

Climate Change – Road to Net Zero

GRI Standards:

402-1: Energy

305-1, 305-2, 305-3, 305-4, 305-5: Emissions

PLANET CARE

At Sanofi, the dedication to improving people's lives goes beyond innovations in healthcare. As a global organization, Sanofi also bears great responsibility in caring for the planet. Every day, Sanofi is minimizing the environmental impacts of its products and activities while strengthening its business resilience in the face of environmental changes.


Through the Planet Care program, Sanofi sets clear goals and is mobilizing employees, partners to join in taking action for the planet.

- **Fight climate change:** build the road to net zero emissions by 2045 with an intermediate carbon neutrality trajectory for 2030, on a 1,5°C science based emission reduction trajectory
- **Limit our environmental footprint and aim for circular solutions** by optimizing the use/reuse of resources and reducing impact of emissions
- **Improve environmental profile of products** by delivering eco-innovative products and by fostering a sustainable use of medicines
- **Mobilize our people for environmental sustainability** by promoting an environmentally conscious culture in the workplace
- **Engage our suppliers in our environmental ambitions** by sourcing responsibly and leading by example

TABLE OF CONTENTS

1. Our commitments to limiting climate change	3
Reducing Our Emissions.....	4
Offsetting What Remains	5
Supporting the Task Force on Climate-related Financial Disclosures (TCFD).....	5
2. Performance	5
2.1. Scopes 1 & 2 GHG emissions	6
Scopes 1 & 2 GHG emissions in France.....	6
Sanofi’s energy consumption	6
2.2. Scope 3 GHG emissions	6
3. Actions	8
3.1. Action on Scopes 1 & 2	8
Energy decarbonization	9
Energy Consumption and efficiency	9
Fostering an eco-fleet.....	10
Fluorinated gases	10
3.2. Action on Scope 3	10
Eco-design and environmentally sustainable sourcing	11
Supplier engagement	11
Reducing GHG emissions due to business travel and employee commuting	12
Fuel and energy related activities	13
Supply chain as lever for reducing GHG emissions.....	13
Waste management	13
4. Annex	14
<i>Reliability of the data and methodology used for the different categories:</i>	14

1. Our commitments to limiting climate change



climate change

Our Objectives

- **Net zero emissions** by **2045** with intermediate **carbon neutrality trajectory by 2030**
- **Reduce GHG emissions** from our activities (scope 1&2) by **55% from 2019 to 2030**
- **Reduce GHG emissions** from our value chain (scope 3) by **30% from 2019 to 2030**
- Use **100% renewable electricity** across all global operations by **2030** (RE100)
- **80% eco-fleet** by **2030**





Global Performance 2023

-38% GHG emissions from our activities (scope 1 & 2), **-7%** from our value chain (scope 3)

79% of electricity supplied on sites is renewable

43% of car-fleet is an eco-fleet

Sanofi was **scored A-** on the **CDP Climate Change** questionnaire



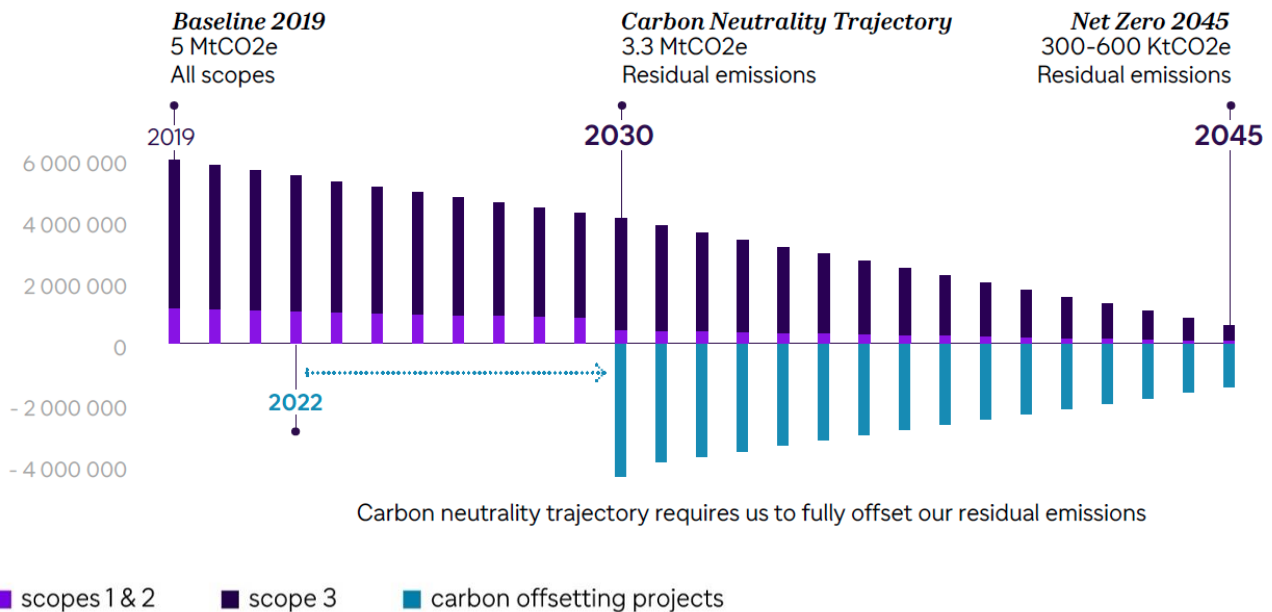
To play our part in mitigating climate change, we pledged to move our activities towards **net zero greenhouse gas emissions by 2045** with an intermediate carbon neutrality trajectory for 2030.

The emissions reduction program we are implementing has produced better results in 2023 than initially estimated, in particular due to energy efficiency measures and the accelerated use of renewable energy. We aim to maintain a high level of ambition and have advanced our Net Zero commitment to 2045, which was validated by the SBTi on February 17, 2023.

Validation of our objectives by the Science Based Target initiative (SBTi) confirms the scientific basis of our objectives, as part of the planet-wide efforts needed to limit global warming to 1.5°C. In January 2023, SBTi signed off our new near-term ambitions, following a revised submission made in 2022 reflecting a change in scope in which we commit to:

- **reducing our scope 1 and 2 greenhouse gas emissions by 55% in absolute terms by 2030**, versus a 2019 baseline;
- increasing our annual supply of **renewably sourced electricity from 11% in 2019 to 80% in 2025 and 100% in 2030**; and
- **reducing our scope 3 emissions by 30%** between 2019 and 2030 (purchased goods and services, capital goods, fuel and energy consumption from upstream transport and distribution, waste generated in operations, business travel and employee commuting).

Our performance is also evaluated annually by the Carbon Disclosure Project (CDP) using their Climate Change questionnaire. In the 2023, Sanofi's efforts to combat climate change achieved a CDP A- 'Leadership' ranking.



Our path toward Net Zero emission by 2045

Reducing Our Emissions

To reduce our impact on climate, we've set up action plans around our four commitments: reducing GHG emissions from our activities (scopes 1 & 2), sourcing renewable energies, fostering an eco-fleet and working with suppliers to reduce GHG emissions across our full value chain (Scope 3). And we're making great progress:

- **Reducing GHG emissions from our activities (scopes 1 & 2):** We've reduced by 38% since 2019 and are aiming for 55% by 2030. To get us there, we've launched company-wide initiatives that promote renewable energy while reducing and optimizing energy consumption, designing new factories with low environmental footprints, and engaging our employees in local actions around the world.
 - **Reducing energy consumption:** We are planning to reduce by 15 % by 2025 for our existing facilities. We have launched energy maturity assessments for our major sites, heat pump programs & energy reduction actions across our operations.
 - **Sourcing renewable electricity:** 79% of our global electricity needs are currently from renewable sources. We have also joined the RE100 initiative and publicly committed to sourcing 100% renewable across all our operations by 2030. It's already the case for all our French sites.
 - **Fostering an eco-fleet:** We are working to implementing an eco-driving policy and culture, improving fuel efficiency, reducing travel and converting our car fleet to an eco-fleet (biofuel, hybrid and electric vehicles). We reviewed our global car fleet policy in 2023 to cover the cost of installing EV charging points at home for employees who opt for an electric vehicle. Already 43% of our fleet is regarded as eco-fleet and we have cut CO₂e emissions from our sales forces by 45% versus a 2019 baseline.
- **Reducing GHG emissions from our value chain (scope 3):** We've worked with partners to reduce indirect GHG emissions from our value chain by 7% since 2019 and are aiming for 30% by 2030. To do this, we've launched decarbonization programs across our supply chain and we're helping our suppliers join us. Through the Energize Program, we've teamed up with 20 other pharmaceutical companies to help our shared supply chains convert to renewable energy. Sanofi is also member of Pharmaceutical Supply Chain Initiative where among others, a decarbonization maturity model has been developed to help suppliers evaluate their current practices and highlight actions to help them proceed to the next level.

Offsetting What Remains

Our focus is the science-based reductions in Greenhouse gas emissions across our value chain. Offsetting still plays a role in how we address remaining emissions and contribute to global carbon neutrality. We've launched a voluntary carbon offsetting strategy that avoids or removes emissions while having a positive impact on both the environment and local communities around the world. In selecting projects, we're seeking balance between projects which simultaneously generate a high volume of credits and deliver positive impacts on communities and the environment.

Four long-term carbon offset projects (15-20 years) have been launched since 2022, and one more is under consideration. The selection of compensation mechanisms will focus on effective projects that associate a positive social impact on communities and on the environment, with "best in class" international certification standards recognized by financial regulators.

In 2022, we launched two projects in partnership with international climate consultancy EcoAct. One of these the Dziva project involves providing 18,250 energy-efficient cook stoves to households in rural parts of Kwale county in Kenya. It will avoid about 790,000 tons of CO2 equivalent emissions over 15 years, while creating jobs and reducing disease related to smoke inhalation.

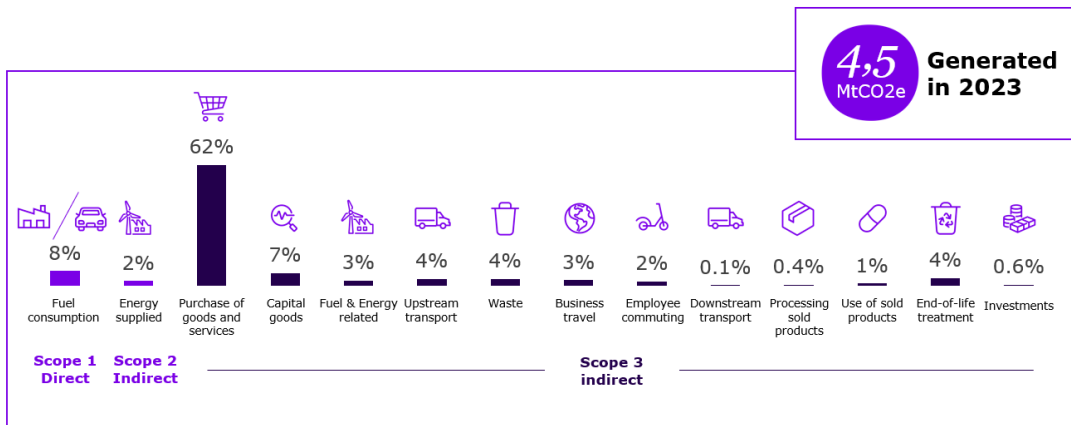
You can find more information on our Climate strategy in our [Climate brochure](#).

Supporting the Task Force on Climate-related Financial Disclosures (TCFD)

In December 2020, Sanofi publicly pledged its support to the Task Force on Climate-related Financial Disclosures (TCFD), with the aim of helping disseminate best practice, improve transparency about the risks and opportunities, and highlight action. In adopting the TCFD recommendations, Sanofi pledged to work towards aligning all of its operations with the climate objectives of the Paris Agreement and rethinking traditional growth models, in particular through economic, technical and organizational transformation. Our commitment is based on in-depth analyses of the impacts of climate change on what we do, and on robust systems put in place for each of the four TCFD pillars.

For more information, see our [Document Center](#): *Climate-related Financial Disclosures and Risks and Opportunities related to Climate Change Factsheet*

2. Performance



Scopes 1, 2 & 3 emissions in 2023.

2.1. Scopes 1 & 2 GHG emissions

Greenhouse gases (Tons of CO ₂ e) ^(a)	2023	2022	2019 (baseline year)	Change vs 2019 (%)
Scope 1 ^(b) Direct emissions	297,700	324,52	367,074	-19 %
Direct emissions from medical rep vehicle fleet	43,294	47,450	78,278	-45 %
Scope 2 ^(b) Indirect emissions (market based)	109,367	140,590	286,381	-62 %
Indirect Emissions (location based)	341,643	355,89	375,159	-9 %
Total^(b) Scope 1 and 2 (market based)	450,361	512,561	731,733	-38 %
CO₂e Intensity in g /Turnover^(c)	10.5	11.9	20.3	-48 %

(a) CO₂e = CO₂ equivalent

Significant improvements have been achieved with our sales fleet consumption due to an eco-driving policy and culture, improvement in fuel-efficiency of the fleet, and reduced travel. The second improvement is due to a reduction in energy consumption and an acceleration of the procurement of renewable electricity supply.

Scopes 1 & 2 GHG emissions in France

GHG emissions (Tons CO ₂ e) ^(a)	2023	2022	2019 (baseline year)	Change vs 2019 (%)
Scope 1 Direct Emissions	82 357	106 638	125 990	
Direct emissions due to sales force car-fleet	3 629	4 354	6 689	
Total Scope 1	85 986	110 992	132 679	
Scope 2 Indirect emissions	1 786	1 737	26 582	
Total France	87 772	112 729	159 261	-45%

Sanofi's energy consumption

Energy consumption (MWh)	2023	2022	2019 (baseline year)	Change vs 2019 (%)
Natural gas	1,400,771	1,515,845	1,673,843	-16%
Electricity	211,803	430,929	1,191,012	-82%
Renewable electricity	1,079,566	902,727	174,872	+517%
Renewable energies (biomass, biomethane)	145,421	86,120	17,635	+725%
Coal	0	0	0	0
Other energy sources (bought-in steam, waste-to-energy, etc.)	354,221	335,268	366,004	-3 %
Total	3,191,782	3,270,889	3,423,366	-7 %

(a) Country energy mix without renewable electricity generated onsite or supply with certificates.

(b) Renewable electricity generated onsite or supply externally with certificates (GOO, RECs, I-RECs).

The 2% reduction in energy consumption in 2023 relative to 2022 reflects lower energy use in response to the energy crisis in Europe; enhanced energy efficiency programs; and the concentration of operations on single sites, such as the regrouping of our R&D operations in France. Conscious of the need to improve energy efficiency and to use less energy, Sanofi plans to reduce its energy consumption at existing manufacturing facilities by 15% in 2025, compared to 2021.

2.2. Scope 3 GHG emissions

Scope 3 greenhouse gas (GHG) emissions represents 90% of Sanofi GHG total emissions. They are the other indirect emissions (vs. Scopes 1 & 2) associated with other functions of the value chain (including transportation, purchased goods and services, waste generation, etc.).

Sanofi worked in collaboration with a third-party expert to develop a robust methodology to determine the Company's Scope 3 emissions. Sanofi continuously assess the specific categories listed in the GHG Protocol by:

- focusing on the most representative and manageable emissions, within a comprehensive framework;
- and using robust datasets, emissions factors and methodologies to convert those data into powerful and relevant values.

Considering Scope 3 emissions allows us to assess the order of magnitude of CO₂e emissions generated by the Company throughout its value chain. The calculation is based on a large dataset, which generates a significant level of uncertainty.

Since 2020, Sanofi has internalized the calculation methodology to improve the quality of the data collected and refine its assumptions. All categories are important and are analyzed with the stakeholders involved, which has allowed the SBTi commitment to be enhanced.

In 2021, Sanofi developed a digital tool to analyze, consolidate and simulate data sourced from all our stakeholders. Thanks to this data analysis tool and the structure of our database, we can compare data by model, organization, and year, and recalibrate baseline year values. We disclose values that are comparable from one year to the next, because they use the same scope and apply the same assumptions.

Thanks to this tool, in 2022, we could breakdown Sanofi CO₂e emissions by entity (Global Business Unit). Since mid-2023, we have been calculating and analyzing CO₂e emissions on a quarterly basis and reporting them to the Planet Care steering committee. We also work on GHG emissions forecasting which is essential for our transition plan.

We continually fine-tune our in-house software, data collection and emission factor updates throughout the year, in order to reduce uncertainty in our calculations. We are also assessing the use of AI to improve the CO₂e calculation and prediction.

In 2023, Sanofi's total Scope 3 GHG emissions amounted to 4 041 735 tCO₂e.

Scope 3 (Tonnes of CO₂e)^(a)	2023	2022 (baseline year)	2019	Change vs 2019 (%)
Calculated Scope 3 emissions (upstream)				
Category 1: Purchased goods and services	2,790,715	2,722,122	2,934,815	-5%
Category 2: Capital goods	293,958	283,521	277,691	+6%
Category 3: Fuel and energy-related activities	126,422	151,037	163,659	-23%
Category 4: Upstream transportation and distribution	164,163	190,999	189,347	-13%
Category 5: Waste generated in operations	162,483	165,480	175,298	-7%
Category 6: Business travel	128,067	75,600	137,591	-7%
Category 7: Employee commuting	102,886	96,241	156,039	-34%
Sub-total: calculated Scope 3 emissions (upstream)	3,768,694	3,685,001	4,034,440	-7%
Estimated Scope 3 emissions (downstream)				
Category 9: Downstream transport and distribution	4,144	3,988	3,633	+14%
Category 10: Processing of sold products	17,212	13,014	15,459	+11%
Category 11: Use of sold products	50,822	73,874	71,728	-29%
Category 12: End-of-life treatment of sold products	173,440	172,074	167,611	+3%
Category 15: Investments	27,413	30,286	35,098	-22%
Sub-total: estimated Scope 3 emissions (downstream)	273,031	293,236	293,529	-7%
TOTAL(b)	4,041,725	3,978,237	4,327,970	-7%

(a) CO₂e = CO₂ equivalent.

(b) Emissions categories according to the GHG protocol: emissions from Cat 8 and Cat 13 (upstream and downstream leased assets) and Cat 14 (Franchises) are not significant. Cat 15 is considered as not applicable, as the emissions of products and services resulting from this collaboration are already accounted for in the other categories.

In 2023, we had reduced our Scope 3 emissions by 7% versus the 2019 baseline. The main factors are improved raw materials sourcing; a reduction in air freight; management of energy supplies; and staff travel (introduction of hybrid working).

Emissions rose by 2% in 2023, vs 2022, due to a growth-related increase in purchased goods and services and the post-COVID resumption of business travel. Reducing Scope 3 emissions is a challenge for any growing organization. We are working across all Sanofi entities and functions to identify levers for cutting emissions, establish roadmaps and the necessary resources – with a particular focus on raw materials and services. Our

eco-design program is also helping us find new ways to decarbonize what we do and what we make. And we are continuing to work with our suppliers to improve their awareness and decarbonize their operations.

The results of our scope 3 calculation are subject to regular review; significant year-on-year changes in emissions are analyzed and explained category by category:

- Category 1: This category covers purchases of raw materials, subcontracting, and services; movements in emission levels reflect trends in our operations.
- Category 2: This category covers emissions related to capital goods. The increase in emissions reflects the investments in construction of new industrial facilities in 2023, such as the Evolutive Vaccines Facilities in France and Singapore, and on the sites at Swiftwater and Cambridge Crossing in the United States.
- Category 3: The steps to migrate towards renewable energies have driven a substantial reduction in this category of emissions (fuel and energy-related activities) since 2019.
- Category 4: Emissions from transportation have fallen due to a reduced use of air freight to ship products to our subsidiaries. During 2023, shipments of vaccines (other than influenza vaccines) from France went by sea to Australia, Japan, Malaysia, Mexico and Brazil, and a number of other sea routes have been validated for vaccines shipments.
- Category 6: Business travel emissions increased in 2023, largely as a result of the lifting of COVID-related restrictions in Asia at the end of 2022 but are still below 2019 levels. This category also includes the medical rep vehicle fleet, which is not managed by Sanofi.
- Category 7: Rolling out our work-from-home policy has significantly reduced emissions from employee commuting, with a slight increase in 2023 due to the end of the pandemic.
- Category 15: Because EUROAPI is no longer consolidated by Sanofi, its estimated share of emissions is now included within this category. EUROAPI figures are based on 2022, because 2023 data are not yet available.

3. Actions

The implementation of the Planet Care roadmap will enable the achievement of the SBTi reduction targets on our 3 scopes of emissions: -55% for Scopes 1&2 and -30% for scope 3, by 2030 based on 2019.

To support the transition plan, in 2022 we increased our internal carbon price from 60 to 100 euros per ton of CO₂e, calculated on the basis of the French tutelary price and CO₂e EUETS market prices in Europe. It will be updated over the coming years. This mechanism is integrated into the calculation of the return on investment time of projects and in the cost of purchasing the main raw materials during evaluation of vendors. This internal carbon price contributes to the decarbonization of scopes 1 and 2 as well as categories 1 and 2 of scope 3. Thus, CAPEX projects with a significant energy cost and CO₂e impact are studied and their alternative scenarios or technological options compared, in order to select the solution that will satisfy both financial and environmental criteria.

We have identified key GHG reduction levers across the company and forecasted their estimated contribution to 2030 reduction targets.

3.1. Action on Scopes 1 & 2

Key reduction levers identified for scope 1&2:

SCOPES 1 & 2	ESTIMATED GHG EMISSIONS REDUCTION 2030 VS 2019 (KTCO ₂ e)	ESTIMATED CONTRIBUTION TO SCOPES 1 & 2 2030 TARGET
Energy decarbonization	272	68%
Energy consumption & efficiency	74	19%
Eco fleet	43	11%

F-gas	10	2%
-------	----	----

Energy decarbonization

Sanofi joined the RE100 initiative and publicly committed to sourcing 100% renewable electricity across all operations by 2030. Our program translates our commitment and promotes initiatives for:

- onsite PV solar generations on industrial, R&D, admin sites and orphan sites/lands;
- supply renewable electricity wherever possible through long-term contracts as Power Purchase Agreement (PPA) or renewable certificates (Guarantee Of Origins, RECs, I-RECs); and
- phase-down & convert or stop of Combined Heat and Power Plants (CHPs) or Cogeneration Plants that combust fossil energies.

Our transition to renewables involves the installation of solar panels on available surfaces. A contract was signed in Europe and Asia: the output from the photovoltaic panels installed had risen from 0.5 MW at the end of 2021 to 4.8 MW at the end of 2022, and 13.5 MW at the end of 2023 (Aramon and Montpellier in France and Virginia in Australia). That could represent between 5% and 20% of consumption on the sites. We are topping this up with guaranteed certified origin energy contracts.

As a result, we have raised our use of renewables from 11% of our electricity consumption in 2019 to 79% in 2023. We signed in 2024 three 20 years renewable electricity Power Purchase Agreement (PPA) for an annual volume of 83GWH per year, representing 19% of electricity needs in France. We also have a renewable electricity PPA in Mexico to supply energy to our three Mexican sites, and are looking at the possibility of extending this model to Europe and the United States.

Finally, we are accelerating our transition to renewable thermal energy by increasing our use of biomethane and biomass, and have signed a long-term supply contract (2024-2030) in France for 210 GWh per year.

Energy Consumption and efficiency

Our energy efficiency approach extends to all our activities, buildings, processes and utilities. It takes in the architectural and functional design of new buildings, and our medical rep vehicle fleets. Energy saving programs are in place at all of our sites. All HSE and energy issues at Sanofi are managed via a management system that covers all of our operations and includes a reference framework, and an internal audit and performance review program. In 2023, the Energy management system of Sanofi has been assessed and certified as meeting the requirements of ISO 50001:2018 for the following activities: Research, development, manufacturing, distribution centers and related support functions performed in the Business Units.

Various levers are being activated (depending on the activity carried on at the site), with a specific focus on air treatment systems that ensure high-quality environments in manufacturing and R&D buildings, which can account for up to 70% of energy consumption of these buildings. However, these systems are important for the quality and safety of our medicines, and any alterations must be validated. Sanofi therefore plans to reduce its energy consumption at existing manufacturing facilities by 15% in 2025, compared to 2021.

For new buildings, new sites, for all major projects, a "Carbon Neutral by Design" evaluation is applied that eliminates the use of fossil energies (natural gas, fuel oil, etc.) to heat new buildings, where possible. The intention is to heat buildings with alternative energies and technologies such as energy recovery, heat pumps, renewable electricity and biomethane.

We broke ground on two EVolutive Facilities (EVF) in France and Singapore in 2022 to digitize our vaccine and biological manufacturing. EVFs are designed to have a lower environmental footprint than traditional sites, using renewable electricity and energy recovery to produce vaccines. By 2022, we are building the first drug substance manufacturing site at Singapore, 100% electrified and on-track to be certified by LEED.

Since Sanofi introduced the Sustainable Building Charter in 2013, we have also sought to lower the footprint of our tertiary buildings. In 2023 more than 65% of our administrative sites surfaces are covered by BREEAM or LEED certifications.

As of today, the HSE management system of Sanofi¹ has been assessed and certified as meeting the requirements of ISO 14001:2015 for the following activities: Research, development, manufacturing, supply chain, sales & marketing, administration, and related support functions performed in the Business Units: General Medicines, Specialty Care, Vaccines, Consumer HealthCare; in the 34 listed sites².

As of today, the Energy management system of Sanofi has been assessed and certified as meeting the requirements of ISO 50001:2018 for the following activities Research, development, manufacturing, distribution centers and related support functions performed in the Business Units: General Medicines, Specialty Care, Vaccines, Consumer HealthCare; in the 30 listed sites³.

Fostering an eco-fleet

Sanofi is committed to optimizing its vehicle fleet to reduce the resulting greenhouse gas emissions. The company's goal is to convert our car fleet into a 80% eco-fleet i.e. that it combines hybrid, electric or biofuel-based vehicles, by 2030. 43% of the vehicle fleet is now considered as an eco-fleet with a 45% reduction in CO₂e emissions from the sales force compared to 2019 (reference year). The programme also involves reducing the distances travelled, training in eco-driving and improving the energy efficiency of internal combustion vehicles. All countries are requested to update their own roadmap to go further and faster in the adoption of low emission vehicles especially in mature markets.

Fluorinated gases

Refrigeration systems are essential to our operations. Unfortunately, many gases used have a significant Global Warming Potential (GWP). Losses from these systems impact our scope 1 emissions profile. Our sites actively work on reducing emissions by improving leak prevention and systematic analysis of accidental releases. Since 2019, the climate impact of these losses has been reduced by 31%, which represents a reduction of 7,000 tons of CO₂e.

Sanofi is working to reduce emissions by replacing these gases with lower GWP alternatives. For example; we have installed a centralized refrigeration unit at our Sisteron (France) site using the most advanced technologies. This new unit reduces electricity consumption by 7.6 GWh annually, which represents around 15% of the site's electricity consumption. This new plant utilizes ammonia and CO₂ as a heat transfer fluid instead of higher GWP fluorinated gas.

3.2. Action on Scope 3

Recognizing the current challenges on scope 3 ambitions, in 2023 Sanofi has reinforced its roadmap and internal funding mechanisms by working across all entities and functions to identify additional levers for reducing emissions, establish roadmaps and lock in the necessary resources, with an active support from the Executive Committee. We have a particular focus on Directs (Raw Material, Packaging, Devices, External Manufacturing, Transportation and Capex) and Services. Our eco-design program is also helping us finding new ways to decarbonize what we do and what we make. And we are continuing to work with our suppliers to improve their awareness and decarbonize their operations.

Key identified reduction levers for scope 3:

SCOPE 3	ESTIMATED GHG EMISSIONS REDUCTION 2030 VS 2019 (KtCO ₂ e)	ESTIMATED CONTRIBUTION TO SCOPES 3 2030 TARGET
Eco-design & sustainable sourcing	620	48%
Suppliers' engagement	182	14%

¹ Represented by Sanofi Winthrop Industrie, Campus Sanofi Val de Bièvre, 82 Avenue Raspail, 94255 GENTILLY, France

² ISO 14001 sites: Amilly Manufacturing, Anagni, Aramon, Beijing, Cairo, Csanyikvölgy, Frankfurt (SFB&O, Distribution platform, Insulin Cluster), Geel, Gentilly, Goa, Hangzhou, Milan (Italy Commercial operations), Luleburgaz, Marc l' Etoile, Mégrine, Narita, Origgio, Pilar, Ploermel, Rzeszow, Scoppito, Hyderabad, Shenzhen, Singapore, Barcelona (Spain Commercial operations), Reading, Swiftwater, Toronto, Val de Reuil, Veresegyhaz, Virginia, Waterford

³ ISO 50001 sites: Anagni, Aramon, Beijing, Cairo, Chilly-Mazarin, Cologne, Compiègne, Csanyikvölgyi, Frankfurt (Corporate offices, R&D, SFB&O, Distribution Platform, Insulin Cluster), Geel, Gentilly, Le Trait, Luleburgaz, Maisons-Alfort, Marcy l'étoile, Montpellier, Orel, Origgio, Pilar, Scoppito, Swiftwater, Toronto Val de Reuil, Vitry R&D, Vitry Manufacturing and Waterford.

Employee commuting & business travels	162	12%
Waste reduction	96	7%
Fuel and energy related	90	7%
Air Transportation	76	6%

Eco-design and environmentally sustainable sourcing

Emissions corresponding to the purchase of raw materials and subcontracting represent more than half of Sanofi's emissions (62% for category 1 in 2023). They therefore represent the main lever for decarbonization. The eco-design program makes it possible to identify levers for the decarbonization of activities and products. Eco-design is a systemic approach that aims to integrate environmental criteria from the design stage of a product, but also into its continuous improvement processes.

For more information, see in our [Document Center](#): Eco-design factsheet.

To reduce the impact of its products, Sanofi is seeking to review its manufacturing processes and replace the most carbon-intensive raw materials with more environmentally sustainable alternatives. The implementation of supply alternatives for a certain number of carbon-intensive raw materials will improve the level of emissions from 2024. Less carbon-intensive suppliers are sought for the main raw materials. For example, the supply of one of our most carbon-intensive raw materials from China has been significantly reduced since 2019 when sourcing of the material was moved to lower carbon intensive vendors in Europe, much closer to the manufacturing site. The previous supplier base represents 5% of supplied materials in 2024, whereas it represented more than half of the supply in 2019. This simple change represents a 120kTCO2 improvement. The group is also studying the supply chain of other carbon intensive raw materials such as Eggs, used in influenza vaccines, and Aluminium, in packaging, in order to determine the possibilities for decarbonizing such sourcing. For Eggs, the study focuses on the most important levers such as breeding practices, manure management and regenerative agriculture in the production of chicken feed.

Supplier engagement

Environmental awareness has significantly increased among customers, investors and society in general. Not complying with sustainability expectation and requirements bears severe financial and reputational risks for Sanofi, with possible impacts of losing market share, being blacklisted from customer's tenders or losing talent retention.

Sanofi wants to partner with the best-in-class suppliers, be inspired by best practices and create a new dynamic among our supply chain to support fair and sustainable economic growth to deliver social benefits through procurement. We plan to achieve this ambition by including sustainability needs at the core of procurement activities.

90% of Sanofi's total emissions are Scope 3 emissions, while Purchase of Goods & Services and Capital Goods represent 62%, thus we are engaging with suppliers to commit to improving their environmental footprint and fight climate change. Supplier contribution is key within our environmental journey towards Net Zero emission by 2045.

Continuing the journey started in 2021, in 2023 we accelerated our activities by identifying our top GHG Emitters (160 suppliers covering approx. 70 % of emissions from Suppliers) and onboarding them in our "Supplier Engagement Program", which consists of a) Increasing Supplier Sustainability Maturity and b) Reducing our Suppliers' carbon footprint. For 2024 we plan to extend the scope and cover >85% of Scope 3 Cat 1 (Purchase of Goods and Services).

With this program we:

- Set clear environmental expectations on activities to complete
- Provide guidance on how to complete activities
- Give support and offer make training material accessible to our suppliers being less advanced/mature on Sustainability

As part of our Supplier Engagement Program, our Top emitters need to commit to:

- Calculate their Scope 1+2+3 emissions and report them publicly (via CDP Climate)
- Get a CDP Climate score of A or B
- Engage with their own supply chain
- SBTi (Science Based Targets initiative)
- 100% Renewable Electricity by 2030

In 2021, Sanofi, along with other global pharmaceutical companies, launched the ENERGIZE program, aiming to help our supply chains to adopt 100% renewable electricity and reduce greenhouse gas emissions. This first-of-its-kind industry program will enable pharmaceutical suppliers to learn more about renewable energy adoption and contracting. This gives suppliers – who may not otherwise have the internal resources or expertise available – the opportunity to participate in the market for power purchase agreements (PPAs). Current corporate members include Amgen, AstraZeneca, Biogen, Boehringer Ingelheim, Bristol Myers Squibb, Charles River, Chiesi, GSK, Haleon, Johnson & Johnson, MSD, Merck KGaA, Novartis, Novo Nordisk, Pfizer, Roche, Sandoz, Sanofi, Takeda, Teva Pharmaceuticals and UCB.

In 2023 we continued our journey towards Net Zero Emissions 2045 by being active members within the following market initiatives:

- *PSCI – Pharmaceutical Supply Chain Initiative*
- *SMI – Sustainable Markets Initiative*
- *PEG (Pharmaceutical Environment Group)*
- *Manufacture 2030, Activate program*

Sanofi has been recognized by CDP as a Supplier Engagement Leader in 2023 in recognition of our efforts to measure and work engaging with suppliers to tackle climate change. This means that Sanofi is among the top 8% assessed for supplier engagement on climate change, which is a proof of concept confirmed by a leading organization and which motivates us to continue the work we started with our supply base fighting climate change.

In 2023, Sanofi joined other global healthcare leaders, from the Sustainable Markets Initiative Health Systems Task Force, in an "Open Letter on Supplier Targets," which sets minimum supplier decarbonization targets, including:

- By 2025, commit to short-term targets aligned with the 1.5 degree trajectory (SBTi);
- By 2025, set targets for waste reduction (including solvents), energy and reuse of materials in manufacturing;
- Commit to sourcing at least 80% of electricity from renewable sources by 2030;
- By 2030, explore green heat supply options;
- Transport providers must align with the SBTi trajectory by 2025 and include green transport solutions in their core offering by 2030; and
- Commit to setting standards for its own suppliers.

Reducing GHG emissions due to business travel and employee commuting

As part of our commitment to reduce our GHG emissions, Sanofi has taken steps to encourage employees to use lower carbon methods of transportation. For example, at our Campus Sanofi Val de Bièvre site, electric buses are provided to drive employees from the site to the subway. Employees are strongly encouraged to choose public transportation and the site is equipped with a room for bikes and reserved spots for electric vehicles.

In order to reduce emissions from business travel, especially carbon intensive air travel, a global internal travel policy, which applies to all Sanofi sites worldwide, sets criteria when preparing a business trip. Those criteria are automatically set within the booking tool used internally, depending on the duration of travel. Moreover, Sanofi encourages the use of telepresence and high-definition video-teleconference equipment at several of our sites. Such rooms allow participants to avoid traveling to different sites and significantly reduce travel-related GHG emissions. As recommended by our global travel policy, virtual meetings option must be assessed and preferred before taking any decision to travel for business.

Business travel includes transportation and hotel nights, but also emissions from medical visitors (including their vehicles not managed by Sanofi).

Fuel and energy related activities

These emissions include the extraction, production and transportation of fuels consumed by the company (not included in scopes 1 and 2). The reduction of energy consumption, the improvement of energy efficiency and the efforts made by Sanofi to move towards renewable energies allow a significant reduction in emissions from activities relating to fuels and energy.

Supply chain as lever for reducing GHG emissions

Every day, nearly 15 million medicines are distributed worldwide. Our supply chain is designed to deliver treatment while ensuring product quality. Aware of the impact that its medicine distribution activities can have on the climate, Sanofi has been providing solutions for over ten years. Sanofi is committed to reducing its carbon footprint by adopting responsible practices to reduce our greenhouse gas emissions throughout the world.

Sanofi has been working on its international transport network significantly by reducing use of air transport and increasing maritime transports which is less carbon intensive. The improvement in transport-related emissions in 2023 comes from the decrease in air freight for the export of the company's products to its subsidiaries. In 2023, vaccine shipments to Australia, Japan, Malaysia, Mexico and Brazil were made by sea from France (excluding flu vaccines) and several new sea routes were validated for the transport of vaccines. The use of marine transportation avoids 260,000 tons of CO₂ each year.

Other actions to create a more efficient and environmentally friendly multimodal transport chain were organized:

- decrease air transport, and prioritize rail and waterways transports; increase the fill levels of trucks and sea containers;
- develop rail for intra-European deliveries;
- experiment with electric and natural gas vehicles for in-town deliveries; design packaging to reduce volume and optimize transport;
- group product shipments and pool transport to reduce the number of trucks on the road; and
- packaging design to reduce product volume and optimize transportation.

A prominent example of the "air to sea" approach is the success story of the transport of vaccines from France to Australia. Indeed, Australia has the highest distribution costs in Vaccines Intercontinental Region and the air freight costs are increasing continuously. As a result, a trip from France to Australia has a significant carbon footprint: 17,000 km to fly from Europe to Australia. The approach "air to sea" was done in 6 months and saved over 1 million and 500 tCO₂e.

Waste management

Sanofi is committed to continuing its efforts in terms of waste management so that, by 2025, more than 90% of it is recovered (reuse, recycling or energy recovery) and that there is no longer landfill.

Some solvents are reprocessed on site after use, in order to be reused and are not reported as recovered waste. In 2023, 56% of solvents were regenerated and reintroduced into the industrial process. This avoided generating the same amount of waste.

At the end of 2023, the landfill rate was 2%, compared to 5% in 2022, with a 52% drop in volumes. The project to compost egg waste at a landfill site in the United States was completed in June 2022, after three years of implementation work (impact studies, change of packaging, obtaining permits). The annual weight of waste sent to landfill has decreased by almost 4,000 tons as a result of this measure.

In 2023, the recovery rate (material and energy recovery) increased from 86% to 88%, with a target of more than 90% by 2025. When the Waste Recycling Maximization Program was launched in 2015, the recovery rate was 56%.

For more information, see our [Document Center](#):

- *Transporting Medicines and Vaccines factsheet*
- *Sustainable Building charter*
- *HSE Policy*
- *HSE Management System factsheet*
- *Eco-Design factsheet*
- *Circular Economy and Waste Management factsheet*
- *Climate-related Financial Disclosures and Risks and Opportunities related to Climate Change Factsheet*

4. Annex

Reliability of the data and methodology used for the different categories:

The calculation of the degree of maturity is based on eight criteria, rated from 1 to 5, which allow us to assess the quality of the data and the quality of the modeling (quality of the emissions factor).

Data quality is assessed according to the following criteria:

- perimeter
- frequency of data reception
- quality of the data source
- completeness of the data

The quality of the modelling is assessed according to the following criteria:

- method
- scope of the emission factor
- assumptions
- reliability of the emission factor source

Scope 3 Category	Data quality	Quality of modelling
1	3,8	3,8
2	3,8	2,7
3	4,8	3,8
4	3,6	3,5
5	4,8	3,5
6	3,8	3,8
7	3,2	3,1
9	3,8	3
10	4,1	3,5
11	4,1	3,5
12	2,8	2,3
15	3,0	3,5