

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Regeneron (NASDAQ: REGN) is a leading biotechnology company that invents life-transforming medicines for people with serious diseases. Founded and led for over 30 years by physician-scientists, our unique ability to repeatedly and consistently translate science into medicine has led to seven FDA-approved treatments and numerous product candidates in development, all of which were homegrown in our laboratories. Our medicines and pipeline are designed to help patients with eye diseases, allergic and inflammatory diseases, cancer, cardiovascular and metabolic diseases, pain, infectious diseases and rare diseases.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date End date		Indicate if you are providing emissions data for past reporting	Select the number of past reporting years you will be providing emissions data	
			years	for	
Reporting	January 1	December 31	No	<not applicable=""></not>	
year	2019	2019			

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Ireland

United Kingdom of Great Britain and Northern Ireland

United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response. USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory. Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization? Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of	Please explain
individual(s)	
Chief	The Chief Executive Officer has overall direct responsibility for the business strategy, which includes Environmental, Social and Governance (ESG) related matters and climate change. Regeneron
Executive	has formalized board oversight of ESG responsibility, amending the Corporate Governance and Compliance Committee's charter to expressly delegate board oversight of corporate responsibility to
Officer	this committee. The CEO is a Director on the Board and engages with the Corporate Governance and Compliance Committee on climate-related issues. The Committee shall oversee the Company's
(CEO)	key corporate responsibility initiatives, including those expected to have a significant impact on the Company's ability to deliver sustained growth; and conduct a periodic (no less than twice yearly)
	review of ESG matters pertaining to the Company. Responsibility for formulating and implementing such initiatives and matters shall remain vested in management. One example of a climate-related
	decision made by the CEO was the provision of feedback and approval of the company's newly published environmental targets.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board- level oversight	
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<not Applicabl e></not 	The Board of Director's Corporate Governance and Compliance Committee directly oversees the company's key corporate responsibility initiatives, including those expected to have a significant impact on the Company's ability to deliver sustained growth, and is tasked with conducting reviews of ESG matters pertaining to Regeneron. This Committee meets at least once a year to review & monitor major plans, capital expenditures, and strategies to address climate-related risks and opportunities.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line			Frequency of reporting to the board on climate-related issues
Corporate responsibility committee	<not Applicable></not 	Both assessing and managing climate-related risks and opportunities	<not applicable=""></not>	Annually

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climaterelated issues are monitored (do not include the names of individuals).

Regeneron's Responsibility Committee, comprised of top-level cross-functional business leaders, was designed to oversee and have accountability for global, climate-related goals and metrics. The associated responsibilities of the committee members include monitoring and assessing climate-related risks and opportunities, spearheading the development of company-wide environmental targets, and identifying individuals with the appropriate skill sets and operational responsibility (primarily within the Environment, Health & Safety (EH&S) and Facilities teams) to respond to climate-related risks and opportunities.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	1 21 2	Activity inventivized	Comment
All employees	Monetary reward	Efficiency project	Regeneron encourages all employees to seek sustainable solutions and share these ideas with colleagues and supervisors. Employees that provide tangible, implementable efficiency improvements can receive recognition from supervisors and teammates for their efforts to manage climate change issues, which translates to monetary rewards. Our SLIM (Simple, Logical Improvements Matter) program challenges every employee to continuously look for opportunities to improve, including climate-related efficiencies. SLIM winners are recognized and rewarded 'R3' points for actions that demonstrate extraordinary achievements. These points translate to dollars that can be spent.
Other, please specify (Facilities, Engineering, and EH&S teams)	Monetary reward	Energy reduction project	The Facilities, Engineering, & Environment, Health & Safety (EH&S) teams are incentivized to pursue energy reduction initiatives & are primarily responsible for driving progress towards the company's sustainability targets. These teams receive monetary rewards for key energy reduction initiatives through the R3 point-based recognition system. Additionally, these employees have job responsibilities that include commitments to sustainability and energy performance targets. Performance is tied to reaching these goals, which are incorporated into yearly compensation reviews.
All employees	Non- monetary reward	Emissions reduction project Energy reduction project Efficiency project	Employees may be recognized in departmental meetings, verbal announcements, email notifications, internal company website announcements, etc. based on their project's performance. Our SLIM (Simple, Logical Improvements Matter) program for continuous improvement also recognizes employees that suggest and implement strategic climate-related efficiency initiatives.
Business unit manager	Non- monetary reward	Emissions reductions are communicated throughout the company. The business unit managers at each responsible site receive recognition when emissions reduction achieved, as they are the direct result of improved operational efficiency, energy reduction, waste reduction, responsible sourcing, & other key initiatives. Received given to business unit managers when their departmental leadership has been instrumental in achieving these solutions & decreasing emissions.	

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities? Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From	То	Comment
	(years)	(years)	
Short-term	0		The climate-related risks that Regeneron considers on a short-term horizon are carbon emissions, environmental impact, and power redundancy to protect against adverse weather due to climate-related events.
Medium- term	3	5	The climate-related risks that Regeneron considers on a medium-term horizon are those related to the political environment and regulatory changes.
Long-term	5		The climate-related risks that Regeneron considers on a long-term horizon are related to the relationship between infrastructure stability, widespread closure of nuclear power facilities, and local natural gas supplies.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

All corporate risks are identified and assessed using Business Impact Analysis (BIA) criteria, which are used company-wide to determine the magnitude of the impact to the company over the long-term horizon. The BIA criteria are written and re-evaluated at least two times per year by a collaborative effort between the Real Estate and Facilities Management department, Security, and EH&S. The four impact criteria include financial materiality, compliance, operational and competitive edge, and shareholder/stakeholder confidence value. These impacts are rated on a scale with six levels: very low, low, medium, high, very high and extreme. Climate-related risks are identified and assessed within these BIA criteria. A risk with a substantive financial or strategic impact would be rated on that scale as medium, high, very high, or extreme. A substantive financial impact of a climate-related risk would have a cost impact greater than \$50 million and have a BIA rating of medium, high, very high or extreme. An example of this would be the magnitude of additional operational expenses incurred because of a climate-related disaster. Other substantive financial and strategic impacts from climate-related risks could include the loss of a sole source production line or an interruption to the R&D pipeline, which could result in a loss of revenue over \$50 million.

Additionally, our Responsibility Committee conducts ESG materiality assessments every 3-to-5 years to identify & evaluate climate-related risks based on their significance to stakeholders and to the business. The committee engages with senior leaders and external stakeholder groups to prioritize the responsibility issues with potential substantive financial or strategic impact to the business.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered Direct operations Upstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment More than once a year

Time horizon(s) covered

Short-term Medium-term Long-term

Description of process

All corporate risks are identified and assessed using Business Impact Analysis (BIA) criteria, which are used company-wide to determine the magnitude of the impact to the company over the long-term horizon. The BIA criteria are written and re-evaluated at least two times per year by a collaborative effort between the Real Estate and Facilities Management department, Security, and EH&S. The four impact criteria include financial materiality, compliance, operational and competitive edge, and shareholder/stakeholder confidence value. These impacts are rated on a scale with six levels: very low, low, medium, high, very high and extreme. Regeneron identifies risks and opportunities at a company level using those BIA criteria, and identifies risks and opportunities at an asset level using a Business Continuity process, both of which are integrated at a senior level. These two processes work to not only identify potential environmental risks and opportunities (which are included in the BIA criteria), but also to develop procedures, policies, mitigation plans and action plans for immediate response. Each site develops and maintains its own Business Continuity Plan to ensure risks and opportunities are considered and addressed within each operating area. Climate-related risks are identified and assessed within these BIA criteria. A risk with a medium to extreme impact would result in a substantive financial impact costing greater than \$50 million. An example of this would be the magnitude of extra operational expenses incurred because of a climate-related disaster. Other substantive financial and strategic impacts from climate-related risks could include the loss of a sole source production line or an interruption to the R&D pipeline, which would result in a loss of revenue. Additionally, our Responsibility Committee conducts ESG materiality assessments every 3-to-5 years to identify & evaluate climate-related risks based on their significance to stakeholders and to the business. The committee engages with senior leaders and external stakeholder groups to prioritize the responsibility issues with potential substantive financial or strategic impact to the business. Environmental management issues have been identified as a "High" priority to our business. At a company level, the Responsibility Committee has accountability for identifying and assessing climate-related risks and opportunities. At a site level, Regeneron's Facilities and EH&S teams prioritize, monitor, and respond to environmental risks and opportunities. These teams collaborate to determine not only the possible impacts, but also provide direction for developing and maintaining mitigation plans in response to those risks. Thus, the priority concerns are addressed as part of the risk management process. At our headquarters, we have utilized this process to mitigate potential negative impacts associated with carbon taxes, natural gas moratoriums, and risk from increases in energy prices. A case study of how our risk management process is applied to physical risks is improving our energy infrastructure through the installation of Tier IV generators. This allows us to switch our power supply to on-site generators and provide power for the entire campus in the occurrence of an adverse weather event with loss of power. Additionally, our sourcing team assesses priority suppliers to evaluate and mitigate if they are in areas of high physical risk. Adverse weather events are more likely due to physical risks that are driven by changes in climate patterns. As another case study, we have an emergency response team that follows specific processes for managing the impacts to the building's infrastructure and power supply in the event of a flood. These processes are established through Tabletop sessions and cross-functional collaborations with the Real Estate and Facilities Management department, Security, and EH&S. Anticipated transitional risks with the most significant impact to our business would be emerging regulations, such as carbon taxes. A case study of how our risk management process is applied to transitional risks includes our efforts to generate our own renewable energy and implement lighting, HVAC, and other energy efficiency measures to reduce our Scope 1 & 2 carbon emissions. These efforts help mitigate the risk of negative financial impacts from carbon tax regulations. While we consider it possible that new legislation will apply within the medium to long term horizon, the impact on the business alongside managing compliance with existing regulations is likely to be incremental.

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Within our Business Impact Analysis, one of the four Impact criteria is Compliance. Compliance seeks, through Company policies, to ensure that employees act in accordance with applicable laws, rules and regulations, including those covering ESG matters. Regeneron is striving to achieve greenhouse gas emissions targets on a corporate level that are complementary to New York State Governor Cuomo's climate initiatives. Regeneron also references the DEC air quality permitting regulations and NYISO demand response program requirements when making decisions regarding electricity generation using clean diesel. Examples of this risk type that our present business is, and our future business will be, regulated by include the United States Atomic Energy Act, the Clean Air Act, the Clean Water Act, the Comprehensive Environmental Response, Compensation and Liability Act, the National Environmental Policy Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act, national restrictions, and other current and potential future local, state, federal, and foreign regulations. Some of these regulatory frameworks may begin to incorporate mandates or tax mechanisms to reduce carbon emissions and are considered within a wider review of applicable regulation across our research and manufacturing operations.
Emerging regulation	Relevant, always included	Whilst we consider it possible that new legislation will apply within the medium to long term horizon, the impact on the business alongside managing compliance with existing regulation is likely to be incremental. An example of a risk from emerging regulation is the introduction of a carbon tax in territories where we operate our more carbon intensive research or manufacturing operations. Identifying and responding to emerging regulatory risks falls under the responsibility of the Facilities, EH&S, and Legal teams, as they monitor potential changes and/or introductions of regulations regarding climate change issues.
Technology	Relevant, always included	Whilst principle interest in technology lies in the development and manufacture of cutting-edge medical therapies, we would also consider operational technologies such as space heating or cooling within this risk assessment. An example of this risk type is fuel cell technology, which we have implemented at our Tarrytown, New York site. Technology-related risk is considered by our Facilities and R&D teams as part of our process to manage and reduce energy use and the associated carbon emissions. It is also considered within the risk assessment framework based on a requirement for cost control and minimizing exposure to future emissions regulations. The principle impact of this risk type on the business is the potential for higher upfront capital investments, which would be offset by lower operating costs.
Legal	Relevant, always included	At Regeneron, our policies seek to ensure that our employees act in accordance with applicable laws, rules, and regulations, including those covering the environment. In connection with this commitment, Regeneron's EH&S department helps develop programs to achieve compliance. The EH&S team considers the significant fines and penalties, as well as potential for criminal prosecution, for the risks associated with non-compliance to environmental regulations. Examples of this risk type that are considered include USEPA penalties for non-compliance with the Clean Air Act, Clean Water Act, Safe Drinking Water Act, Toxic Substances Control Act, the Resource Conservation and Recovery Act, and other similar Acts. The NYS DEC also calculates significant penalties based on the violation and impact on the environment. Legal risks are carefully considered in the organization's climate-related risk assessment to avoid the penalties previously mentioned, and to minimize the impact that non-compliance would have in the communities in which we operate. Additionally, these risks are assessed to minimize the time and cost involved in potential hearings, legal fees, and corrective measures that may be necessary to bring the company into compliance.
Market	Relevant, always included	An example of this risk type is the ability of our products to reach the market as scheduled. Regeneron's market access team, which is involved in the movement of our products to health care professionals, continuously monitors various weather conditions throughout the year (severe high temperatures, hurricanes, etc.) and looks at the capacity of distributors, estimated delivery schedules, and other factors as part of an informal risk assessment process. If there are potential issues identified, the finance and strategic planning teams are notified, who will then provide an estimated revenue impact. Regeneron is also a member of HDA for healthcare distributors, so we leverage that emergency and disaster preparedness for our own operations.
Reputation	Relevant, always included	Examples of this risk type include reputational risks associated with Regeneron's impact on the environment. Regeneron's ESG materiality assessment determined that environmental management is of high importance to stakeholders and to our long-term business success. Prioritizing & mitigating these risks is critical to maintaining our reputation. They are prioritized based on their importance to stakeholders and impact on the business. We engaged with senior leaders and external stakeholder groups, including healthcare trade organizations, investors, patient advocacy groups and access to medicine non-profits, as part of our ESG materiality assessment to prioritize the responsibility issues that are most important to our business. This assessment identified climate-related issues as a "High Priority" for our stakeholders.
Acute physical	Relevant, always included	Examples of this risk type include flooding and severe storms resulting in loss of power. Regeneron's emergency planning group (which includes EH&S, Real Estate and Facilities Management, and Security) evaluates acute physical risks using internal scenario analysis. This group evaluates weather conditions to ensure that operations continue normally, and potential damages are minimized in the event of acute physical risks due to climate change. For example, we have installed redundant equipment and backup generators onsite to mitigate potential impacts from the loss of power.
Chronic physical	Relevant, always included	Examples of this risk type include temperature and weather pattern changes that would affect Regeneron's ability to have a stable source of power at all facilities or would materially reduce access to water resources. Regeneron's emergency planning group (which includes EH&S, Real Estate and Facilities Management, and Security) evaluates chronic physical risks using internal scenario analysis. This group continuously monitors chronic physical risks from climate change. To mitigate these risks, this team is constantly reviewing the latest technologies to reduce our short-term impact while planning for future changes.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business? Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier Risk 1

Where in the value chain does the risk driver occur? Direct operations

Risk type & Primary climate-related risk driver

Current regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification <Not Applicable>

Company-specific description

Changes to the load-shedding requirements for local utility demand response programs could provide an operational readiness risk for Regeneron, as we may potentially need to change our response strategy to ensure that critical equipment and research materials are not impacted. Regeneron is tracking and participating in local utility demand response programs, which reduce the local utility's power plant demand and local power emissions.

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency) 1000000

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact figure

Regeneron would lose approximately \$1 million in yearly incentives and reduced electricity costs if program changes do not permit the organization to continue participating in the program. This figure represents the sum of monetary incentives that Regeneron would expect to receive, given that the company is able to participate in demand response programs.

Cost of response to risk

12000000

Description of response and explanation of cost calculation

Regeneron has been managing this effort by proactively replacing generators at the Tarrytown, New York headquarters with Tier IV lower emissions generators. The site has also committed that all new generators purchased will achieve this level of reduced emissions or greater, when possible. The demand response program provides an opportunity for Regeneron to do annual "pull the plug" tests on all research and development facilities, ensuring resiliency and operational readiness in the event of an adverse weather event. Regeneron's response also involved implementing a new Automatic Transfer Switch to automate this project. The cost of response to the risk represents the sum of all equipment and installation costs for the recently upgraded generators.

Comment

Identifier Risk 2

-

Where in the value chain does the risk driver occur? Direct operations

Risk type & Primary climate-related risk driver

Acute physical Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Extreme weather events could affect Regeneron's ability to maintain steady power in the event of severe weather, such as flooding, high winds, or extreme cold. This could result in a loss of research and development materials, and thus manufacturing materials, by the destruction or loss of active and historical research and product. The potential impact would be a reduction or disruption in the production pipeline.

Time horizon

Medium-term

Unlikely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure? Yes, an estimated range

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) 10000000

Potential financial impact figure – maximum (currency) 20000000

Explanation of financial impact figure

The estimated financial implications could be \$10-20 million, depending on the materials affected. This financial range is an estimated sum of the destruction & repair costs to facility equipment if impacted by power loss.

Cost of response to risk 20000000

Description of response and explanation of cost calculation

Regeneron's response to this risk ensures that a minimum of N+1 redundancy is provided for new and current research and development critical loads. At our R&D campus, we have installed one piece of equipment as an independent backup for each critical load if equipment failure occurs. Each year, we re-evaluate the loads to ensure we are maintaining N+1. The company is also exploring additional off grid generation possibilities for an additional level of redundancy. The cost of response to this risk is an estimated sum of the replacement costs of research and mechanical equipment located in areas that could be affected by flooding, high winds, or extreme cold.

Identifier Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Reputation

Increased stakeholder concern or negative stakeholder feedback

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Climate change impacts to our operations could limit Regeneron's ability to provide products to customers in a timely fashion, which would result in negative financial and reputational impacts. Inability to produce our products and make them available to customers on a regular basis would hurt the company's reputation as a reliable medical supplier and reduce demand for our products, thus resulting in reduced revenues.

Time horizon Medium-term

ivieulum-tem

Likelihood

Unlikely

Magnitude of impact High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency) <Not Applicable>

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Any manufacturing disruptions that limit our ability to meet the demand for commercial supplies of our products would materially harm Regeneron's reputation and financial condition. However, the potential financial impact is not able to be estimated, as it it is uncertain how our revenues would be affected.

Cost of response to risk

100000000

Description of response and explanation of cost calculation

Regeneron's response to this risk involves the addition of a manufacturing facility outside of the United States for duplication of manufacturing. We've established at-scale manufacturing in both New York and Ireland, and continue to expand and renovate our manufacturing facilities to increase resiliency against adverse weather events and improve our ability to provide products to consumers. We incurred capital expenditures primarily in connection with renovating our new Limerick, Ireland facility. The cost of response to this risk represents the total investment cost over the last six years to develop the manufacturing site in Limerick, Ireland. In addition, our distribution team monitors weather situations and adjusts trucking/routes as needed to avoid in-transit risks. For disaster planning, we hold inventory in different warehouses, none of which are on any coastal towns. For air service, we monitor weather and typically hold shipments until the weather clears. In some situations, we have also arranged delivery to alternate locations where healthcare professionals can safely receive stock.

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur? Direct operations

Risk type & Primary climate-related risk driver

Current regulation

Enhanced emissions-reporting obligations

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification <Not Applicable>

Company-specific description

Due to the increasing number of investor queries regarding ESG-related information, Regeneron is encouraged to publicly disclose its environmental performance each year. As climate change incidents have become more prevalent and reporting standards more stringent, Regeneron has increased its spending on sustainability reporting and disclosure.

Time horizon

Medium-term

Likelihood Very likely

Magnitude of impact

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency) 90000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure - maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The potential financial impact represents the range of additional operational expenses that Regeneron incurs on an annual basis to hire third-party assistance with enhanced reporting requirements regarding climate change matters.

Cost of response to risk

80000

Description of response and explanation of cost calculation

Regeneron's response to this risk is the creation of a full-time position that is dedicated to public reporting on the company's environmental performance and sustainability strategy. The cost of response to this risk represents the internal management costs related to sustainability reporting.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business? Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur? Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Primary potential financial impact

Returns on investment in low-emission technology

Company-specific description

We participate in the New York Independent System Operator (NYISO) ICAP-SCR program and ConEdison DLRP & CSRP programs. These demand response programs reduce strain on the grid & provide an incentive to participants in the form of monetary return of 1) systems benefits charges applied to the participant's utility bills and 2) potential transmission and distribution electricity charge reductions. In Regeneron's case, this applies to our Westchester county, New York sites by reducing the peak grid power daily tariff. Participation in the program reduces operational costs related to electricity use as we apply the incentive earned back to our electrical usage costs. This comprises part of the calculation for return on investment for the installation of all participating technologies (e.g. Tier IV generators, solid oxide fuel cell, solar rooftops). Our Sleepy Hollow solar rooftop provides primary power during peak times to the property, which typically coincides with called events by either NYISO or the utility. The company invests the cost savings into research and development activities.

Time horizon Short-term

Likelihood

More likely than not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency) 1000000

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact figure

The estimated financial impact is an annual cost avoidance of \$1 million for our Sleepy Hollow, New York site. The financial impact was calculated by the rate of each demand response program multiplied by the kWh that is committed to the curtailment, plus any performance bonuses for exceeding committed capacity. Additionally, there is opportunity to reduce each participating site's ICAP-tag, which significantly reduces the cost of distribution charges to that service.

Cost to realize opportunity

32000000

Strategy to realize opportunity and explanation of cost calculation

Regeneron's strategy to realize this opportunity is to ensure all premises are 100% redundant & utilize required technologies for participation in the New York Independent System Operator (NYISO) ICAP-SCR program & ConEdison DLRP & CSRP programs. We also develop SOPs to execute events when called to mitigate interruption to daily operations while shifting load from the grid to internal generation systems. The cost to realize the opportunity is a sum of costs taken from various projects implemented to improve site infrastructure and enable relief to the grid in the local region.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur? Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver Participation in carbon market

Primary potential financial impact

Other, please specify (Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon)

Company-specific description

United States legislative proposals over the past ten years have proposed carbon taxes, which could be levied to U.S. businesses. The impacts of these regulations could include a tax per metric ton of CO2-e avoided. Groups such as the Congressional Budget Office (CBO) provide analysis and cost estimates for potential legislation. Regeneron reviews the potential legislation and budget estimates to develop an informed strategy to develop business opportunities. Regeneron is ensuring that the company owns the carbon credits in all renewable energy contracts to reduce the potential tax burden.

Time horizon

Medium-term

Likelihood More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure? Yes, a single figure estimate

Potential financial impact figure (currency) 6688000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact figure

The estimated financial impact is estimated based on a cost per metric ton of CO2-e avoided if Regeneron participated in carbon markets. If the Energy Innovation and Carbon Dividend Act (EICDA) is passed in the US, companies could experience a carbon tax as much as \$95 per ton of CO2-e by 2030. Given that Regeneron's combined Scope 1 and Scope 2 (market-based) emissions in the US were 70,400 metric tons of CO2-e in 2019, the annual cost to Regeneron of a \$95 per ton of CO2-e carbon tax would be \$6,688,000.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Regeneron's strategy to realize this opportunity is to include language in all renewable energy contracts to ensure that carbon credits are assigned to Regeneron for all assets, whether owned or leased. This method would maximize the opportunity for Regeneron to use carbon credits for a reduction in potential taxes. We began this practice several years ago and continued it through the reporting period. Additionally, we have created company-wide targets to match 50% of our electricity consumption with electricity from certified renewable energy sources by 2025, and match 100% by 2035. We will seek to incorporate the assignment of carbon credits in future renewable energy contracts. Also, Regeneron may sell excess credits to other companies, providing a new revenue stream. The cost to realize this opportunity is zero because this involves adding language specifying carbon credit ownership in a contract.

Comment

Identifier Opp3

Where in the value chain does the opportunity occur? Direct operations

Opportunity type Energy source

Primary climate-related opportunity driver Use of lower-emission sources of energy

Primary potential financial impact Reduced direct costs

Company-specific description

Regeneron has an opportunity to obtain yearly operational savings in energy costs, while providing a more stable source of power for its headquarters, by implementing new clean energy technologies.

Time horizon Short-term

Likelihood

More likely than not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1500000

Potential financial impact figure – minimum (currency) <Not Applicable>

Potential financial impact figure – maximum (currency) <Not Applicable>

Explanation of financial impact figure

The estimated financial implications are \$1.5 million, which is the sum of the anticipated annual energy savings resulting from the installation of a solid oxide fuel cell.

Cost to realize opportunity 22000000

22000000

Strategy to realize opportunity and explanation of cost calculation

Regeneron's strategy to realize this opportunity is to locally produce electricity through fuel cells. This provides a stable source of electricity at a lower annual cost than grid power. One therm of natural gas costs approximately \$0.82. This is equivalent to 30 kWh of electricity, which costs \$3.96. The cost to realize this opportunity was calculated by multiplying the cost per unit of energy (per kWh) by the fuel cell's estimated energy consumption over a 10-year period.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning? Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy? Yes, qualitative and quantitative

C3.1b

(C3.1b) Provide details of your organization's use of climate-related scenario analysis.

Climate- related scenarios and models applied	Details
please specify (WRI Aqueduct Water Risk Mapping and TCFD Scenario Analysis)	Given that water is one of the greatest resource inputs for our business, we have chosen the WRI Aqueduct Water Risk assessment to inform our current and future business strategy. Regeneron's water risk is assessed based on seven water risk layers and a non-weighted average of those risks. These layers include overall water risk, global water depletion, human water security threat, baseline water stress, projected water stress, and regulatory & reputational water risk. The quantity of water withdrawals at all site locations are evaluated against these identified risk layers to determine which sites have the largest negative contribution to local water risks. The time horizon considered is long term, as the analysis applies to current & projected water stress 10 years from now. This time horizon is relevant to our organization because we seek to anticipate long-term risks related to climate change and adjust our operations accordingly, such as avoiding expansion into water-stressed areas and limiting water withdrawals. The areas of our organization that have been considered as part of this scenario analysis include our 8 site locations around the world. The results of this scenario analysis include several water risk is below Regeneron's global average water risk. Twe of our sites in Europe are in areas with a medium to high water risk, however, these two sites have the lowest water consumption among all Regeneron locations. There may be future challenges that arise from policy-based water restrictions in those higher risk areas. However, since our withdrawals are minimal in those areas, little to no financial or operational impacts are anticipated. The results of the scenario analysis have informed our business objectives and strategy, as we minimize company expansion in areas with high overall water risk. This strategy on water restrictions in those higher risk areas. However, since our vithdrawals are minimal in those areas, little to no financial or operational impacts are anticipated. The results of the sce

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate- related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Our strategy for products and services has been influenced by climate-related risks and opportunities, as our Facilities and EH&S teams have established processes to protect our R&D and manufacturing materials from climate-related risks. These teams monitor climate-related events and their potential impact on our product development. The time horizons covered are short & medium term, which is 0-5 years. As a case study of the most substantial strategic decision made in this area, we have implemented equipment redundancy at our R&D campus as a risk management strategy, which was the result of our company's analysis of risks within the BIA criteria and Business Continuity. When extreme weather events have hit our facilities, our redundancy and backup systems have protected our research and development, and our products.
Supply chain and/or value chain	Yes	Our strategy for the value chain has been influenced by climate-related risks and opportunities, as our distribution team monitors climate-related risks associated with extreme weather situations. The time horizons covered are short & medium term, which is 0-5 years. Our team evaluates the urgency and severity of these risks and adjusts trucking & routes as needed to avoid in-transit risks. As a case study of the most substantial strategic decision made in this area, we established several warehouses for holding inventory, none of which are on any coastal towns, for disaster planning and risk mitigation. For air service, we monitor weather conditions and typically hold shipments until unfavorable weather clears. In some situations, we have also arranged delivery to alternate locations where healthcare professionals can safely receive our products. Regarding our supply chain, we partner with utilities to evaluate and mitigate climate-related risks.
Investment in R&D	Yes	Our strategy for investment in R&D has been influenced by climate-related risks and opportunities, as the potential impact of transition risks affecting the company's revenue and reputation have resulted in expanded investment in redundant equipment for R&D activities. We utilize cost savings from environmental sustainability initiatives to invest in these R&D related projects. The time horizons covered are short & medium term, which is 0-5 years. As a case study of the most substantial strategic decision made in this area, we utilized cost savings from the Demand Response (DR) programs plus an additional dollar investment to install lab equipment redundancy. In addition, we received approximately \$7 million in incentives for DR enabling to purchase new generators to meet the program requirements and mitigate acute physical risks.
Operations	Yes	Our strategy for operations has been influenced by climate-related risks and opportunities, as we seek to invest in low emissions technologies that generate clean energy for our facilities. The time horizons covered are short & medium term, which is 0-5 years. As a case study of the most substantial strategic decision made in this area, we have invested in low-emissions technologies at our Westchester county, New York campuses through the installation of a rooftop solar canopy and a solid oxide fuel cell to mitigate the impacts of climate-related risks, both transitional and physical.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Capital expenditures Capital allocation Access to capital Assets	Revenues: Climate-related risks due to adverse weather events have influenced our strategies to mitigate any research or manufacturing disruptions that could potentially limit our ability to meet the demand for commercial supplies of our products and generate revenue. Also, participation in demand response programs with our local utility represents a case study for how a climate-related opportunity has influenced the revenue aspect of our financial planning. Through participation in demand response, Regeneron can generate revenue for load-shedding performance. The time horizon covered by the financial planning of this element is both short and medium term, anywhere from 0-5 years. Direct costs: Engagement in strategic energy management investments represents a case study for how climate-related risks have influenced the direct cost element of our financial planning. The time horizon covered by the financial planning of this element is both short and medium term, anywhere from 0-5 years. Capital expenditures & Capital allocation: State and federal subsidy of renewable energy represents a case study for how climate-related opportunities have influenced the capital expenditures & capital allocation elements of our financial planning. The time horizon covered by the financial planning of these elements is both short and medium term, anywhere from 0-5 years. Regeneron can invest in renewable energy while meeting an appropriate Return On Investment and achieving the goal of reducing greenhouse gas emissions. Subsidy programs are fully considered when establishing Return On Investment, Net Present Value, and Internal Rate of Return calculations as part of the capital expenditure & allocation requests for capital and energy efficiency projects. Access to capital: State and federal subsidy of this element is both short and medium term, anywhere from 0-5 years. Assests: The purchase of Tier IV generators to assist in resiliency and harden electrical infrastructure represents a case study for how climate-related opportuni

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

Climate-related risks and opportunities that have been identified and assessed through our risk management processes have influenced our company's overall environmental strategy. We have used the outcomes of our assessment to establish a new set of environmental targets and evaluate the financial resources necessary to achieve those targets.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year? Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number Int 1

Year target was set 2019

Target coverage Company-wide

Scope(s) (or Scope 3 category) Scope 1+2 (market-based)

Intensity metric Metric tons CO2e per square meter

Base year 2016

Intensity figure in base year (metric tons CO2e per unit of activity) 0.37

% of total base year emissions in selected Scope(s) (or Scope 3 category) covered by this intensity figure 100

Target year 2025

Targeted reduction from base year (%)

30

Intensity figure in target year (metric tons CO2e per unit of activity) [auto-calculated] 0.259

% change anticipated in absolute Scope 1+2 emissions -10

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year (metric tons CO2e per unit of activity) 0.27

% of target achieved [auto-calculated] 90.0900900900901

Target status in reporting year Underway

Is this a science-based target? No, but we anticipate setting one in the next 2 years

Please explain (including target coverage)

The target coverage is 100% of the company's Scope 1 & 2 (market-based) emissions across all site locations. Although Regeneron is a rapidly growing company and adding more square footage each year, the company's absolute Scope 1 & 2 (market-based) emissions have decreased. Decreasing Scope 1 & 2 emissions paired with a growing spatial footprint has allowed us to progress towards our intensity target.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year? Target(s) to increase low-carbon energy consumption or production

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number Low 1

Year target was set 2019

Target coverage Company-wide

Target type: absolute or intensity Absolute

Target type: energy carrier Electricity

Target type: activity Consumption Target type: energy source Renewable energy source(s) only

Metric (target numerator if reporting an intensity target) kWh

Target denominator (intensity targets only) <Not Applicable>

Base year 2016

Figure or percentage in base year 0.62

Target year 2025

Figure or percentage in target year 50

Figure or percentage in reporting year 20

% of target achieved [auto-calculated] 39.2466585662211

Target status in reporting year Underway

Is this target part of an emissions target? No

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

The target coverage is 100% of the company's electricity consumption across all site locations. By 2025, our target is to match 50% of our global electricity consumption with electricity from certified renewable energy sources.

Target reference number Low 2

Year target was set 2019

Target coverage Company-wide

Target type: absolute or intensity Absolute

Target type: energy carrier Electricity

Target type: activity Consumption

Target type: energy source Renewable energy source(s) only

Metric (target numerator if reporting an intensity target) kWh

Target denominator (intensity targets only) <Not Applicable>

Base year 2016

Figure or percentage in base year 0.62

Target year 2035

Figure or percentage in target year 100

Figure or percentage in reporting year 20

% of target achieved [auto-calculated] 19.5009056148118

Target status in reporting year Underway

Is this target part of an emissions target? No No, it's not part of an overarching initiative

Please explain (including target coverage)

The target coverage is 100% of the company's electricity consumption across all site locations. By 2035, our target is to match 100% of our electricity consumption with electricity from certified renewable energy sources.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	2	0
To be implemented*	1	7.4
Implementation commenced*	1	25.3
Implemented*	4	103.9
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in buildings	Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

4.8

Scope(s) Scope 2 (location-based)

Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 17580

Investment required (unit currency – as specified in C0.4) 153171

Payback period

4-10 years

Estimated lifetime of the initiative 6-10 years

Comment

We performed lighting upgrades at our Sleepy Hollow, NY campus. The estimated energy savings are 17,578.4 kWh/year.

Initiative category & Initiative type

Energy efficiency in buildings

Other, please specify (Electrochromic IGUs)

Estimated annual CO2e savings (metric tonnes CO2e)

77.2

Scope 1 Scope 2 (location-based)

Voluntary/Mandatory Voluntary

voluntury

Annual monetary savings (unit currency – as specified in C0.4) 30830

Investment required (unit currency – as specified in C0.4) 1570000

Payback period >25 years

Estimated lifetime of the initiative

>30 years

Comment

We installed View Glass electrochromic IGUs at our Tarrytown, NY site. The estimated annual energy savings are 186,250 kWh of electricity plus 4,999 therms of natural gas.

Initiative category & Initiative type

Energy efficiency in buildings

Estimated annual CO2e savings (metric tonnes CO2e) 3.3

Scope(s) Scope 2 (location-based)

Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 1464

Investment required (unit currency – as specified in C0.4) 15240

Payback period 4-10 years

Estimated lifetime of the initiative 11-15 years

Comment

We upgraded to LED lighting in a newly renovated lab at our Tarrytown, NY campus. The estimated annual energy savings are 12,213 kWh per year.

Initiative category & Initiative type

Energy efficiency in buildings

Estimated annual CO2e savings (metric tonnes CO2e) 18.6

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory Voluntary

Annual monetary savings (unit currency – as specified in C0.4) 8200

Investment required (unit currency – as specified in C0.4) 320000

Payback period >25 years

Estimated lifetime of the initiative 11-15 years

Comment

We upgraded the lighting in a renovated portion of our office space in Tarrytown, NY. The estimated annual energy savings are 68,478 kWh per year.

C4.3c

Lighting

Lighting

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment	
engagement	Regeneron has sustainability representatives at major sites tasked with engaging local employees in environmental sustainability reduction goals and feedback for continuous improvement. These employees work with cross-functional department leaders to determine feasibility and ease of investing in certain emissions reduction activities, and present findings to site management for further consideration. We believe our investments in programs that encourage employees to commute through alternative methods help them establish sustainable behaviors and reduce the company's Scope 3 emissions from commuting. Additionally, employees that implement emissions reduction activities receive recognition from supervisors and teammates for their efforts to manage climate change issues. The SLIM (Simple, Logical Improvements Matter) and R3 point-based corporate recognition programs permit employees to be recognized and rewarded for actions that demonstrate extraordinary achievements. R3 points are converted into dollars and used at an employee's discretion.	r
energy efficiency	Regeneron's operational teams bring efficiency and environmental stewardship into the design plans for every new building, renovation, and addition. Projects are proposed and reviewed when they can impact operational efficiency, energy reductions, and GHG emissions reductions. Investments in these projects are typically reviewed and implemented based on ROI and operational impact analysis.	
incentives/recognition	Employees that implement emissions reduction activities receive recognition from supervisors and teammates for their efforts to manage climate change issues. The SLIM (Simple, Logical Improvements Matter) and R3 point-based corporate recognition programs permit employees to be recognized and rewarded for actions that demonstrate extraordinary achievements. R3 points are converted into dollars and used at the employee's discretion.	

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions? No

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start January 1 2016

Base year end December 31 2016

Base year emissions (metric tons CO2e) 39400

Comment

Scope 2 (location-based)

Base year start January 1 2016

Base year end December 31 2016

Base year emissions (metric tons CO2e) 25300

Comment

Scope 2 (market-based)

Base year start January 1 2016

Base year end December 31 2016

Base year emissions (metric tons CO2e) 25300

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions. The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e) 57500

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

Scope 2, market-based (if applicable) 22700

Start date <Not Applicable>

End date

<Not Applicable>

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure? No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status Relevant, calculated

Metric tonnes CO2e 346100

Emissions calculation methodology

Greenhouse Gas Protocol Quantis Scope 3 Evaluator

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Purchased goods and services are essential for allowing our business to conduct research & development and manufacture our products. This source comprises the largest portion of the company's Scope 3 emissions.

Capital goods

Evaluation status Relevant, calculated

Metric tonnes CO2e 158700

Emissions calculation methodology

Greenhouse Gas Protocol Quantis Scope 3 Evaluator

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Capital goods are essential in allowing our business to conduct research and develop our products. This source comprises the second largest portion of the company's Scope 3 emissions.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status Relevant, calculated

Metric tonnes CO2e

Emissions calculation methodology

Greenhouse Gas Protocol Quantis Scope 3 Evaluator

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Fuel and energy related activities are relevant to the research and development of our products. Therefore, we calculate the Scope 3 emissions from these activities.

Upstream transportation and distribution

Evaluation status Relevant, not yet calculated

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

470

Emissions calculation methodology

Calculated using emissions factors from a 2015 paper "Greenhouse gas emission factors for recycling of source-segregated waste materials" in the Resources, Conservation and Recycling journal by David A. Turner, Ian D. Williams, Simon Kemp.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Includes waste generated in operations for our 2 manufacturing facilities, R&D headquarters, and office location in Sleepy Hollow, New York. This emissions value excludes waste from our small office locations where Regeneron is a tenant: Basking Ridge, New Jersey; Dublin, Ireland; Uxbridge, United Kingdom; and Washington, D.C.

Business travel

Evaluation status Relevant, calculated

Metric tonnes CO2e

11380

Emissions calculation methodology

WRI CO2 GHG Standard

Percentage of emissions calculated using data obtained from suppliers or value chain partners 100

Please explain

The data for this source was obtained from Regeneron's business travel vendor.

Employee commuting

Evaluation status Relevant, calculated

Metric tonnes CO2e

Emissions calculation methodology

Greenhouse Gas Protocol Mobile Combustion GHG Emissions Calculation Tool version 2.6 based on the 2014 IPCC 5th Assessment Report

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

A survey was sent to all employees and a 36% response was received. Survey data is assumed to be representative of all employees.

Upstream leased assets

Evaluation status Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable> Please explain

Regeneron uses an operational control boundary and the emissions for leased locations are included in Scope 1 and Scope 2 calculations.

Downstream transportation and distribution

Evaluation status Relevant, not yet calculated

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable> Please explain

Processing of sold products

Evaluation status Not relevant, explanation provided

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

Regeneron does not sell any intermediary products. Therefore, this source of Scope 3 emissions is considered "not relevant" and is not evaluated.

Use of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

The emissions associated with the use of sold products are insignificant and immeasurable. Therefore, this source of Scope 3 emissions is considered "not relevant" and is not evaluated.

End of life treatment of sold products

Evaluation status Not evaluated

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable> Please explain

The emissions associated with the end of life treatment of sold products are insignificant and immeasurable. Due to the difficulty and complexity in calculating these emissions, this source is not evaluated.

Downstream leased assets

Evaluation status Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

Regeneron is not the lessor for any properties. Therefore, this source of Scope 3 emissions is considered "not relevant" and is not evaluated.

Franchises

Evaluation status Not relevant, explanation provided

Metric tonnes CO2e <Not Applicable>

Emissions calculation methodology <Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

Regeneron does not have any franchises. Therefore, this source of Scope 3 emissions is considered "not relevant" and is not evaluated.

Investments

Evaluation status Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

This source of Scope 3 emissions is not applicable to our business and is therefore not evaluated.

Other (upstream)

Evaluation status Not evaluated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners <Not Applicable>

Please explain

The emissions associated with this source are insignificant and are therefore not evaluated.

Other (downstream)

Evaluation status Not evaluated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>
Please explain

The emissions associated with this source are insignificant and are therefore not evaluated.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization? No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure 0.000012

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e) 94000

Metric denominator unit total revenue

Metric denominator: Unit total 7900000000

Scope 2 figure used Location-based

% change from previous year 20

Direction of change Decreased

Reason for change

The reduction in emissions is due to 1) the implementation of several energy reduction & efficiency initiatives and 2) an increase in revenue from 2018 to 2019.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type? Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	57420	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	60	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	60	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Ireland	9687
United States of America	47859
United Kingdom of Great Britain and Northern Ireland	0

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide. By facility

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Rensselaer, New York	24338	42.625526	-73.737343
Tarrytown, New York	22507	41.078613	-73.823432
Sleepy Hollow, New York	1014	41.114966	-73.862071
Basking Ridge, New Jersey	0	40.650141	-74.583063
Limerick, Ireland	9687	52.620446	-8.656246
Dublin, Ireland	0	53.333605	-6.26323
Uxbridge, United Kingdom	0	51.54541	-0.47954
Washington, D.C.	0	38.89991	-77.03161

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

				Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Ireland	13885	0	28758736	28758736
United States of America	22594	22594	120830251	0
United Kingdom of Great Britain and Northern Ireland	59	84	229107	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide. By facility

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Rensselaer, New York	7531	7531
Tarrytown, New York	13788	13788
Sleepy Hollow, New York	1205	1205
Basking Ridge, New Jersey	67	67
Limerick, Ireland	13868	0
Dublin, Ireland	17	0
Uxbridge, United Kingdom	59	84
Washington, D.C.	3	3

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	1 °	Direction of change		Please explain calculation
Change in renewable energy consumption	472.7	Decreased	0.5	Renewable energy consumption accounted for a reduction of 472.7 metric tons CO2e during 2019. The change in emissions associated with renewable energy consumption is calculated by: 472.7 tCO2e/ 86,000 (gross global Scope 1+2 market-based emissions for 2018), then multiplied by 100. This yielded a 0.5% decrease in emissions compared to the previous year. Renewable energy generated was from photovoltaic installations. The previous year's response listed the savings based on energy produced at Regeneron sites, including energy generated from a fuel cell.
Other emissions reduction activities	5100	Decreased	5.9	From 2018 to 2019, emissions reduction activities contributed to a decrease in electricity consumption across our facilities. The 5.9% decrease was calculated by: the difference between 2018 & 2019 Scope 2 emissions divided by 86,000 (gross global Scope 1+2 market-based emissions for 2018), then multiplied by 100. This yielded a 5.9% decrease in emissions compared to the previous year.
Divestment	0	No change	0	There were no company divestments in 2019.
Acquisitions	0	No change	0	There were no company acquisitions in 2019.
Mergers	0	No change	0	There were no company mergers in 2019.
Change in output	0	No change	0	There were no changes in output in 2019.
Change in methodology	0	No change	0	There were no methodology changes in 2019.
Change in boundary	3	Increased	0	During 2019, Regeneron opened one new site in Washington, D.C. The total Scope 1+2 (market-based) emissions for this site was 3 tCO2e. The 0.003% increase was calculated by: 3 tCO2e/ 86,000 (gross global Scope 1+2 market-based emissions for 2018), then multiplied by 100. This yielded a 0.003% increase in emissions.
Change in physical operating conditions	0	No change	0	There were no changes in physical operating conditions in 2019.
Unidentified	230	Decreased	2.7	Overall Scope 1 emissions decreased. This was a result of an increase in fuel consumption for transportation and a decrease in natural gas usage at other sites. The specific reasons are unidentified. The remaining decrease in emissions between 2018 and 2019 is reported here, and compared to the 2018 gross global Scope 1+2 (market-based) emissions to yield a 2.7% decrease in emissions.
Other	0	No change	0	

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy? More than 5% but less than or equal to 10%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	288500	288500
Consumption of purchased or acquired electricity	<not applicable=""></not>	0	121100	121100
Consumption of purchased or acquired heat	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of purchased or acquired steam	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of purchased or acquired cooling	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>	<not applicable=""></not>
Consumption of self-generated non-fuel renewable energy	<not applicable=""></not>	30600	<not applicable=""></not>	30600
Total energy consumption	<not applicable=""></not>	30600	409600	440200

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	Yes
Consumption of fuel for co-generation or tri-generation	No

C8.2c

Fuels (excluding feedstocks)

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Diesel
Heating value LHV (lower heating value)
Total fuel MWh consumed by the organization 621
MWh fuel consumed for self-generation of electricity 621
MWh fuel consumed for self-generation of heat 0
MWh fuel consumed for self-generation of steam 0
MWh fuel consumed for self-generation of cooling 0
MWh fuel consumed for self-cogeneration or self-trigeneration <not applicable=""></not>
Emission factor 0.27
Unit
metric tons CO2 per MWh
metric tons CO2 per MWh Emissions factor source
metric tons CO2 per MWh Emissions factor source Emissions factor was calculated. Data for LHV and density from the 2020 CDP Technical Note.
metric tons CO2 per MWh Emissions factor source Emissions factor was calculated. Data for LHV and density from the 2020 CDP Technical Note. Comment Fuels (excluding feedstocks)
metric tons CO2 per MWh Emissions factor source Emissions factor was calculated. Data for LHV and density from the 2020 CDP Technical Note. Comment Fuels (excluding feedstocks) Natural Gasoline Heating value
metric tons CO2 per MWh Emissions factor source Emissions factor was calculated. Data for LHV and density from the 2020 CDP Technical Note. Comment Fuels (excluding feedstocks) Natural Gasoline Heating value LHV (lower heating value) Total fuel MWh consumed by the organization
metric tons CO2 per MWh Emissions factor source Emissions factor was calculated. Data for LHV and density from the 2020 CDP Technical Note. Comment Fuels (excluding feedstocks) Natural Gasoline Heating value LHV (lower heating value) Total fuel MWh consumed by the organization 30643 MWh fuel consumed for self-generation of electricity
metric tons CO2 per MWh Emissions factor source Emissions factor was calculated. Data for LHV and density from the 2020 CDP Technical Note. Comment Fuels (excluding feedstocks) Natural Gasoline Heating value LHV (lower heating value) Total fuel MWh consumed by the organization 30643 MWh fuel consumed for self-generation of electricity 0 MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self-cogeneration or self-trigeneration <Not Applicable>

Emission factor

0.26

Unit metric tons CO2 per MWh

Emissions factor source

Emissions factor was calculated. Data for LHV and density from the 2020 CDP Technical Note.

Comment

Fuels (excluding feedstocks) Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization 253102

MWh fuel consumed for self-generation of electricity 23330

MWh fuel consumed for self-generation of heat 229772

MWh fuel consumed for self-generation of steam 0

MWh fuel consumed for self-generation of cooling 0

MWh fuel consumed for self-cogeneration or self-trigeneration <Not Applicable>

Emission factor

0.19

Unit metric tons CO2 per MWh

Emissions factor source

Emissions factor was calculated. Data for LHV and density from the 2020 CDP Technical Note.

Comment

Fuels (excluding feedstocks) Fuel Oil Number 2

Heating value LHV (lower heating value)

Total fuel MWh consumed by the organization 4113

MWh fuel consumed for self-generation of electricity 876

MWh fuel consumed for self-generation of heat 3237

MWh fuel consumed for self-generation of steam

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self-cogeneration or self-trigeneration <Not Applicable>

Emission factor

0.27

Unit metric tons CO2 per MWh

Emissions factor source

Emissions factor was calculated. Data for LHV and density from the 2020 CDP Technical Note.

Comment

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	-	Generation that is consumed by the organization (MWh)		Generation from renewable sources that is consumed by the organization (MWh)
Electricity	26631	26631	1804	1804
Heat	233009	233009	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method

None (no purchases of low-carbon electricity, heat, steam or cooling)

Low-carbon technology type

<Not Applicable>

Country/region of consumption of low-carbon electricity, heat, steam or cooling <Not Applicable>

MWh consumed accounted for at a zero emission factor <Not Applicable>

Comment

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Type of verification or assurance Limited assurance

Attach the statement Verification-Statement-Regeneron-2020.pdf

Page/ section reference

1-3

Relevant standard

Proportion of reported emissions verified (%) 100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach Scope 2 location-based

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Type of verification or assurance Limited assurance

Attach the statement Verification-Statement-Regeneron-2020.pdf

Page/ section reference 1-3

Relevant standard ISO14064-3

Proportion of reported emissions verified (%) 100

Scope 2 approach Scope 2 market-based

Verification or assurance cycle in place Annual process

Status in the current reporting year Complete

Type of verification or assurance Limited assurance

Attach the statement Verification-Statement-Regeneron-2020.pdf

Page/ section reference 1-3

Relevant standard ISO14064-3

Proportion of reported emissions verified (%) 100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5? No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)? Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations. EU ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS

16.8

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1 2019

Period end date

December 31 2019

Allowances allocated

0

Allowances purchased

9670

Verified Scope 1 emissions in metric tons CO2e 9670

Verified Scope 2 emissions in metric tons CO2e 0

Details of ownership

Facilities we own and operate

Comment

Our manufacturing facility in Ireland participates in the EU ETS.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Regeneron's manufacturing facility in Ireland is required, as per its activity (combustion of fuels in installations with a total rated thermal input exceeding 20 MW, except in installations for the incineration of hazardous or municipal waste), to possess a greenhouse gas permit (IE-GHG177-10477-3). As our strategy for complying with the EU ETS, the EH&S and Facilities teams monitor and report all calculated CO2e emissions from the site's main combustion activities. These include combustion of natural gas from site steam boilers, and combustion of fuel oil from generators and sprinkler pumps. The site is required to verify the emissions by an authorized external verifier before submission to the regulatory agency (i.e. Irish EPA). Regeneron then surrenders the above calculated emissions through the EU ETS. A free allocation of allowances is granted to all installations based on activities levels, and the remaining allowances must be purchased on the open carbon market. In 2019, we purchased 9,670 allowances to remain in compliance.

A case study of how we have applied the strategy is through the implementation of several projects identified through a third-party energy efficiency audit. Energy efficiency improvements such as increasing the thermal performance of glass and implementing a building automation system to optimize air conditioning, heating, lighting, etc. have assisted us in reducing emissions at the site.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

CDP

(C11.3) Does your organization use an internal price on carbon? No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues? Yes, other partners in the value chain

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Regeneron engages with other partners in its value chain, such as Consolidated Edison, NYISO, NYSERDA, etc. regarding opportunities to reduce GHG emissions and address climate change issues. Our strategy includes working with our utilities and suppliers on efficient upgrades for equipment and buildings, as well as other opportunities to improve processes. As case studies of our climate-related engagement strategy, we have accomplished the following:

1. Partnered with a local company to improve waste management processes and campus engagement around composting.

2. Engaged our local utilities to install clean technologies, such as solar canopies and a solid oxide fuel cell, to mitigate potential climate change risks and reduce carbon emissions.

3. Required our construction partners to build to LEED specifications.

4. Set a company-wide goal to engage our top 30 suppliers, representing more than 50% of spend, to gather and report relevant Scope 3 GHG emissions data by 2021.

Regeneron's strategy for climate-related engagement includes prioritizing GHG emission reduction activities that we identify with our suppliers and other partners in the value chain. This is accomplished by evaluating project costs and potential emissions reductions as a result of each activity. Wherever possible, prioritization is given to projects that reduce our exposure to climate-related risks, which include disruptions to our supply chain, regulatory changes, and loss of power during extreme weather events. When possible, Regeneron determines the success of a project by measuring its emissions reductions. Additionally, we integrate new projects into the organization's annual risk assessment and determine whether the projects have reduced our exposure to climate change risks.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following? Other

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

Our Environmental Sustainability team participates in quarterly engagements with state and regional representatives in the public & private sectors to discuss policies aimed at mitigating climate change impacts. We discuss trends and regulations associated with grid modernization, mobility and transportation, green infrastructure, etc., and identify tangible, implementable solutions that can be presented to policy makers. The result of each engagement is a 12-month action plan, developed by representatives in the room, and a clear strategy for implementing climate change mitigation strategies.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

To ensure that our activities are consistent with our climate change strategy, we have environmental sustainability experts within our company who are responsible for engaging on climate change issues. We ensure that we are speaking to qualified professionals within the industry as well as local and state representatives at the engagement to avoid any potential conflicts of interest. Our approach is consistent with our overall climate strategy because 1) we have specific company representatives who attend the engagements, 2) the engagements involve discussing & finding solutions to climate change issues, 3) the climate change topics are maintained year over year, 4) the frequency of the engagements is more than twice a year, and 5) we seek to find business solutions that suit our operations and support our company-wide environmental targets.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status Complete

Attach the document

2019 REGN Responsibility Report.pdf

Page/Section reference 15-16, 70-79, 96-97

Content elements

Governance Strategy Risks & opportunities Emissions figures Emission targets Other metrics

Comment

2019 Responsibility Report, pages 15-16, 70-79, 96-97

Publication

In mainstream reports

Status Complete

Attach the document REGN_AR19_v4.pdf

Page/Section reference 37-38

Content elements

Governance Strategy Emission targets

Comment

2019 Annual Report, pages 37-38

Publication

In mainstream reports

Status Complete

Attach the document Regeneron 2020 Proxy Statement.pdf

Page/Section reference 23-26

Content elements

Governance Strategy Risks & opportunities

Comment

2019 Proxy Statement, pages 23-26

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Executive Vice President Finance, CFO	Chief Financial Officer (CFO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response	Investors	Public

Please confirm below

I have read and accept the applicable Terms