produced by the Group. This means of disposal is used only as a last resort when local incineration plants are unavailable.

#### Non-hazardous waste (Tonnes)(a)

	2016	2015
Recycled non-hazardous waste (excluding Merial)(b)	103,800	100,001
Non-hazardous waste incinerated with waste-to-energy (excluding Merial)(c)	24,161	18,213
Non-hazardous waste incinerated without waste-to-energy (excluding Merial)(d)	3,766	2,126
Non-hazardous waste sent to authorized landfills (excluding Merial)(e)	20,384	20,137
Total (excluding Merial)	152,111	140,477

- (a) Merial:
- (b) 2,003 tonnes (2015) / 1,846 tonnes (2016)
- (c) 1,115 tonnes (2015) / 660 tonnes (2016)
- (d) 157 tonnes (2015) / 145 tonnes (2016)
- (e) 793 tonnes (2015) / 691 tonnes (2016)

The quantity of non-hazardous waste (excluding canteen waste) was 8.3% higher than in 2015. This was mainly due to a sharp rise (of 12,500 tonnes) in non-hazardous waste at the Elbeuf site (France) in 2016, following the reclassification of one category of waste from hazardous to non-hazardous. At most of our other sites, the quantity of non-hazardous waste was stable year-on-year.

In addition, 1,483 tonnes of canteen waste were generated in 2016; such waste was not previously reported.

Overall, total waste generated by Sanofi (excluding canteen waste) rose by 5.7% year-on-year, and the recovery rate is in the region of 60%.

Non-hazardous building waste is not included in the data reported above, although we make every effort to maximize post-treatment recovery of such waste.

#### Initiatives to reduce food waste

Many of our office, R&D and industrial premises in France have already taken measures to cut food waste. Such measures are in place at 86% of our French sites, and operate at three levels:

- · reduction at source, by enforcing precise contractual specifications on portion size and conducting regular surveys, especially in advance of periods when canteen footfall is expected to be low;
- responsible food management, which includes matching quantities to needs and using just-in-time techniques for some peripheral items; charging users for bread so that users do not automatically take bread without eating it; reducing the range of options available towards the end of mealtimes; and charging users by weight for items such as salad and prepared fruit; and
- management of leftovers and waste, including recovering leftover vegetables for reuse the next day; introducing sort bins to facilitate recycling of waste; and setting up food donation agreements with charities to help the needy.

We also conduct regular awareness campaigns, covering 69.5% of our French sites. These include weighing

### 4.2. INFORMATION ON HEALTH, SAFETY AND THE ENVIRONMENT

leftovers (especially bread) and informing canteen users of the results, using sort bins for awareness campaigns about the benefits of sorting waste, and sharing information about good practices in preventing food waste.

### 3.C.c. Noise and other forms of pollution

Our activities do not cause any major noise pollution or noxious smells.

The issue of noise pollution is mainly addressed in terms of the health risk to employees who work near machines. Noise measurements are taken around the periphery of our sites on a case-by-case basis, though not as part of an overall strategy. As an example, noise measurements taken around the periphery of a site in Canada led us to install noise barriers around cooling towers located at the edge of the site.

Any noxious smells are mainly confined to our fermentation activities. We are committed to responding to any complaints that may be voiced by neighbors in the immediate vicinity of our sites.

# 3.D. Protecting biodiversity

As a global healthcare leader, we are aware that natural resources (plants, animals, etc.) from ecosystems are sources of potential innovative new medicines that could prevent or cure diseases, even though this applies to only a very small proportion of our current portfolio. Consequently, we acknowledge the need to protect and conserve all natural resources, and preserve the ecosystems that provide biodiversity. We comply with a number of global conventions that lay down principles relating to the preservation of biodiversity:

- the Convention on Biological Diversity, part of the United Nations Environment Programme (UNEP), which arose out of the 1992 Rio de Janeiro Earth Summit, and more specifically the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (2010);
- · Human Rights principles, in particular the rights of indigenous peoples to retain, control, protect and develop their intellectual property rights over cultural heritage, traditional knowledge and traditional cultural expressions; and
- the United Nations Global Compact and Sustainable Development Goals.

We are aware that unapproved or excessive exploitation of natural resources, as well as production activities that cause pollution, may jeopardize the ecology and economy of the affected countries.

We are developing processes to protect and preserve biodiversity that call for:

- · respect for national access rights to biodiversity, and equitable sharing of the profits earned from commercializing medicines derived from natural resources;
- monitoring suppliers responsible for collecting natural resources used in research projects to discover new medicines;
- sourcing biological materials and related services from suppliers who apply appropriate environmental and biodiversity preservation standards;
- · understanding the effects of the production and use of our medicines on natural resources through a review (initiated in 2013) of the active substances used at our production sites for industrial purposes. Based on the information collected to date, no plants or animals included in the CITES (Convention on International Trade in Endangered Species) lists are used in our production activities; and
- conserving habitats and species around Sanofi sites throughout the world. In 2014, we commissioned an independent firm to conduct a document-based assessment of the biodiversity sensitivity of our industrial sites. The results showed that excluding Merial, only seven of our sites (four of them in Europe) had high sensitivity in terms of biodiversity. During 2016, we carried out a more detailed study to identify exactly which species (birds, mammals amphibians) were potentially endangered in proximity to our sites.

This study fed into our "Planet Mobilization" environmental program, which includes a biodiversity component. The strategy adopted involves deepening our knowledge of all of our sites by conducting local biodiversity surveys, beginning with those that are located in or near zones known to be biodiversity sensitive. We also intend to develop initiatives to promote and protect biodiversity involving the employees at each of our sites.

A good practice guide to promote biodiversity at Sanofi sites was issued in 2013.

Finally, we have implemented a program to install hives at Sanofi sites to protect bees, which pollinate 80% of crops. To date, a total of 60 beehives are in place at 23 sites in France, the United States and Belgium. Our employees have been enthusiastic in volunteering to take part in this scheme, with more than 250 having already signed up. In 2016, we collected 256 kilograms of honey at six sites.

# 4.3. Information about external commitments to promote sustainable development

4.3. INFORMATION ABOUT EXTERNAL COMMITMENTS TO PROMOTE SUSTAINABLE DEVELOPMENT

measured:

# 4.3.1. Local, economic and social impact of Sanofi's activities

# 1.A. Sanofi's socio-economic footprint in the world

Sanofi employs over 110,000 people in 100 countries. The majority of them work at one of more than 100 industrial sites or over 20 R&D sites. However, Sanofi's economic footprint stretches far beyond its own operations, impacting many economic sectors and public bodies around the world.

To obtain a clearer understanding of its socio-economic contribution worldwide, Sanofi decided to estimate the value creation across the entire supply chain, households and the public sector. A first analysis was performed in 2015 by an independent French consulting agency recognized for its expertise in sustainability and socioeconomic footprint studies. The LOCAL FOOTPRINT® tool was used to reproduce the functioning of economies and estimate the effects of Sanofi's economic flows locally and in 186 countries with a breakdown of 25 sectors such as agriculture, the wood and paper industry, the chemical products and petroleum industries, wholesale trade, transport and logistics, corporate and financial services (such as printing, real estate, consulting).

LOCAL FOOTPRINT® is a methodology based on inputoutput tables, which trace all the economic exchanges between countries. The first work on tables aiming to represent the economic relationships between business sectors was begun by Wassily Leontief, who won the Nobel Prize for Economics in 1973. For the purpose of this study, the consulting agency exploited and adjusted the Eora database for which it has exclusivity. The result of an Australian large-scale research project building the first global input-output table offering quality standards and regular updates, the Eora database combines international trade data specialized by economic activity and localized by country. Sourced and aggregated by UN statistics organizations (Comtrade and UNData), this data is best in class representing national economic accounts at the global level.

Based on classified expenditure, human resources and finance data provided by Sanofi, every euro spent either on purchasing, remuneration of employees or taxes, and its repercussions along the supply chain, was traced • Direct impacts: Sanofi own impacts - our jobs and the added value generated by our activities.

worldwide. Three types of impact were captured and

- Indirect impacts: jobs and GDP (Gross Domestic Product) supported within our supply chain and service providers - 1st tier suppliers, as well as 2<sup>nd</sup>, 3rd, 4th, etc. tier suppliers.
- Induced impacts: the impacts supported by household consumption (wages paid by Sanofi and its chain of suppliers) and by public administration expenditure (taxes paid by the Company and its chain of suppliers).

The scope for this pilot comprised the 2014 fiscal year data from 25 countries selected for their importance in terms of purchases and sales, their number of employees and their local specificities (distribution, manufacturing or R&D sites). Two types of studies were carried out. On the one hand, a global study assessing how the countries were impacted by Sanofi global activities and on the other hand, 25 locally specific studies analyzing how the activities of each country impacted the others. Intercompany sales were included in the latter.

In 2014, the 25 selected countries represented around 90% of the Company's total purchases (€11,390 million total spending around the world), 83% of net sales, 93% of taxes paid, 95% of jobs, and 94% of global compensation (with 104,250 persons employed and €7,722 million of gross compensation), and approximately 80% of the company's value added.

Globally, the study shows that Sanofi supports around 1.2 million jobs a year and generates around €51.6 billion of GDP worldwide through its direct, indirect and induced economic impacts. The countries benefiting most from our activities being the United States, France, China, India and Germany and the most impacted industries being financial and business support services, the chemical and oil industries, and public services in education and healthcare.

# 1.B. France

Sanofi's footprint in France during 2016 was:

approximately 27,500 employees;

- 42 sites(1), in 11 of the 13 new regions and 24 administrative districts (départements):
  - 8 R&D sites;
  - 23 production sites;
  - 4 distribution sites;
  - 7 administrative sites including our corporate headquarters and the global headquarters of our R&D operations, Industrial Affairs, Sanofi Pasteur (Vaccines) and Merial (Animal Health);
- net sales of approximately €2.2 billion (including Merial). or some 6% of our worldwide net sales (including Merial):
- a positive contribution of €6.2 billion to France's balance of trade, making Sanofi the country's fifth largest exporter;
- 46.4% of our total R&D expenditure, representing €2.4 billion, with just over 6,600 employees (41% of our worldwide R&D workforce);
- one-third of our worldwide industrial output, with 15,000 employees at our 27 French industrial sites (one-third of our worldwide Industrial Affairs workforce);
- 27% of our worldwide purchases, worth a total of €3.8 billion and sourced from 15,000 suppliers.

Our socio-economic impacts and responsibilities go far beyond the direct field of operations summarized above. To assess our broader contribution in France, we used the LOCAL FOOTPRINT® methodology (see section "4.3.1.A. Sanofi's socio-economic footprint in the world") to estimate the socio-economic effects of all of our activities on French territory. By applying in-depth analysis, this made it possible to estimate not only the direct impacts of our operations, but also the knock-on effects on our chain of suppliers (indirect impacts) and on consumption via the salaries paid to our employees and the public spending funded by the taxes and duties we pay (induced impacts).

Based on data for the 2014 fiscal year, one job at Sanofi supports 3.3 jobs on French territory, primarily in the pharmaceutical industry, business services, healthcare and education services. Each euro of value added by Sanofi in France generates an additional 1.3 euros of GDP in the French economy.

For over 30 years Sanofi has operated dedicated entrepreneurial units (Sanofi Développement and the Sanofi entrepreneurial start-up unit) to drive local economic development around our 42 sites in France by promoting sustainable job creation and encouraging individual entrepreneurial initiatives.

### Sanofi Développement:

- 1. Implements local economic development initiatives around Sanofi sites in France.
- 2. Provides support for the development of very small enterprises (VSEs) and small and medium-sized enterprises (SMEs) and start-ups to help accelerate job creation, especially in the healthcare, industrial and business services sectors, as part of the Sanofi SME Plan implemented in 2015.

The aim of the SME Plan is to raise the profile of these initiatives and improve how they are coordinated and structured, thereby unlocking new synergies and putting Sanofi at the forefront of French companies in relations with SMEs and start-ups. Looking beyond the traditional principal/subcontractor relationship, start-ups and SMEs can be seen as an essential link in the value chain. By supporting them, we help ensure their long-term viability while improving our credentials as a good corporate citizen (see Section "4.3.3. Subcontracting and suppliers").

3. Manages regeneration agreements and other measures to support the local economy.

In 2016, Sanofi Développement initiatives mainly involved the following administrative districts (départements): Alpes de Haute Provence, Essonne, Eure, Gard, Oise, Puy de Dôme, Rhône, Seine Saint-Denis and Val de Marne.

Sanofi Développement has made loans to job-creating businesses, organized mentoring and skill-sharing programs, and provided subsidies to economic stakeholders for local economic development programs.

During 2016, Sanofi committed over €3 million in the districts listed above and provided funding to 40 VSEs and SMEs to help them grow and offer jobs under permanent contracts. Sanofi also subsidized several economic development programs run by local economic stakeholders to bolster the creation of additional indirect jobs. Several of those projects are related to the social and solidarity economy, the creation of business support networks, and projects in the healthcare sector.

In 2016, aid in the form of loans or subsidies helped create at least 700 jobs.

The Sanofi entrepreneurial start-up unit supports Sanofi employees who wish to start their own business or acquire an existing VSE or SME, and people on work-study contracts with a start-up project.

<sup>(1)</sup> Some of our locations house more than one activity (e.g. production and R&D at the Vitry-sur-Seine/Alfortville site, or production and distribution at the Amilly site), and hence are counted as more than one site.

In 2016, 66 employees were supported by this unit and 27 start-up projects were approved, primarily in the service, retail, healthcare and wellness, hospitality and tourism sectors.

In line with our long-standing policy of supporting the training and employment of young people, more than 5% of our French workforce in 2016 was employed under a work-study contract (professional training, apprenticeship or Volunteer for International Experience (VIE) contracts).

To enhance their employability in the healthcare sector, work-study employees were invited to take part in forums organized with the professional branch of the French Pharmaceutical Companies Association (LEEM) and economic players in the regions of Normandy, Centre, Île de France and Auvergne-Rhône-Alpes. These forums provide an opportunity for work-study employees to meet with SMEs and start-ups seeking job candidates in the healthcare sector.

We also participated in Altern'up, a competition to support work-study employees and interns who are starting up a business.

Finally, Sanofi offers career guidance to young people by taking part in student forums, and through programs like Ma caméra chez les pro or the C'est Génial Foundation. intended to introduce students and their teachers to the business world and its career options.

# 4.3.2. Relations with stakeholders

### 2.A. Conditions for stakeholder dialogue

Each day across the globe, Sanofi interacts with a broad range of stakeholders. Although these interactions have varying objectives, they are very firmly grounded in our CSR approach. They enable us to:

- provide stakeholders with reliable, factual information (including information about the proper use of products marketed by Sanofi, products under development, financial and extra-financial information, etc.) via various communication tools, including brochures, dedicated websites, publicity campaigns, annual assessments, and responses to questionnaires and requests for information;
- conduct formalized dialogue and consultation processes to involve stakeholders in our strategic decisions and determine whether we are adequately meeting their expectations, via stakeholder panels and surveys, customer satisfaction surveys, employee engagement surveys, forums, residents' panels in communities adjacent to our sites, ombudsman, etc.;

 establish partnership projects, particularly in the healthcare field: support for patient associations, humanitarian aid programs, partnerships with the academic world, clinical trial programs, etc.

More specifically with respect to our CSR strategy, our global support functions and many of our subsidiaries have established initiatives to create opportunities for formalized dialogue and consultation to obtain stakeholder feedback on our CSR strategy and objectives, to make any necessary adjustments, and to shape a concerted vision of the CSR challenges facing Sanofi.

After four years of ongoing dialogue with our stakeholders in France, in 2016 we initiated formalized dialogue at international level in the form of a Stakeholder Panel. The panel provides a forum to discuss CSR issues and to involve stakeholders in a co-construction process geared toward producing tangible outcomes.

This international panel has around forty members, and includes people nominated by their organization as well as prominent individuals who attend in their own right. The panel includes representatives from humanitarian and environmental NGOs, patient associations, public bodies, healthcare professionals, university researchers in life sciences and healthcare, the business and financial community, socially responsible investment (SRI) funds, trade unions and the media. They are joined by around fifteen internal stakeholders representing Sanofi's operations and functions (R&D, Industrial Affairs, Diabetes & Cardiovascular Global Business Unit, Finance, External Affairs, Medical Affairs, Governmental Relations, Human Resources, Environment, Communication, Real Estate and Facility Management, and the CSR department in its role as project leader).

The panel has held its first meeting, a full-day session chaired by an independent facilitator. The discussions highlighted four themes that external and internal stakeholders felt should be addressed as a priority. Working parties were set up to deal with each of those four issues: access to healthcare, the price of innovation, our ethical approach to R&D, and our local socio-economic and environmental footprint. Experts on these issues will be drafted onto the working parties.

In line with our commitment to transparency, summaries of the plenary sessions will be posted on a dedicated stakeholder digital platform and on our corporate website. Discussions are governed by the Chatham House Rule, under which there is transparency in reporting what is discussed but the identity of the participants remains confidential.

Another example of dialogue with stakeholders is our CSR Board, which meets in Egypt once a year. The fourth annual meeting in 2016 brought together 24 external stakeholders (public officials, politicians, economists, representatives of NGOs, patient associations and healthcare professionals). At the 2016 meeting, the participants assessed the possibilities for improving the care of people with multiple sclerosis, and identified initiatives to inform and educate children and those around them to adopt healthy lifestyles.

In addition, our CSR department finalized a toolkit intended to help our subsidiaries engage with their internal and external stakeholders and perform their own materiality tests to identify local CSR priorities. Three countries (Brazil, Canada and Russia) deployed the local materiality tool. Each country is developing its own action plan and working on its own priorities.

# 2.B. Health-related partnerships and philanthropic initiatives

### 2.B.a. Partnerships

The challenges encompassed by Corporate Social Responsibility, particularly when it comes to ensuring access to healthcare for all patients across the globe, are complex issues that the pharmaceutical industry cannot tackle alone. For this reason, we cooperate with numerous stakeholders - private, public and/or organizations - to pool our expertise and know-how with that of our partners and provide the best possible response to certain major health-related challenges facing society.

Although we outline examples of key initiatives below, they are not an exhaustive portrayal of the multitude of projects undertaken by Sanofi. For more information about our partnerships, refer to our annual CSR Report and related material, available at www.sanofi.com.

# Partnership to combat neglected tropical diseases (NTDs)

Initiated in 2001 with a program to combat Human African Trypanosomiasis (or sleeping sickness), partnership with the World Health Organization (WHO) was renewed in 2006 and expanded to include other NTDs: leishmaniosis, Buruli ulcer, and Chagas disease. In March 2011, the CEO of Sanofi and Margaret Chan (Director-General of the WHO), renewed their commitment to combat NTDs for five more years. For Sanofi, this commitment represents financial support of approximately \$75 million, or \$5 million annually over the period from 2001 through 2016.

Since the beginning of this collaboration with the WHO, over 36 million people have been screened for sleeping sickness and nearly 200,000 patients have been treated for the disease, which is nearly always fatal if left untreated. Thanks to our partnership, reported new cases fell from 30,000 in 2001 to less than 7,200 in 2010(1) and then to 6,750 in 2011; 7,210 cases were reported in 2012, and the figures then fell to 6,230 in 2013, 3,796 in 2014 and 2,804 in 2015. Data on new cases reported in 2016 are not yet available. These figures show good progress toward the WHO goal of eradicating sleeping sickness by 2020. The latest figure is the lowest number of new cases since a reliable reporting method was instituted 75 years ago. Active and passive screening efforts continue, with the aim of reaching the 2020 goals set by the WHO.

On January 30, 2012, Sanofi signed the London Declaration on NTDs alongside other pharmaceutical groups, representatives of the US and UK governments, the Bill & Melinda Gates Foundation, the World Bank and official representatives from countries where NTDs are endemic

In October 2015, Sanofi and the Pasteur Institute in Tunis signed a partnership agreement to combat leishmaniosis. Under the agreement, an awareness program about cutaneous leishmaniosis was launched from 2016 onward in schools. Nearly 40.000 educational comic books have been distributed to students in their final primary school year, in seven governorates where the disease is endemic. Transmitted to humans through insect bites, cutaneous leishmaniosis is a parasitic, non-communicable disease that constitutes a major public health problem in Tunisia, where around 3,000 new cases are reported each

# WIPO Re:Search, a public-private consortium to stimulate research

To promote innovation and research on NTDs, the World Intellectual Property Organization (WIPO) has brought together a number of partners in the public and private sectors, including Sanofi. WIPO Re:Search is a consortium of public and private sector organizations that have joined forces to expand access to intellectual property assets by researchers worldwide in order to promote R&D on NTDs, malaria and tuberculosis (http:// www.wipo.int/research/en/). Sanofi is one of the founding corporate members of the consortium, which now includes just over 100 members across the globe. Over a hundred collaboration agreements have been established, and some projects are already moving toward new phases of development.

<sup>(1)</sup> Programs that the WHO was able to undertake or extend thanks to Sanofi's support are described in the WHO – Sanofi Collaborative Report: A Partnership to Save Lives 2006-2011, available online.

# Partnerships to monitor antimalarial drug safety and emerging resistance

Sanofi and the Drugs for Neglected Diseases Initiative (DNDi) have embarked on an ambitious clinical trials program to document the efficacy and safety of an antimalarial drug they partnered to develop. The drug, ASAQ Winthrop®, is a fixed-dose combination of artesunate and amodiaquine. The program comprises over 20 trials conducted in 22 countries and is expected ultimately to cover over 30,000 cases of malaria treated with this drug. Sanofi has further enhanced this work through partnerships with academic institutions. In January 2012, the WorldWide Antimalarial Resistance Network (WWARN) and Sanofi announced an agreement to monitor emerging antimalarial drug resistance. The agreement provides for all efficacy data from clinical trials conducted with ASAQ Winthrop® to be shared with the WWARN. The data collected are fed into the global database created by WWARN to monitor the emergence of resistance, and were the subject of several publications in 2016. In 2013. Sanofi entered into a similar partnership with the Liverpool School of Tropical Medicine to share data on the drug's safety with academic teams.

# Authorization of new treatment for latent TB infection thanks to a partnership with the Centers for Disease **Control and Prevention (CDC)**

On November 25, 2014, the United States Food and Drug Administration (FDA) approved a new indication for Priftin® (rifapentine) based on a pivotal study conducted by the CDC in Atlanta (United States) under the public/private partnership between Sanofi and the CDC. This drug is now indicated for use in combination with isoniazid for the treatment of latent tuberculosis infection (LTBI) in patients over two years of age exposed to a high risk of active tuberculosis. Approved in the United States since 1998, Priftin® is an antimycobacterial used in conjunction with one or more anti-tuberculosis drugs for the treatment of active pulmonary tuberculosis caused by mycobacterium tuberculosis. In 2015, the WHO added rifapentine to its List of Essential Medicines, and included it in its guidelines on the management of latent tuberculosis infection in highincome and upper middle-income countries with estimated TB incidence of less than 100 per 100,000 people. In 2016, Sanofi - which has been involved in research into anti-tuberculosis drugs for more than half a century applied to register rifapentine for latent TB in three new countries (South Africa, South Korea and Taiwan).

# Sanofi Pasteur and the Bill & Melinda Gates Foundation join forces to discover new vaccines

In October 2013, Sanofi Pasteur announced a partnership with the Bill & Melinda Gates Foundation to explore and develop new platforms and methods to accelerate vaccine R&D, and specifically to address global health issues. The Vaccine Discovery Partnership (VxDP) is a new mechanism that enables the Bill & Melinda Gates Foundation to collaborate directly with Sanofi Pasteur and other vaccine-pharmaceutical companies across disease areas of interest. It establishes a clear, straightforward and lasting relationship based on a memorandum of understanding, and is expected to accelerate the development of candidate vaccines for use in developing countries. In 2014, teams of scientists from the Bill & Melinda Gates Foundation and Sanofi Pasteur's R&D teams identified several areas of cooperation, particularly in connection with innovative public health projects (adjuvants, experimental medicine concepts, etc.). Sanofi Pasteur is in discussions with the Discovery and Translational Sciences program of the Bill & Melinda Gates Foundation about developing human vaccines using models and translational science(1). We are also in discussions about key strategic areas such as maternal immunization and new forms of vaccine distribution (thermostability and vaccine co-administration), and about potential synergies in developing countries for the innovative vaccines portfolio of our Indian subsidiary Shantha, while allowing industry partners to develop and test new technologies that they can then apply to other R&D programs.

As part of the partnership with the Bill & Melinda Gates Foundation, Sanofi Pasteur announced in October 2015 the creation of a vaccine innovation center with the Infectious Disease Research Institute (IDRI) in Seattle, Washington (United States). This new center, the Global Health Vaccine Center of Innovation (GHVCI), is intended to accelerate the development of vaccines and supporting technologies to address infectious diseases and ensure that new vaccines are available to people in developing countries.

# Sanofi Pasteur shoulder to shoulder with public health stakeholders to eradicate polio

Since being launched by the WHO in 1988, the Global Polio Eradication Initiative (GPEI) has slashed the incidence of polio by 99.9%, from 350,000 cases a year to 74 in 2015. Sanofi Pasteur is one of the main suppliers of oral polio vaccine (OPV), which has been used on a massive scale to halt the spread of the virus in virtually every country in the world. To finally eradicate the disease, the WHO recommended in 2013 that OPV be gradually phased out in favor of the inclusion of a dose of inactivated

<sup>(1)</sup> Medicine that bridges the gap between fundamental research and clinical research with the aim of making therapeutic innovations available more quickly.

polio vaccine (IPV) in each country's vaccination timetable. Having invested in an expansion of production capacity and an unprecedented regulatory approval program, Sanofi Pasteur is now the main supplier to UNICEF, which makes the vaccine available to countries according to their needs and vaccination plans. Sanofi Pasteur and the Bill & Melinda Gates Foundation have developed a pricing mechanism based on financial contributions from the two partners with the aim of encouraging the rapid widespread adoption of IPV. Under this mechanism, Sanofi Pasteur is able to offer IPV at a price of €0.75 per dose to 73 of the world's poorest countries. During the 2015 United Nations Private Sector Forum, various private sector initiatives were identified and selected to help achieve the Sustainable Development Goals (SDGs). The price support mechanism developed jointly by Sanofi Pasteur and the Bill & Melinda Gates Foundation for introducing IPV vaccination was selected in order to help attain Goal No.3 of the SDGs.

### Partnerships for non-communicable diseases

In the field of diabetes, Sanofi is taking part in innovative partnerships designed to improve healthcare systems.

# Raising awareness and enhancing prevention in schools: the KiDS program

Globally, approximately 86,000 children develop type 1 diabetes each year. Schools play an important role in supporting these children, but for many such children a lack of knowledge about diabetes within schools can lead to isolation, stigmatization and discrimination. In 2013, the International Diabetes Federation - in collaboration with the International Society for Pediatric and Adolescent Diabetes (ISPAD) and Sanofi - launched the Kids and Diabetes in Schools (KiDS) program. The goals of the program are to help create a safe school environment in which children, teachers and parents are made aware of the issues, to support children living with the disease, and to promote healthy eating and exercise at school. Since the launch of KiDS, awareness campaigns have been conducted at 53 schools, reaching over 44,000 students and 4,500 teachers in the pilot countries (India and Brazil). In November 2016, the KiDS program was extended to two new countries: Pakistan and the United Arab Emirates. Similar in-school educational programs have been introduced in Turkey, Canada and Algeria.

# Be He@Ithy Be Mobile: using mobile phones to fight diabetes

Sanofi is looking to remain at the cutting edge of healthcare innovation by harnessing new mobile phone technology to empower patients to manage their condition. In February 2015, Sanofi signed up to "Be He@lthy Be Mobile", an innovative collaboration between the WHO and the International Telecommunication Union (ITU). Sanofi is working with the ITU on the mDiabète program, a "Be He@Ithy Be Mobile" initiative in Senegal rolling out e-health strategies to help people living with diabetes. Key features include regular text messages (430,000 have been sent since the Senegal program started) and training sessions for healthcare professionals. The program was launched in Egypt in 2016. More information about the program is available at: http://www.itu.int/en/ITU-D/ICT-Applications/ eHEALTH/Be\_healthy/Documents/BHBM-AnnualReport-2015.pdf

# Diabetes and tuberculosis in South Africa: fighting a growing double disease burden

In November 2015, our South African subsidiary announced a joint initiative with the University Research Co (URC). South African Aguity Innovations and the National Department of Health to improve early detection and access to care for people with concomitant diabetes and tuberculosis. Diabetes is a growing problem in South Africa, where an estimated 2.3 million adults are currently living with diabetes. Their risk of developing active tuberculosis is two to three times higher than that of people without diabetes. This public health initiative is being piloted in four South African provinces (KwaZulu Natal, Eastern Cape, Gauteng and Free State). It is intended to help improve diabetes screening and diagnosis for people with tuberculosis, and tuberculosis screening and diagnosis for people with diabetes. It also aims to improve skills and practices and among healthcare professionals, and raise awareness about the prevention and control of these diseases. In 2016, training programs for healthcare professionals developed under this initiative received accreditation from the Health Professionals Council of South Africa. So far, 535 healthcare professionals have followed these programs: 27 physicians, 214 nurses and 294 community health workers. Awareness, communication and social mobilization campaigns have reached approximately 3,700 people. It is estimated that 135,000 people have benefited from the diabetes and tuberculosis awareness campaign, giving a boost to prevention and screening.

### Partnerships with patient associations

Sanofi is committed to working with patient associations all over the world, taking their priorities into account with a view to discovering improved healthcare solutions that better reflect the needs of patients, friends and families throughout the patient's journey.

We encourage open dialogue so that we can listen to our patients and gain a better understanding of their expectations. Our collaborations with patient associations are guided by a spirit of partnership, mutual respect and trust, but without ever undermining an association's independence. We operate a global policy to ensure that our relations with patient associations are ethical, responsible and transparent. Our External Affairs

department has set up a network of correspondents that covers all the countries in which we operate. We have also committed to working with many patient associations in various regions to empower patients and exchange ideas on issues such as diabetes, cardiovascular diseases or asthma.

Committed to the principle of transparency that helps build trust in our relations with stakeholders, the public and most importantly the patient, we have been disclosing the amounts we pay to patient associations based in Europe since 2010 and in Australia, Brazil, Canada, the United States and Japan since 2011. A complete list is available on our corporate website: www.sanofi.com.

# Raising awareness about climate-related health challenges

Sanofi has engaged with the issue of climate change in order to raise awareness about its impact on health. In 2015 we formed an advisory board of climate and health experts tasked with identifying the challenges stemming from climate change, especially those relating to health, and defining our approach. As a sign of our commitment, Sanofi was an official partner of the 21st Conference of the Parties (COP 21) to the United Nations Framework Convention on Climate Change that took place in Paris during November and December 2015. To coincide with COP 21, our CEO joined 38 other French business leaders in signing a call for action to curb climate change. In 2016, we played an active role in a number of conferences at the COP 22 held in Marrakesh (Morocco). Our Moroccan subsidiary reported to COP 22 on its achievements in limiting its environmental footprint, and on its strategy for anticipating the health impact of climate changes in areas such as pollution-related allergies and vector-borne diseases like dengue and malaria.

# 2.B.b. The Sanofi Espoir Foundation

Sanofi created the Sanofi Espoir Foundation to bolster our commitment to international solidarity, and to clarify its importance for all our stakeholders. The Foundation's mission is to help reduce healthcare inequalities and poverty among the world's poorest communities. In addition to coordinating initiatives in response to humanitarian crises, the Foundation works to ensure a lasting impact in three areas: fighting childhood cancers in under-resourced countries, reducing maternal and neonatal mortality in such countries, and improving access to healthcare among the most disadvantaged populations.

In 2016, the Foundation gave its support for the launch and/or development of 36 multi-year programs with 35 key partners in 31 countries. To ensure continuous access to care for injured or displaced persons, the Foundation organized initiatives in response to humanitarian crises in two countries and donations of medicines and vaccines to six countries.

## Fighting childhood cancers in low- and middle-income countries

The "My Child Matters" program is a unique initiative launched by the Foundation in 2006 to provide better diagnosis and care for young cancer patients in low- and middle-income countries in Africa, Asia and Latin America. Run in partnership with St. Jude Children's Research Hospital, the International Society of Paediatric Oncology (SIOP), the Union for International Cancer Control (UICC), the Franco-African Pediatric Oncology Group (GFAOP), the Children's Cancer Institute (CCI) and the Alliance for Global Cancer Control, the program focuses on building the capacities of local teams. In 10 years, the program has supported 65 projects in 40 countries, the treatment of 50,000 children, and the training of 15,000 healthcare professionals. The Foundation's involvement includes organizing a project bid cycle every three years, building contacts between project teams and international experts, developing a mentorship program, offering training for project teams, sharing good practices and providing financial support, which to date amounts to €9 million. During 2016, 16 projects were ongoing in Asia, Africa and Latin America.

### Reducing maternal and neonatal mortality

The Foundation was the driving force behind the "Midwives for Life" initiative to reduce largely preventable complications and deaths of mothers and newborns in developing countries through more and better trained health workers, particularly midwives, who play a key role in this fight. By the end of 2016 ten programs were under way, aimed at reducing maternal and neonatal mortality in Asia (Myanmar and Cambodia), Latin America (Mexico) and Africa (Senegal, Côte d'Ivoire, Tanzania and Ethiopia). In 2014, the Sanofi Espoir Foundation introduced the "Midwives for Life Awards" to recognize initiatives developed by midwives to reduce maternal and neonatal mortality and improve the health of women and newborns in developing countries. The 2016 awardwinners, chosen by a panel of experts, were eight projects in Afghanistan, the Comoros, Indonesia, Côte d'Ivoire, Gambia, Malawi, Zambia and Chile/Ecuador.

### Access to healthcare for the most disadvantaged

To improve medical care for vulnerable people in France, the Foundation has joined forces with eight field-based partners: the French Red Cross, Médecins du Monde, Samu Social Paris, the SOLIPAM network (which helps vulnerable pregnant women), the Centre d'Action Sociale Protestant, COMEDE (which campaigns for better healthcare for refugees), the Apprentis d'Auteuil, the Maison des Femmes (a women's refuge charity) and Emmaus Défi. The selected programs share a common theme: women and children.

## Responding to humanitarian crises

In a humanitarian crisis, healthcare is one of the most vital needs. During 2016, we took action alongside non-profit partners in Haiti and Iraq. In response to the Syrian crisis, the Sanofi Espoir Foundation strengthened its partnership with Première Urgence Internationale in the Bardarash refugee camp in Iraq, setting up a mother-and-child unit in addition to the medical service already in place.

In the wake of the hurricane that hit Haiti in October 2016, the Sanofi Espoir Foundation supported the French Red Cross and Première Urgence Internationale in their medical response, by reinforcing seriously weakened healthcare centers and taking action to prevent and fight epidemics.

In response to other humanitarian crises and in accordance with the provisions of the Foundation's charter governing donations of medicines and vaccines, 863,301 boxes of drugs/vaccines were donated by Sanofi in 2016 to six countries.

# 4.3.3. Subcontracting and suppliers

Given that Sanofi purchases goods and services worth nearly €14 billion, procurement is a major CSR issue. As stipulated by our Suppliers Code of Conduct, responsible procurement is based on the UN Global Compact, the conventions of the International Labour Organization, and our own Code of Ethics. It is central to how we manage relations with our current and future suppliers in terms of respect for human rights, good labor practices, health and safety, protection of the environment and compliance with ethical rules.

As the department in charge of overseeing relations with our suppliers, the Sanofi Procurement function has since 2007 followed a responsible procurement policy based on international CSR standards. Evaluating CSR performance is integral to our assessment of our suppliers' overall performance, and is an essential consideration in the selection and ongoing management of suppliers and subcontractors. CSR evaluations are built into our procurement risk management model and processes, to ensure that our suppliers continue to make progress. They are based on a comprehensive multi-criterion CSR risk analysis taking account of factors such as procurement strategies; the types of goods and services purchased; the countries in which we operate; and environmental, social and ethical performance.

In March 2016, Sanofi added a new dimension to this approach by becoming one of around 20 European and American companies to sign up to the Together for Sustainability (TfS) initiative. TfS is rolling out a worldwide program to encourage dialogue with suppliers and to evaluate and improve sustainable procurement practices, including on environmental and social issues. The initiative is based on good practice and draws upon established principles including the United Nations Global Compact and the Responsible Care® Global Charter, as well as standards developed by the International Labour Organization (ILO), the International Organization for Standardization (ISO), Social Accountability International (SAI) and many other bodies. Under the TfS initiative, supplier evaluations and audits are conducted by independent experts, with the results shared between TfS members via a collaborative online platform.

The 2016 annual TfS evaluation involved more than 280 Sanofi's suppliers.

In addition, a number of initiatives are in place to promote supplier diversity, reflecting our commitment to supporting the development of the local economies where our sites are located. In France, we have adopted a proactive approach by ratifying the Charter of Intercompany Relations and making commitments vis-à-vis SMEs, specifically to:

- respect the commitments set out in the Charter (guarantee fair financial treatment, promote cooperation between large buyers and strategic suppliers by helping SMEs reduce the risks of mutual dependence, take account of environmental concerns, develop the local economy, fight corruption, etc.);
- agree to have an independent expert review our organization and management practices for compliance with the Charter; and
- · adopt any corrective measures needed to meet the Charter's objectives.

Sanofi's Procurement function oversees and coordinates action plans to support implementation of the Charter, and monitors key performance indicators and any corrective actions taken.

We are now taking this approach a step further by rolling out an SME program based on 11 support measures for SMEs. Since 2015, Sanofi has supported 36 SMEs and start-ups selected for their innovation, agility and performance. In each case, they have been visited by a two-person Sanofi team (one from procurement, one from operations) to gain an understanding of their development strategies and offer suitable means of support. In February 2016, Sanofi brought together for the first time around a hundred SME and start-up business leaders with major players from business and the public sector. At this event, we outlined our SME and start-up plan via shared experience sessions, discussed the key issues facing SMEs and start-ups in France, and held three topic-based workshops on funding, international expansion and competitiveness.

To ensure that this commitment is translated into action and to preserve independence, Sanofi has since 2012 had an internal ombudsman who is independent of our Procurement department. The primary roles of the ombudsman, who may be contacted by a supplier or a buyer, include alternative dispute resolution processes based on neutrality, impartiality and confidentiality; helping the parties identify a solution; working in the interests of a settlement rather than of the parties; and reporting on issues that arise and their outcomes so that we can continually improve.

On June 8, 2016 the Business Ombudsman's department of the French Economy, Industry and Digital Ministry recognized our commitment by re-awarding us the Responsible Supplier Relations label following an in-depth audit. The audit's findings highlighted the Sanofi France SME and start-up plan; a marked reduction in the time taken to pay suppliers; promotion of innovation in the supply chain; commitments in employment practices and anti-corruption; ongoing improvements in the quality of dialogue with suppliers at every stage in the contractual relationship; and an embedded culture of responsible procurement.

Of the total value of purchases made in France during 2015, the percentage of purchases from French SMEs was 13.2%, compared with 18% in 2014, 14.1% in 2013 and 13.3% in 2012.

In the United States, Sanofi is also committed to supporting SMEs, in particular those run by economically or socially disadvantaged people: minority-owned, disabled-owned, or veteran-owned businesses, and those located in historically underutilized business zones (HUBZones). This initiative further illustrates the importance Sanofi places on diversity and innovation in our supplier base.

### 4.3.4. Fair business practices

# 4.A. Measures to prevent corruption

All stakeholders are aware not only of the harmful economic consequences of corruption but also of its potential to seriously impede development, particularly in emerging countries.

Fighting corruption calls for international rules that are adhered to by as many countries as possible, combined with effective anti-corruption legislation enforced nationally. The adoption of the Organisation for Economic Co-operation and Development (OECD) Anti-Bribery Convention and the United Nations Convention against Corruption, together with far-reaching national laws such as the US Foreign Corrupt Practices Act (FCPA) and the UK Bribery Act, are helping to achieve this goal.

Multinational companies also have a responsibility to actively fight corruption. In line with our ethical approach, Sanofi adheres to the following regulations and principles:

- Principle 10 of the United Nations Global Compact: https://www.unglobalcompact.org/what-is-gc/mission/ principles/principle-10;
- the United Nations Convention against Corruption, adopted on October 31, 2003: http://www.unodc.org/ unodc/en/corruption/uncac.html;
- the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions: http://www.oecd.org/corruption/ oecdantibriberyconvention.htm; and
- the measures adopted pursuant to Article 301 of the US Sarbanes-Oxley Act.

In recent years, the anti-corruption authorities in several European countries and in the United States have increased their scrutiny of companies in some business sectors. Healthcare companies have been the focus of particular attention over the past few years due to their interactions with a wide range of stakeholders, such as physicians and government agencies.

For some years, Sanofi has been responding to this growing pressure by developing and implementing measures and systems to prevent and fight all forms of corruption everywhere its does business.

The corruption prevention program at Sanofi is based on two reference texts:

- the Sanofi Code of Ethics: all new joiners receive compulsory training on the Code, and refresher courses are organized by our subsidiaries; and
- an anti-corruption policy available to all employees via Sanofi's corporate intranet, which sets out what employees are expected to do to prevent and combat corruption. This policy is the keynote document for other policies on related topics such as due diligence and involvement in organizing events with third parties such as healthcare professionals.

The principles contained in these documents are promoted throughout the Sanofi organization by our Ethics & Business Integrity department. This department operates at headquarters, regional, business unit, support function and country levels, primarily in a training role. Employees receive anti-corruption training on a regular basis, and an e-learning library with several modules on this subject is available to all employees via the Ethics & Business Integrity intranet.

We also have a Compliance Executive Committee chaired by our CEO, which oversees the effectiveness of all aspects of our compliance program and facilitates the implementation of, and adherence to, the program. The committee plays a leading role in recommending and reviewing actions taken to support the programs implemented by Sanofi's Ethics & Business Integrity Department and to foster employees' adherence to Sanofi's values.

Sanofi's subsidiaries are encouraged to establish local compliance committees to ensure compliance with the Code of Ethics, policies and procedures, legal and regulatory requirements, and industry standards. Best practices, and recommendations for a model Local Compliance Committee Charter, have been issued to the subsidiaries in all countries where Sanofi operates.

A whistleblowing system has been operated since 2006, in line with Sanofi's Code of Ethics. Any employee can use the system to report a breach of the rules and principles contained in the Code to the Ethics & Business Integrity Department. All the alleged breaches flagged up by this system to the Ethics & Business Integrity Department in 2016 were investigated. Where the evidence collected confirmed the allegation, various sanctions were applied ranging from a simple warning to contract termination.

Rigorous processes for the selection of third parties (such as service providers and suppliers) are a key element in preventing corruption, since the Company may be exposed to risk through their interactions with public officials and administrations. Sanofi systematically applies a pre-vetting process to third parties, taking into account many factors such as the nature of the business, the local environment, the type of relationship, and the nature and scope of the work to be carried out.

# 4.B. Measures to protect consumer health and safety

For several decades, the pharmaceutical industry has been operating in a highly regulated environment (see "Item 4 – B.6.3 Regulatory Framework" of our 2016 Annual Report on Form 20-F). Before products can be brought to market, numerous clinical trials and laboratory studies must be conducted to assess and in some cases improve their benefit/risk profile. Those trials and studies must be carried out in compliance with the Good Clinical Practices and Good Laboratory Practices promoted by the French National Agency for Drug and Health Product Safety (ANSM) and other local and international health authorities.

Good Manufacturing Practices must also be strictly applied at each stage in the manufacturing of a product so as to ensure that the products supplied meet demanding quality standards.

Compliance with Good Distribution Practices is also essential, to ensure quality and guarantee the traceability of products from the distribution center to the final point of delivery: wholesaler, dispensing pharmacy, hospital pharmacy.

In addition to these good practices, many other regulations define legal requirements concerning pharmacovigilance, medical information, and promotional/sales practices.

As a global healthcare player focused on patient needs Sanofi develops, manufactures and markets a wide range of healthcare products worldwide, including a broad-based portfolio of prescription medicines, consumer healthcare products, animal health products, vaccines, generics and medical devices.

Patient safety is an absolute priority for Sanofi. The Company's approach to patient safety is built on guidelines for quality and continuous improvement covering each phase of the product life cycle, and services associated with our products. To deliver on this approach, we have mechanisms in place to:

- ensure the safety of patients taking part in clinical trials;
- guarantee the quality of products under development or on the market, and of our regulated activities, via a dedicated quality organization;;
- continuously monitor and assess our products' benefit/ risk profile by implementing a drug safety monitoring system;
- actively combat counterfeiting of our products; and
- ensure continuity of supply of our products.

### 4.B.a. Safety of patients taking part in clinical trials

Clinical trials are a mandatory part of the approval process for any new drug, and are also carried out post-marketing to assess product safety monitoring and develop new indications.

The purpose of clinical trials is to collect data about the efficacy and safety of products in healthy subjects and patients.

Sanofi organizes clinical trials all over the world, including in developing countries and emerging markets, so as to take account of the specific needs of the various populations that participate in these trials.

Sanofi applies all the international standards in implementing and monitoring clinical trials worldwide: the Declaration of Helsinki, the recommendations of the International Conference on Harmonization (ICH), and in particular Good Clinical Practices (GCP). In addition to these international standards, we comply with all national and international rules and laws applicable to clinical trials European Directives 2001/20/EC 2005/28/EC; the CFR21 regulations issued by the US Food and Drug Administration (FDA); and the regulations issued by the Japanese Ministry of Health, Labor and Welfare (MHLW).

Before a clinical trial can start, it is subject to review by the health authorities and by independent ethics committees representing healthcare professionals and patients in the country where the trial takes place, in compliance with applicable local and international laws and regulations.

Each ethics committee is an independent body entrusted with protecting the rights, safety and well-being of human subjects participating in a clinical trial. The committee expresses an opinion on the trial protocol, the suitability of the investigators involved in the trial, the adequacy of facilities, and the methods and documents used to inform patients enrolled in trials in order to obtain their free and informed consent.

Sanofi ensures that all participants (or their legal representatives) enrolled in the clinical trials conducted by the Company give their free and informed consent to participate in the trial. Consent must be given before any procedure or intervention required by the study protocol is carried on a participant, and before any data are collected. All documents related to clinical trials, in particular the consent form, must comply with applicable legislation and must provide participants with exhaustive, easily understandable information. Participants must be informed of their right to access and amend their personal data in accordance with applicable law. Sanofi applies procedures and tools to protect the confidentiality of personal data collected during clinical trials.

Sanofi is committed to transparency about our medical research and to providing healthcare professionals and patients with all useful information about our development projects and products so that they may make informed medical decisions. Information about the results of clinical trials is made available to healthcare professionals, and to participants in the trials, on a dedicated website.

Sanofi implements a strategy of audits covering clinical trials, associated systems and any subcontractors potentially involved in the conduct of trials. The aim is to obtain assurance that the conduct of trials complies with the Company's quality standards and the applicable regulations, and to implement a continuous improvement process. Our audit program is determined on the basis of an evaluation of the potential risks identified for clinical research activities. It is designed to ensure adequate coverage of projects and trials conducted in various countries and regions all over the world. In addition, Sanofi is subject throughout the world to health authority inspections carried out to ensure compliance with ethical standards and legislation governing clinical trials. None of the 98 inspections conducted on our clinical research activities in 2016 resulted in regulatory action.

# 4.B.b. A dedicated Quality organization

Sanofi's senior management is firmly committed to providing safe and effective products throughout the world that are developed, manufactured, distributed and marketed in full compliance with regulatory requirements and our own corporate values.

To this end, the Chief Quality Officer (CQO), who has direct access to the CEO, is in charge of our Global Quality function, which unifies all the quality teams within our R&D and Industrial Affairs operations and our commercial operations in the countries. Global Quality ensures that our quality policy is implemented consistently throughout the product life cycle and that the same high quality standards are applied worldwide, to guarantee patients' safety and meet stakeholders' expectations.

Our global quality policy is distributed to all our employees throughout the world, and is available in 27 languages. The latest version of this policy, signed jointly by the CEO and CQO, was issued in 2015. It reaffirms our commitment to patients and the global reach of our quality principles, and stresses how important it is for all our people to uphold our quality culture. Quality managers are appointed in each operational unit and at each site or subsidiary involved in activities that could potentially impact product quality, patient safety or data integrity. They conduct and coordinate quality and compliance activities, ensuring that quality standards rules are observed not only within our own operations but by our subcontractors and suppliers. They also prepare for and follow up on inspections by healthcare authorities.

The effectiveness of our quality systems is monitored within each Sanofi entity using objective-based assessment, performance indicators and periodic quality reviews involving management and internal stakeholders.

### 4.B.c. Quality of marketed products and products in development

Medicines cannot be marketed without fulfilling a large number of constantly changing regulatory requirements, intended largely to ensure optimal product quality.

The Company's quality system guarantees the quality and safety of products marketed by Sanofi.

The quality system ensures that regulatory Good Manufacturing Practices and our own quality directives are applied strictly everywhere in the world, and that our subcontractors meet equivalent levels of quality.

Key measures embedded in our quality system include:

- for each batch produced, quality controls must be performed and documented at each stage in the manufacturing process before the batch is released;
- annual quality reviews are conducted for each marketed product to check that the manufacturing process is being complied with and is still valid, such that the process can be continuously improved;
- a system for monitoring quality issues reported by patients and healthcare professionals, so that claims can be investigated quickly and corrective/preventive action taken; and
- an audit strategy covering all activities associated with the manufacturing of our products, including related systems and any subcontractors that may be involved in such activities. These audits help us to meet our regulatory obligations and to continually improve our performance.

### 4.B.d. Pharmacovigilance

The Sanofi Global Pharmacovigilance and Epidemiology (GPE) function reports to the Chief Safety Officer (CSO). The CSO reports to the Chief Medical Officer (CMO), who in turn reports directly to the CEO.

The GPE function is Sanofi's center of excellence for assessing and monitoring the benefit/risk profile of our entire product portfolio which includes prescription medicines, consumer healthcare products, vaccines, generics and medical devices developed and marketed by Sanofi.

All pharmacovigilance activities relating to our product portfolio worldwide are handled by a single dedicated function, Global Pharmacovigilance and Epidemiology (GPE), from first administration in humans through all the development phases until the end of the commercialization cycle. Each specialty within our portfolio is managed by a dedicated team of scientific and medical experts.

All of the activities and responsibilities within the remit of GPE are conducted in line with national and international regulations and recommendations. GPE relies on a global network of local and regional pharmacovigilance staff, who report directly to GPE. In Europe, a dedicated team handles the assignments, activities and responsibilities incumbent upon the Qualified Person Responsible for Pharmacovigilance (QPPV). Pharmaceutical companies in Europe are required to inform the European Medicines Agency and the competent national authorities of the name of their QPPV. Sanofi designates a single person to act as QPPV across all entities. This allows for centralized supervision and harmonized governance of the pharmacovigilance system.

Strict compliance with official regulations is essential, which is why GPE has developed a robust, welldocumented system that is applied throughout the GPE network. Our compliance policy means that when we undergo regulatory audits and inspections, we can be absolutely sure that we have achieved the highest standards in our benefit/risk assessments and patient safety monitoring, and in meeting our reporting and transparency obligations towards patients, regulators and healthcare professionals.

Sanofi systematically aligns on the most demanding standards of Good Pharmacovigilance Practices, regardless of local or regional practices. Those standards also apply to clinical trials and programs that are not directly conducted by Sanofi and to collaborative projects with NGOs.

All pharmacovigilance information and data relating to our portfolio from everywhere in the world is collected, monitored, declared to the supervisory authorities and analyzed using a powerful and secure database system backed by algorithmic analysis and data aggregation tools. Responsibility for the integrity and maintenance of this system lies with the operational management of our GPE function.

The benefit/risk profile of the Company's products is continuously and systematically assessed by the GPE function, under the auspices of a permanent Benefit/Risk Assessment Committee (BRAC). Chaired by our Chief Medical Officer, BRAC reviews and assesses the benefit/ risk profile of Sanofi products from preclinical phases to commercialization, and through the product's entire life cycle on the market.

Data collected on our products are systematically subject to continuous iterative analysis to identify and extract potential pharmacovigilance signals from the adverse event information reported. The aim is to proactively flag up potential risks relating to the use of Sanofi products. Potential warning signals are referred upwards within our management chain for further scientific and medical investigation; each step is carefully documented so as to inform the decision-making process underlying any risk minimization plans. Risk minimization plans, and strategies for monitoring them, must in all cases be approved by the supervisory authorities before they are implemented on the ground. The majority of cases are routine scenarios, in which the identification and confirmation of new signals will call for additions or amendments to the wording of the label information provided to patients and healthcare professionals. The wording of such amendments is agreed in consultations between the marketing authorization holder and the relevant supervisory authorities. The revised label information must then be released in accordance with an agreed timetable. In those exceptional cases where there is an established serious risk to public health, the marketing authorization holder must establish a specific alert procedure under the control of the supervisory authorities, which can go as far as triggering a crisis management procedure including a product recall.

GPE and its partners are subject to regular audits by Sanofi's Global Quality function. The key objectives are to check compliance with internal quality standards and with regulatory requirements, and to feed a process of continuous improvement by identifying protective and corrective actions. Audit programs are based on a strategic assessment of potential pharmacovigilance risks.

GPE also has a fully trained team dedicated to official inspections. This team covers all aspects of such inspections including preparation, organization, performance, information and internal communication; it also handles relations with the supervisory authorities, in liaison with the Sanofi functions affected.

See also "Item 4 – B.5. Global Research & Development" and "Item 4 - B.6.3 Regulatory Framework" in our 2016 Annual Report on Form 20-F, and section "2.C.c. Identifying, Assessing and Managing Risks Relating to the Safety of Products Under Development and Marketed Products" in the Report of the Chairman of the Board of Directors included as Exhibit 99.1 to our 2016 annual Report on Form 20-F (which is available on our website at http://en.sanofi.com/investors/regulated\_info\_france/ french\_security\_report/french\_security\_report.aspx).

### 4.B.e. Continuity of supply

Compliance with Good Distribution Practices is essential to protect quality and guarantee the traceability of products from the distribution center to the final point of delivery: wholesaler, dispensing pharmacy or hospital pharmacy.

The Global Supply Chain function, which reports to Industrial Affairs, is responsible for ensuring continuity of supply of our medicines to patients, with no interruptions in the supply chain. We set a zero stockout objective, which means that no link in the chain can be missing or defective.

The continuity of supply process includes:

- · defining product inventory levels taking into account the product's criticality and manufacturing lead-times, and the volatility of sales forecasts;
- having back-up solutions that can be activated for certain products; and
- coordinating and managing product shortages in response to specific circumstances.

Continuity of supply across the entire chain, from procurement of raw materials through to the distribution of medicines, is embedded not only in our Supply Chain function but also in the definitions, procedures, assessments, action plans and monitoring processes of our overall risk management policy. Cross-functional, multi-disciplinary committees oversee the detection, coordination, strategic management and resolution of high-risk situations to ensure continuity of supply at the operational level.

Sanofi operates an audit strategy covering activities related to the distribution of our products, associated systems, and any subcontractors involved in those activities. The aim is to obtain assurance that distribution activities comply with our quality standards and the applicable regulations, and to and to implement a continuous improvement process.

### 4.B.f. Anti-counterfeiting measures

Criminal activities involving counterfeit drugs are a major public health issue, and are responsible for hundreds of thousands of deaths every year, for example from malaria and tuberculosis(1). Sanofi has been actively combatting this growing problem for many years, in order to ensure that patients throughout the world have access to quality drugs. All therapeutic product lines are potentially exposed to counterfeiting and all countries may be affected, whether through physical supply chains or over the internet.

The Company is taking a wide range of proactive measures at a worldwide level:

• Our anti-counterfeit governance structure is built around a central coordinating team whose day-to-day role is to detect suspected cases of counterfeiting of our products (in the field or on the internet), investigate them, and

<sup>(1)</sup> WHO World Malaria Report 2013: International Policy Network, 2009



take the necessary action. This team also supports healthcare and law enforcement agencies at national and international level, and works in conjunction with supranational bodies such as the OECD and the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA).

- Sanofi's Central Anti-Counterfeit Laboratory (LCAC) has a dedicated team of experts and state-of-the-art technologies to identify and analyze counterfeit products., Since 2008, over 30,000 products have been registered with the LCAC for the purpose of detecting counterfeit products.
- Our actions in 2016 included identifying counterfeit products in Indonesia<sup>(1)</sup>, enabling the authorities there to dismantle a network of counterfeiters.
- The company also applies industrial systems and processes to better combat falsification and rapidly establish product authenticity, such as tamper-evident packaging, security labels, and the Data Matrix 2-dimensional barcode product ID system (serialization/ aggregation).

In addition, an annual one-day internal awareness campaign directed at Sanofi employees highlights the dangers of counterfeit medicines.

During 2016, we also delivered training programs for medical and pharmacy students.

### 4.C. Relations with healthcare professionals

Good relations with healthcare professionals are fundamental to innovation, and to ensuring that our projects meet patients' healthcare needs. We work with healthcare professionals every day to advance biomedical research and support the proper use of our healthcare products and services. For example, we collaborate with healthcare professionals in order to:

- better understand diseases, and further our knowledge of disease physiopathology and the mechanism of action of new compounds;
- design and conduct clinical trials on compounds under development and marketed products, to evaluate their safety and efficacy;
- benefit from their expertise to adapt our projects in the interest of patients;

- encourage proper use of our products; and
- organize scientific briefings on pathologies, related issues, and the healthcare products we offer.

See also "Item 4 - B.6.3.6. Transparency and Public Access to Documents" and "- B.6.3.7. Other New Legislation Proposed or Pending Implementation" in our 2016 Annual Report on Form 20-F.

# 4.C.a. Transparency in our relations with healthcare professionals

As a patient-centered healthcare company, Sanofi conducts its business in line with the highest standards of ethics and integrity. This is of vital importance to ensure transparency in our relationships. Over the last decade, several countries have introduced regulations concerning transparency in relationships applicable to the healthcare industry, including France, the United Kingdom, the United States and - from January 1, 2015 - all 33 European countries(2) covered by the EFPIA "Code on Disclosure of Transfers of Value from Pharmaceutical Companies to Healthcare Professionals and Healthcare Organizations", commonly referred to as the "Disclosure Code". Sanofi is committed to complying with all national and international governing relations with professionals, and provide all our employees with appropriate information and training on this issue. Employee engagement is crucial, and goes hand in hand with our responsibility as a global leader in the healthcare industry.

Strict rules are applied that aim to ensure scientific quality while providing fair remuneration for the expertise supplied. Healthcare experts are chosen on the basis of objective criteria related to the purpose of the scientific assignment for which they are retained. This process enables us to verify an expert's credentials in terms of medical specialization, publications, research and teaching. The information we provide to experts must not impair their objectivity or the scientific quality of their work. Because the work they do requires time and expertise, experts should be remunerated. Such remuneration must be reasonable and represent fair payment for work performed, in compliance with our internal rules.

Benefits such as hospitality (meals and lodging) are always incidental to the scientific purpose of the assignment, and are granted in strict compliance with Sanofi's own internal procedures and with external rules.

<sup>(1)</sup> http://www.iracm.com/en/2016/07/vast-fake-vaccines-making-ring-dismantled-in-indonesia/; http://time.com/4385064/indonesia-children-vaccinationscandal-vaccine-healthl; http://www.thejakartapost.com/news/2016/06/30/distribution-chain-blamed-for-fake-vaccine-circulation.html

<sup>(2)</sup> Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and United Kingdom.

# 4.C.b. Promotional information about our products

As a global pharmaceutical company, Sanofi adheres to the codes on promotional activities governing our industry in Europe (EFPIA), the United States (PhRMA) and worldwide (IFPMA). Sanofi's internal codes are based on these codes and refer to them explicitly.

Our Regulatory Affairs and Ethics & Business Integrity Departments have established procedures and directives that comply with international standards:

- on scientific information provided via promotional or non-promotional materials: best practice guidelines on the use of promotional documents or materials to communicate information about medicines and healthcare products, and on the provision of items of medical utility, etc.;
- on using websites to provide scientific and promotional information: our Internet Committee has established an approval procedure covering all websites developed by Sanofi and its subsidiaries worldwide; and
- on interactions with healthcare professionals: hospitality rules associated with scientific events, and rules governing the remuneration and selection of experts with whom we contract to provide services.

To ensure that our ethical principles are applied in practice, we are also committed to:

- providing continuing professional education for medical reps, and assessing our medical sales visit activities;
- applying the strictest ethical standards on scientific materials;
- · providing precise, up-to-date and objective scientific information so that are employees are knowledgeable in their interactions with healthcare professionals and comply with the relevant regulatory requirements;
- supplying documentation that enables healthcare professionals to make objective assessments about the quality of our products and the uses for which they were developed:
- · ensuring that information about our products is based on scientifically proven results; and
- conducting internal audits to ensure that our subsidiaries are in compliance with the approval procedures for scientific materials, and with internal and external codes of conduct and currently applicable laws and regulations governing promotion.

### 4.C.c. Promotional information in France

The core mission of our promotional activities is to provide quality information about the product presented in compliance with the marketing authorization for that product, and to promote correct use of the product among healthcare professionals.

On October 15, 2014, LEEM (the French Pharmaceutical Companies Association) and CEPS (Economic Committee for Healthcare Products, a French government agency) signed a new charter on "the provision of information via cold selling or prospecting with a view to the promotion of medicines". This replaced a 2004 charter governing medical sales visits; it reforms the framework governing the provision of promotional information and includes new rules designed to safeguard the quality of the information provided to healthcare professionals and to promote the proper use of medicines. The new charter introduces six key changes: (i) a broader scope of application; (ii) an extended definition of those involved in providing promotional information; (iii) a distinction between promotional scientific information (proactive) non-promotional scientific information (in response to an enquiry from a healthcare professional); (iv) an overhaul of the obligations relating to continuing professional education; (v) tighter ethical rules; and (vi) the establishment of a national promotional information observatory.

Based on this new charter, the HAS (the French National Authority for Health) drafted a new certification framework which was published in the Official Journal on April 13, 2016. The certification audit involves obtaining assurance (i) that the company is capable of reliably delivering on its declared policy and objectives and (ii) that the company's management system complies with the specified requirements and is effectively implemented, especially in the following areas: quality policy for promotional information (which at Sanofi is built into our global quality approach), ethical standards, and the training and assessment of individuals involved in cold selling or prospecting with a view to the promotion of medicines.

These developments provided an opportunity for us to enhance the expertise of our medical rep teams and our overall operational excellence while maintaining an ethical and responsible approach, thereby ensuring that activities within the scope of the charter are fully compliant.

In February 2007, our medical reps were among the first to be certified under the initial charter. Our certification has been renewed every year since then following an audit, the most recent of which was in February 2016.

We also provide a dedicated hotline for healthcare professionals to give feedback on the quality of medical sales visits.

# 4.3.5. Other initiatives to support human rights

Respect for human rights is one of the cornerstones of Corporate Social Responsibility for Sanofi. We are convinced that the principles underpinning human rights apply not only to people but also to nations and, by extension, to businesses. Sanofi supports and applies the United Nations Guiding Principles on Business and Human Rights.

In keeping with these principles, Sanofi has adopted a proactive, company-wide approach to ensure that respect for human rights is embedded at all levels of our operations by:

- performing self-assessments of our internal practices on a selection of key issues such as non-discrimination, the abolition of forced labor, the abolition of child labor and freedom of association;
- adopting targeted policies on employee rights (see section "4.1.6. Promotion of and compliance with International Labour Organization (ILO) Conventions)";
- identifying human rights issues at every stage of the value chain: In 2013, we produced a guide entitled "Human Rights in Our Activities," which describes the four key steps in the life cycle of a drug. For each step, the guide includes information on respect for fundamental human rights principles, stakeholder expectations and a selection of Sanofi good practices. It was distributed to all our employees in late 2013, backed by resources for managers including a mini intranet site and presentational materials;
- employee training: since 2010, 156 managers and senior executives from over 25 corporate functions (including internal auditors) have followed a full-day training program on human rights in business, organized in conjunction with outside experts. At the end of 2016, we marked 2016 International Human Rights Day by making an e-learning awareness module available to all our employees via our corporate intranet:
- assessing our suppliers through a program that has been in place since 2007 (see section "4.3.3. Subcontracting and suppliers"); and
- contributing alongside other businesses to initiatives and working parties on human rights issues through Entreprises pour les Droits de l'Homme (EDH), a federation of French multinationals which Sanofi joined in 2007 as a founding member.

We also incorporate human rights issues into our global risk analyses, not only by identifying specific risks but also by considering the potential impact on patients when assessing the severity of risks.

# 4.4. How corporate social responsibility information is reported: methodological note

### Scope of consolidation

Unless otherwise specified:

- HR data are consolidated for all Sanofi companies worldwide that are fully consolidated for financial reporting purposes, regardless of their activity (industrial or research sites, commercial subsidiaries or administrative headquarters);
- health and safety data (occupational injuries) are consolidated worldwide for all Sanofi companies, including joint ventures and companies consolidated for financial reporting purposes.

### Environmental data:

- environmental data (including expenditures) consolidated for all industrial sites (the Tucson site was excluded because it ceased operations in the second quarter of 2016) and R&D sites.
- the Merial global business unit was divested on January 1, 2017. Consequently, figures for Merial are disclosed separately and are not consolidated at Sanofi level, and comments on data do not apply to Merial;
- impact of administrative the environmental headquarters locations is not included in the scope of consolidation; and
- the environmental impact of CO<sub>2</sub> emissions from our vehicle fleet covers all Pharmaceutical Operations subsidiaries (field sales force, but excluding management) and is provided for information purposes.

# Changes in scope

Changes in scope within Sanofi (new sites, site closures, transfers of activities) between 2015 and 2016 have been treated using pre-determined rules so that performance can be assessed on a comparable basis from one period to the next. Consequently, scope 1 CO2 data (apart from the vehicle fleet), scope 2 CO2 data and water data are reported on a proforma constant scope basis.

## Reporting framework

We apply standard reporting frameworks for human resources, safety and environmental information, so that the indicators monitored across all our entities are consistent and reliable. These frameworks specify the methodologies to be applied for reporting indicators throughout Sanofi and include definitions, methodological principles, calculation formulae and emission factors. We also use standard data collection tools:

- human resources data: in 2016, our Convergence global HR platform covered virtually all of our workforce (98.7%). This platform was launched in 2011 to streamline personnel management and process implementation, and to provide managers and employees with access to a wide array of HR information and tools. Quality controls over data from the Convergence platform were enhanced in 2013 and continued throughout 2014, 2015 and 2016 both at global and individual entity level;
- · safety data: our MSRS system was used to collect and consolidate safety data for 2016 across the entire Sanofi scope; and
- environmental data: during 2016, we replaced the existing application (GREEN) with a new software solution (SWORD), which was used to consolidate all the Sanofi data contained in this CSR report. Implementing this new solution also gave us the opportunity to update our environmental reporting standards.

The reporting period for our 2016 environmental indicators runs from October 1, 2015 through September 30, 2016.

Scope 3 emissions data cover the whole of Sanofi including Merial.

### Additional information and methodological limitations

The methodologies applied for some human resources and HSE indicators may be subject to limitations as a result of:

- the lack of nationally and/or internationally recognized definitions, in particular for different types employment contract;
- reliance on estimates and on representative rather than actual metrics, and limited availability of external data required for calculations;
- practical arrangements for the collection and input of
- the fact that HSE operating expenditures are extracted from the SWORD reporting software and input by HSE correspondents at each site.

This is why to the extent possible, we specify the definitions and methodologies used for each of the indicators listed below, and any margin of uncertainty.

# **Safety indicators**

### Lost time injury frequency rate

The lost time injury frequency rate is the number of accidents resulting in lost time of one day or more within a 12-month period, per million hours worked.

For non-mobile personnel, accidents occurring during the home-workplace commute are not included in this indicator. However, they are included for medical sales representatives, in accordance with our internal reporting rules.

If additional accidents are identified that had not been recorded by the end of the reporting period, or if the classification of an accident is changed after the end of the reporting period, the frequency rate is adjusted retrospectively.

### Total occupational injury frequency rate

We have decided not to publish the severity rate calculated using the criteria defined by French regulations. Because this rate is calculated solely on the basis of the number of days of lost time, it does not reflect the actual severity of injuries from an international standpoint.

This is because for a given injury, the number of days of lost time may vary considerably from one country to another depending on the applicable regulations and compensation systems. Consequently, we have decided to publish the total occupational injury frequency rate.

The total occupational injury frequency rate is the number of occupational injuries with or without lost time, per million hours worked.

### Motor vehicle accidents

A motor vehicle accident is any accident that occurs when the driver is at the wheel (driving or parking).

This indicator covers all road traffic accidents involving vehicles owned or leased by Sanofi, or owned by an employee and regularly driven for work purposes (medical sales representatives).

### **Environmental indicators**

Environmental indicators are collected during an annual campaign, except for indicators relating to energy and water consumption which are collected quarterly.

# Scope 1 and 2 CO<sub>2</sub> emissions

Direct emissions are calculated on the basis of data from the Greenhouse Gas (GHG) Protocol. We changed our carbon accounting methods in 2016 to align on GHG Protocol rules. Indirect emissions from other energy sources purchased from external suppliers are accounted for as follows:

- emissions from electricity generation: emission factors are obtained from the 2015 CO2 Emissions from Fuel Combustion Highlights report published by the International Energy Agency (IEA). The IEA published emission factors for 2013 in the first quarter of 2015. Consequently, those emission factors are applied definitively to the 2013 data, and provisionally to the 2014, 2015 and 2016 data. When the next IEA report is published in the first guarter of 2017 (with 2014 values) we will update the emission factors for 2014 (definitively) and for 2015, 2016 and 2017 (provisionally);
- emissions generated by the production of steam are calculated on the basis of site-specific factors, or estimated using our own internal standards; and
- emissions from vehicles used by our medical representatives are reported for information purposes, but are not included in the scope 1 proforma data.

### Percentage of electricity from renewable sources

The percentage of electricity from renewable sources as published by Sanofi is calculated on the basis of energy purchased from the national grid weighted for the national energy mix, and of direct on-site consumption from a renewable source such as solar panels or biomass. The IEA publishes the energy mix for each country annually, with a two-year time-lag.

## Air emissions of nitrogen oxides (NO<sub>x</sub>) and sulphur oxides (SO<sub>x</sub>)

We revised our reporting process for SO<sub>x</sub> and NO<sub>x</sub> in 2016.

NO<sub>x</sub> emissions are generated by combustion facilities (other than thermal oxidizers) and are measured on site, or calculated automatically using our environmental reporting software (by multiplying the quantity of fossil fuels burnt on site by a specific emission factor). We use emission factors for fuel oil boilers, natural gas boilers and wood-burning boilers, obtained from the Interprofessional Technical Center for Studies on Air Pollution (CITEPA), a French government agency. SO<sub>x</sub> emissions are generated by combustion facilities that use domestic fuel oil, heavy fuel oil or coal. They are measured on site, or calculated automatically using our environmental reporting software (by multiplying the quantity of fossil fuels burnt on site by a specific emission factor).

NB: We are not required to report SO<sub>x</sub> emissions related to our processes because they are considered to be much lower than those generated by combustion facilities.

## Wastewater discharge

The data presented correspond to effluents after internal and/or external treatment. In the absence of information on the effectiveness of external treatment, a purification rate of 50% is assumed for the purpose of calculating COD.

Only data from our chemistry and biotech facilities were collected. However, these account for the vast majority of our COD (approximately 80%).

#### Waste

The distinction between hazardous and non-hazardous waste corresponds to that used in European regulations for European Union member countries (Decision 2000/532/EC of May 3, 2000), and that used in local regulations for other countries. Waste arising from soil decontamination operations is not included in the published total for our operating activities. The recovery rate corresponds to waste that is recycled, or incinerated off-site using waste-to-energy technology.

Canteen waste is recorded, but not included with other waste data; instead, it is discussed in a separate section of the CSR report.

### **Human resources indicators**

### Worldwide workforce

Employees under contract include all employees that have an employment contract (permanent or fixed-term) with a Sanofi company on the last calendar day of the year. The figures are expressed in numbers of employees, regardless of hours worked or the date of hiring during the month.

# Worldwide new hires and departures

New hires and departures for Sanofi as a whole exclude all intra-group movements such as international, intercompany or inter-site transfers.

For 2016, we applied a new methodology and carried out specific procedures to exclude all intra-group movements. We have also taken steps to enhance the reliability of movement-related data from the Convergence platform. Data on movements (new hires and departures) cover more than 98% of the scope of reporting. They do not include companies that were consolidated for the first time or acquired during the year, or movements relating to companies not included in the Convergence platform (for which data on new hires and departures are not collected).

Conversions of fixed-term contracts into permanent contracts are not counted as either new hires or departures.

# Average wages for the lowest paid

Since 2011, the average wages of the 15% lowest paid employees has been compared to the minimum wage specified by law or collective agreement in five countries that are representative of the diverse locations of our worldwide sites (Brazil, China, France, Germany and the United States). This indicator has not changed over the years, and was disclosed in detail from 2011 onwards; each year, it has been within a range from 1.6x (in France) to 3x (in the United States) of the statutory minimum wage in the relevant country. Consequently, we decided in 2016 to stop disclosing this information country by country.

#### Absenteeism

We monitor absenteeism locally in line with the relevant regulations; because those regulations vary from country to country, it is not meaningful to report them on a worldwide consolidated basis. Consequently, we have decided to stop disclosing absenteeism data for the five countries on which we report in detail (Brazil, China, France, Germany and the United States), which together represent 59.1% of our workforce.

### Employee relations

Social dialogue data are provided by the human resources departments in each of the five major countries (Brazil, China, France, Germany and the United States). Collective bargaining agreements are defined as those that have been signed by the company itself or by employers' organizations to which it belongs. If the same agreement has been signed by several sites or entities, it is counted only once.

### Hours of training

Reporting on hours of training was introduced in 2014 in five major countries where the Group operates (Brazil, China, France, Germany and the United States), which together represent 59.1% of our employees. Because this reporting is based solely on data recorded in local databases, this indicator may be underestimated.

Data on hours of training collected for reporting purposes correspond to:

- · compulsory training, in particular training required for regulatory purposes; and
- training organized by Sanofi (in person or via e-learning programs) and provided by in-house or external trainers.

Quantitative training data (total number of hours of training and total number of participants in 2016) are consolidated from reports available for each Sanofi entity, but Animal Health activities (Merial) are excluded from the overall total.

The rollout of the ILearn global monitoring and reporting system will enable us to report more fully on training in future years.

### Percentage of women in the Top 400

Our Top 400 (in practice consisting of 434 people) is defined as senior executives and managers who are regarded as essential to our continuing operations and to future workforce planning needs for our global operations. These positions are identified by heads of global operations and the human resources departments of the relevant divisions, and the corresponding data are entered in the Convergence platform. Managers are defined as people whose role involves supervising individuals with one or more direct subordinates.

#### Consolidation and internal controls

Data are consolidated by our global HR and HSE functions on the basis of information provided by industrial and research sites, Sanofi subsidiaries and administrative headquarters throughout the world.

When sites house more than one function, environmental impact is either attributed to the one with the greatest impact or shared among the functions. Safety and environmental data are systematically checked by HSE coordinators within each activity before being submitted for consolidation. In addition, our global HR and HSE functions perform consistency controls on data during the consolidation process.

These controls include comparisons with prior-year data; any significant variances are thoroughly investigated.

Workforce data are compared with consolidated data in the finance database.

To ensure that site correspondents have properly understood the HSE indicators and that the right data are being reported, controls over HSE reporting data are performed during internal audits conducted at Sanofi sites.

#### **External controls**

As required by the French "Grenelle II" decree of April 24, 2012 and the French Ministerial order of May 13, 2013 on the verification of CSR data contained in the management report, Sanofi has designated one of its statutory auditors as the independent third party responsible for verifying the disclosure and fair presentation of its CSR information. The independent third party's report, included as section 4.5 of this CSR report, includes a description of the procedures performed and the independent third party's comments and conclusions.

### 4.5. REPORT BY INDEPENDENT THIRD PARTY ON THE CONSOLIDATED HUMAN RESOURCES. ENVIRONMENTAL AND SOCIAL INFORMATION INCLUDED IN THE MANAGEMENT REPORT

# 4.5 Report by independent third party, on the consolidated human resources, environmental and social information included in the management report

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

# For the year ended December 31, 2016

To the Shareholders,

In our capacity as Statutory Auditor of SANOFI (the "Company"), appointed as independent third party and certified by COFRAC under number 3-1060(1), we hereby report to you our report on the consolidated human resources, environmental and social information for the year ended December 31, 2016, included in the report (hereinafter management named Information"), pursuant to article L.225-102-1 of the French Commercial Code (Code de commerce).

### Company's responsibility

The Board of Directors is responsible for preparing a company's management report including the CSR Information required by article R.225-105-1 of the French Commercial Code in accordance with the CSR procedures and standards used by the Company (hereinafter the "Guidelines"), summarised in the management report and available on request from the company's head office.

### Independence and quality control

Our independence is defined by regulatory texts, the French Code of ethics (Code de déontologie) of our profession and the requirements of article L.822-11 of the French Commercial Code. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with the ethical requirements and applicable legal and regulatory requirements.

# Statutory Auditor's responsibility

On the basis of our work, our responsibility is to:

 attest that the required CSR Information is included in the management report or, in the event of non-disclosure of a part or all of the CSR Information, that an explanation is provided in accordance with the third paragraph of article R.225-105 of the French Commercial Code (Attestation regarding completeness of CSR Information);

 express a limited assurance conclusion that the CSR Information taken as a whole, is, in all material respects, fairly presented in accordance with the Guidelines (Conclusion on the fairness of CSR Information).

Our work involved ten persons and was conducted between October 2016 and March 2017 during a 20 week period. We were assisted in our work by our CSR experts.

We performed our work in accordance with the order dated 13 May 2013 defining the conditions under which the independent third party performs its engagement and with the professional guidance issued by the French Institute of statutory auditors (Compagnie nationale des commissaires aux comptes) relating to this engagement and with ISAE 3000(2) concerning our conclusion on the fairness of CSR Information.

### 1. Attestation regarding the completeness of CSR Information

# Nature and scope of our work

On the basis of interviews with the individuals in charge of the relevant departments, we obtained an understanding of the Company's sustainability strategy regarding human resources and environmental impacts of its activities and its social commitments and, where applicable, any actions or programmes arising from them.

We compared the CSR Information presented in the management report with the list provided article R.225-105-1 of the French Commercial Code.

For any consolidated information that is not disclosed, we verified that explanations were provided in accordance with article R.225-105, paragraph 3 of the French Commercial Code.

We verified that the CSR Information covers the scope of consolidation, i.e., the Company, its subsidiaries as defined by article L.233-1 and the controlled entities as defined by article L.233-3 of the French Commercial Code within the limitations set out in the "Methodological information, Methodological details on CSR information" section of the management report.

<sup>(1)</sup> whose scope is available at www.cofrac.fr

<sup>(2)</sup> ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information



4.5. REPORT BY INDEPENDENT THIRD PARTY ON THE CONSOLIDATED HUMAN RESOURCES, ENVIRONMENTAL AND SOCIAL INFORMATION INCLUDED IN THE MANAGEMENT REPORT

### Conclusion

Based on the work performed and given the limitations mentioned above, we attest that the required CSR Information has been disclosed in the management report, with the exception of the following information: training and social relations, for which the scope is limited (59,1% of headcount), as mentioned in the methodological notes.

### 2. Conclusion on the fairness of CSR Information

### Nature and scope of our work

We conducted around 20 interviews with about 30 persons responsible for preparing the CSR Information in the departments in charge of collecting the information and, where appropriate, responsible for internal control and risk management procedures, in order to:

- assess the suitability of the Guidelines in terms of their relevance, completeness, reliability, neutrality and understandability, and taking into account industry best practices where appropriate;
- verify the implementation of data-collection. compilation, processing and control process to reach completeness and consistency of the CSR Information and obtain an understanding of the internal control and risk management procedures used to prepare the CSR Information.

We determined the nature and scope of our tests and procedures based on the nature and importance of the CSR Information with respect to the characteristics of the Company, the human resources and environmental challenges of its activities, its sustainability strategy and industry best practices.

Regarding the CSR Information that we considered to be the most important(1):

• at parent entity level, we referred to documentary sources and conducted interviews to corroborate the qualitative information (organisation, policies, actions), performed analytical procedures on the quantitative information and verified, using sampling techniques, the calculations and the consolidation of the data. We also verified that the information was consistent and in agreement with the other information in the management report;

• at the level of a representative sample of entities selected by us(2) on the basis of their activity, their contribution to the consolidated indicators, their location and a risk analysis, we conducted interviews to verify that procedures are properly applied, and we performed tests of details, using sampling techniques, in order to verify the calculations and reconcile the data with the supporting documents. The selected sample represents on average 47% of headcount considered as material data of social issues and on average 25% of quantitative environmental data disclosed considered as material data of environmental issues.

For the remaining consolidated CSR Information, we assessed its consistency based on our understanding of the company.

We also assessed the relevance of explanations provided for any information that was not disclosed, either in whole or in part.

We believe that the sampling methods and sample sizes we have used, based on our professional judgement, are sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures. Due to the use of sampling techniques and other limitations inherent to information and internal control systems, the risk of not detecting a material misstatement in the CSR information cannot be totally eliminated.

### Conclusion

Based on the work performed, except for the possible effects of the limited scope as mentioned in part 1 of this report, no other material misstatements have come to our attention that cause us to believe that the CSR Information, taken as a whole, is not presented fairly in accordance with the Guidelines.

Neuilly-sur-Seine, March 2<sup>nd</sup>, 2017

One of the Statutory Auditors

PricewaterhouseCoopers Audit

Philippe Vogt

Sylvain Lambert

Partner

Partner Partner of "Sustainable Development" Department

<sup>(1)</sup> Detailed in appendix

<sup>(2)</sup> HR sites located in China, United States and France; industrial sites and VM sites located in Germany (Cologne), in Canada (Toronto), in China (Hangzhou), in United States (Allston), in France (Aramon, Chilly Mazarin, Compiègne, Croix de Berny, La Boétie, Val de Rueil, Vertolaye).

### 4.5. REPORT BY INDEPENDENT THIRD PARTY ON THE CONSOLIDATED HUMAN RESOURCES, ENVIRONMENTAL AND SOCIAL INFORMATION INCLUDED IN THE MANAGEMENT REPORT

Appendix: CSR Information that we considered to be the most important

#### **Human resources**

- Total workforce and split by gender, age and geographical area;
- Hires and departures;
- Compensation, and changes in compensation;
- Health and safety in the workplace;
- Frequency and severity of occupational injuries;
- Occupational diseases;
- Training policies;
- Training hours;
- Measures promoting gender equality;
- Anti-discrimination policy;
- Promotion of and compliance with ILO conventions.

### **Environmental information**

- How the company organized address environmental issues;
- The amount of provisions and guarantees for environmental risks, provided that such information is not seriously prejudicial to ongoing litigation;

- · Measures to prevent, reduce and remediate air soil emissions, wastewater discharge and contamination;
- Measures to prevent, recycle, reuse, recover and eliminate waste;
- Water consumption and supply, and local constraints;
- Consumption and optimization of raw materials;
- Energy consumption, measures to improve energy efficiency, and use of renewable energies;
- Significant sources of greenhouse gases emitted as a result of the company's activities, in particular by the use of the goods and services it produces.

#### Social information

- · Local, economic and social impact of the company's activities;
- Relationships with individuals or organizations affected by the company's activities;
- Subcontracting and suppliers;
- Consumer safety;
- · Fair practices.

