



**PRENTISS
SMITH & CO**

Socially Responsible Investment Report for:

NOVARTIS AG-REG

Basel,

Ticker: NOVN SW Equity

Website: www.novartis.com

Last Updated: 03-09-2022

I. Exclusionary Screening

Does NOVARTIS AG-REG appear on any of the following lists? In our exclusionary screening, a single appearance disqualifies an investment.

Fossil Fuels & Precious Metals Mining

- BICS - Oil, Gas & Coal Industries¹
- BICS - Precious Metals Mining¹
- CDP/CAI Carbon Majors Database²

Agrochemicals & Animal Cruelty

- BICS - Crop Chemicals & Fertilizers¹
- Cruelty Free Investing Worst Companies for Animals³

Pornography, Gambling & Tobacco

- BICS - Casinos¹
- BICS - Tobacco¹
- BICS - Pornography¹

Defense & Retail Gun Sales

- BICS - Defense Primes¹
- SIPRI Arms Industry Database⁴
- Gun Retailers⁵
- NRA Top Allies⁶

Private Prisons

- BICS - Security Services¹

¹ BICS = [Bloomberg Industry Classification Systems](#)

² [CDP/CAI Carbon Majors](#)

³ [Cruelty Free Investing 10 Worst Companies for Animals](#)

⁴ NRA = [National Rifle Association Top 10 Industry Allies](#)

⁵ Prentiss Smith & Company Internal Research

⁶ SIPRI = [Stockholm International Peace Research Institute](#)

II. Environmental, Social & Governance Data

What quantifiable environmental, social and governance data, policies or recognition does NOVARTIS AG-REG exhibit? Positive factors may help support a decision to invest.*

General

Dow Jones Sustainability World Index 2021

Listed

MSCI ESG Rating

AA

S&P Sustainability Distinction

Bronze

Has the GRI checked?

Yes

Climate Change & Fossil Fuels

TCFD Supporter Since

2020

100% Renewable Year (RE100)

2025

Electric Vehicles 100 Member

Yes

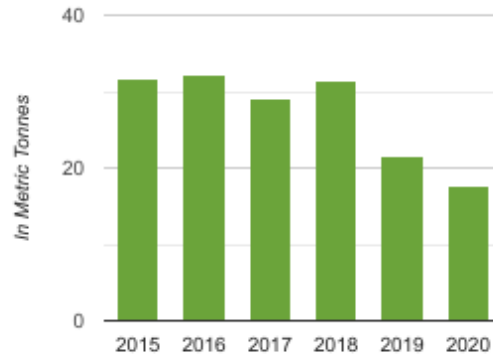
°C Reduction Commitment (SBTi)

1.5°C

CDP Climate Change 2021 Score

B

GHG Intensity per Sales



Initiatives and Policies in Place:

- **Climate Change Policy**
- **Renewable Electricity Target Policy**

Environmental Stewardship

CDP Water Security 2021 Score

A-

Green Buildings

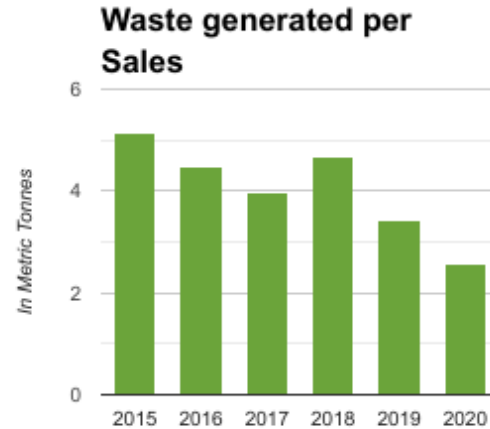
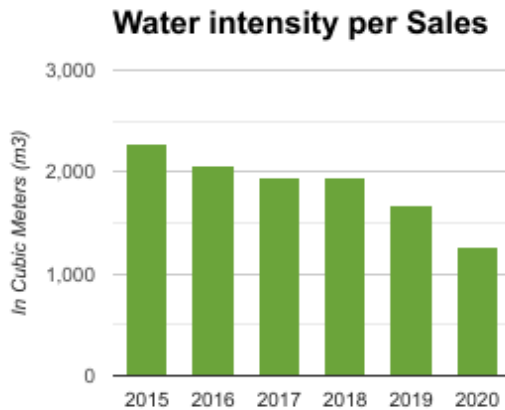
Yes

Sustainable Packaging

Yes

Publicly Disclosed Sustainable Supply Guidelines
Encompassing ESG Area

Yes



Initiatives and Policies in Place:

- **Social Supply Chain Management**
- **Biodiversity Policy**
- **Water Policy**
- **Waste Reduction**
- **Environmental Quality Management**
- **Environmental Supply Management**
- **Emission Reduction**
- **Energy Efficiency Policy**

Human Rights & Well-Being

Forbes World's Best Large Employers (1-500)

348

Great Places to Work Top 25

16

Institute for Clinical and Economic Review (Fair Drug Pricing)

Member

Initiatives and Policies in Place:

- **Anti-child Labor Policy**
- **Human Rights Policy**
- **Fair Remuneration Policy**
- **Equal Opportunity Policy**

Diversity, Equity, Inclusion and Justice

Forbes Best Employers for Diversity (1-500)

308

Women Employees

50%

Women Executives

23%

Women on the Board

29%

Women in Management

33%

Covers Gender Reassignment Services

Yes

Equileap's Gender Equality Ranking (1-100)

36

Women Promoted of Total Promoted

52%

Number of Women Executives

3

Number of Women on the Board

4

Women in Middle Management

45%

Initiatives and Policies in Place:

- **Required Gender Diversity at the C-level and Management**
- **Has Women Recruiting Strategy**

Corporate Responsibility

Size of the Board

14

Shareholder vote on management remuneration

92.37%

Employee CSR Training

Yes

Initiatives and Policies in Place:

- **Whistle Blower Employee Protection Policy**
- **Ethics Policy**

* Data sources may include:

- Corporate SEC filings
- Company sustainability and other reporting.
- Bloomberg LP ESG Data (via Data License).
- [As You Sow Clean 200](#)
- [As You Sow Racial Justice 1000 Scorecard](#)
- [Banktrack Human Rights Benchmark](#)
- [Barron's 100 Most Sustainable US Companies](#)
- [CDP A-List](#)
- [CDP Responses](#)
- [CEO Action for Diversity & Inclusion Pledge](#)
- Climate Group [EP100 Members](#), [EV100 Members](#)
- [Corporate Knights 100 Most Sustainable Corporations](#)
- [CPA-Zicklin Index](#) for Political Accountability
- [Digital Rights Corporate Accountability Index](#)
- [Diversity Inc's Top 50 Companies for Diversity](#)
- [Dow Jones Sustainability Indices \(DJSI\)](#)
- [EPA's Green Power Partners](#)
- [Equileap's Top 100 Companies for Gender Equality](#)
- Forbes [Best Large Employers](#), [Best Midsize Employers](#), [Best Employers for Diversity](#)
- Fortune [100 Best Employers](#), [Best Workplaces for Women](#), [Best Workplaces for Millennials](#)
- [Glassdoor Best Places to Work](#)
- Great Places to Work [World's Best Workplaces](#), [Best Workplaces for Parents](#)
- [HRC's Corporate Equality Index](#)
- [Institute for Clinical and Economic Review \(ICER\) Policy Leadership Forum Members](#)
- [JUST Capital Rankings](#)
- KnowTheChain [Food, Apparel and IT Benchmarks](#)
- [MSCI ESG Ratings](#)
- PEOPLE [Companies That Care](#)
- [Points of Light Civic 50 Honorees](#)
- [RE100 Member List](#)
- [Roundtable on Sustainable Palm Oil \(RSPO\) Supply Chain Certificate Holders](#)
- [S&P Global Sustainability Yearbook](#)
- [Science-Based Targets initiative \(SBTi\) Companies](#)
- [State Street Global Advisors' Gender Diversity Index](#)
- [Task Force on Climate-related Financial Disclosures \(TCFD\) Supporters](#)
- World Benchmarking Alliance [Corporate Human Rights Benchmark](#), [Social Transformation Benchmark](#), [Gender Benchmark](#), [Digital Inclusion Benchmark](#), [Food and Agriculture Benchmark](#), [Auto and Utilities Benchmark](#)

III. Research Narrative

What else has our research process told us about how NOVARTIS AG-REG conducts business, in terms of its products and services, its environmental impact, and its approach to governance?

Summary

Novartis AG, a Swiss-American global pharmaceutical company, researches, develops and produces patent-protected prescription medicines for the treatment of diseases such as psoriasis, heart failure, and multiple sclerosis. The company has a long history of sustainability reporting, including reporting to CDP, and has aggressive carbon neutrality and net zero goals. Novartis appears to have made significant progress in reducing, replacing and refining its procedures to minimize animal testing, as well as disclosing detail on the testing that does take place. The company also practices significant mitigation to prevent emissions of active pharmaceutical ingredients into wastewater.

Novartis continues to recover from a series of business ethics lawsuits related to healthcare fraud and gender discrimination alleged to have taken place in the early 2000s. Dr. Vas Narasimhan, who was appointed CEO in 2018, says that Novartis is a “different company” now and committed to addressing and moving beyond past mistakes.

Products & Services

Novartis AG is a Swiss-American global pharmaceutical corporation that was formed through the 1996 merger of Ciba-Geigy and Sandoz. Novartis' predecessor companies date back more than 150 years, and were originally involved in the production of chemicals and dyes. By the early 1900s those companies, Ciba and Sandoz, became involved in the production of pharmaceuticals. In 2010, Novartis became a world leader in eye care with the acquisition of a majority interest in Alcon. Following a series of divestments in 2014 and 2015, including its vaccines and diagnostics businesses, over-the-counter medicines, and the animal health business, as well as a spin-off of Alcon in 2019, Novartis is now comprised of two global operation divisions: Innovative Medicines

(patent-protected prescription medicines) and Sandoz (generic pharmaceuticals and biosimilars). In August 2022, Novartis announced that it intends to separate Sandoz “into a new publicly stranded standalone company by way of a 100% spin-off.”¹ Vas Narasimhan M.D., CEO of Novartis, said: “For Novartis, the separation of Sandoz would further support our strategy of building a focused innovative medicines company, with depth in five core therapeutic areas, and strength in technology platforms.” Following the spin-off of Sandoz, the five core therapeutic areas of Novartis will be cardiovascular, immunology, neuroscience, solid tumors, and hematology.²

In 2021, the company’s top three selling drugs were Cosentyx, Entresto, and Gilenya. Cosentyx treats plaque psoriasis, psoriatic arthritis, ankylosing spondylitis, an inflammatory disease, and nr-axSpA (non-radiographic axial spondyloarthritis), a type of inflammatory arthritis of the spine that is undetectable by X-ray.³ Entresto is a fixed-dose combination medication used to treat heart failure, and Gilenya is an immunosuppressive drug used to treat multiple sclerosis.

Novartis manufactures its products at eleven pharmaceutical and four bulk chemical facilities, as well as one biotech production facility. Like most pharmaceutical companies, Novartis does conduct animal testing during the drug development process. Novartis claims that it is committed to transparent reporting of the numbers of animals needed for drug R&D purposes. Novartis reports that in 2021, “all Novartis Institutes for BioMedical Research in-vivo sites received accreditation from the American Association for Accreditation of Laboratory Animal Care International (AAALAC Intl), underscoring our progress in conducting responsible animal research.”⁴ Of all the animals used by Novartis for testing purposes in 2021, 74.94% were rodents, 24.94% were fish, and 0.12% constituted other species. Novartis policy states that the company will not use great apes unless they are required or recommended by regulatory bodies or where necessary to answer a biomedically relevant scientific question (and only when no alternative is available). Novartis has had an Animal Welfare Policy in place since 2005. The policy emphasizes the “3 Rs” approach of reduction in the amount of animal testing, replacement wherever feasible with non-animal based testing methods, and continual refinement of procedures to improve the lives of laboratory animals.

1

<https://www.novartis.com/news/media-releases/novartis-announces-intention-separate-sandoz-business-create-standalone-company-way-100-spin>

2

<https://www.novartis.com/news/media-releases/novartis-unveils-new-focused-strategy-underpinned-eight-potential-multi-billion-dollar-peak-sales-brands-deep-pipeline-meet-management-event> .

³ <https://www.cosentyx.com/>

4

<https://www.reporting.novartis.com/2021/novartis-in-society/our-performance/build-trust-with-society/being-a-responsible-citizen/conducting-animal-research-responsibly.html>

Environment

As of 2021, Novartis had committed to achieving total carbon footprint neutrality (Scope 1, 2, and 3) by 2030 and net zero carbon emissions across its value chain by 2040. Novartis aims to achieve carbon neutrality within its own operations (Scope 1 and 2) by 2025, reporting that it has managed to reduce its Scope 1 and 2 greenhouse gas emissions by 34% from 2016 base levels (excluding offsets). Another goal for 2025 is to “include environmental criteria in all supplier contracts,” citing the publication of *Green Expectations*, a set of company guidelines that current suppliers are required to acknowledge. In terms of waste, Novartis aims to become plastic neutral and ensure that all new products meet sustainable design principles by 2030, and to eliminate PVC in secondary and tertiary packaging, as well as primary packaging when feasible, by 2025. As of 2021, there remained one single Novartis site still using PVC in secondary and tertiary packaging, but it plans to cease this practice in 2022. Another aim for 2025 is to reduce waste disposal by half. The company reports that its waste disposal has already been reduced by 56% versus a 2016 baseline, and that it has eliminated 17 types of single-use plastics at 132 Novartis sites.

In 2020, Novartis signed five virtual power purchase agreements (multi-year bilateral renewable energy contracts), which Novartis claims made it “the first pharmaceutical company set to achieve 100% renewable electricity in its European operations.”⁵ In 2020, Novartis reported that it has managed to reduce overall energy consumption by 20% versus a 2016 baseline.⁶

Aside from energy use in the manufacturing process, another concern regarding the pharmaceutical industry's impact on the environment relates to traces of medicines being released into the water supply. Novartis claims that it regularly monitors the levels of active pharmaceutical ingredients (APIs) in water discharge and in aquatic environments. The level of active pharmaceuticals in the company's water discharge is below the level approved as safe by medical regulatory agencies, having been reduced to below 0.2%. Several Novartis manufacturing sites have implemented dedicated pre-treatment facilities designed to reduce the emission of APIs through wastewater. Novartis claims that these measures help reduce the concentration of APIs in wastewater by over 90%. The company's target for 2020 was to keep pharmaceutical discharge from its manufacturing sites at a level tenfold below the level considered to have “no effect.” As of 2022, this target appears to have been renewed for 2025 (i.e. not met for 2020).

⁵ <https://www.novartis.com/news/achieving-100-renewable-electricity>

⁶ https://www.novartis.com/sites/novartis_com/files/novartis-environmental-sustainability-occupational-health-safety-data-supplement-2020.pdf

Novartis' predecessor companies owned chemical and agrochemical assets that would be considered to have a negative environmental impact. These operations have been spun-off from the modern day Novartis, following the Ciba-Geigy and Sandoz merger, as Novartis shed non-core assets to focus entirely on healthcare. In November 2000, Novartis and AstraZeneca conducted a spin-off and merger of their crop protection, seeds and agrochemicals businesses to form Syngenta, a separate publicly-traded Swiss company. The Novartis and AstraZeneca agribusinesses had existed since the 1930's through a variety of legacy companies. Under the Environmental Matters Agreements of the merger, Syngenta indemnified AstraZeneca and Novartis for matters arising from Syngenta's sites and agribusinesses, with exceptions made for certain sites and circumstances.

Today Novartis says that it has a strict policy of not sending any hazardous waste to landfills, regardless of local regulations that may still allow this practice. The recycling rate for hazardous waste is 58.8% (down 10.8% from 2015), while 37.2% is incinerated (up 7% from 2015) and 4% is treated (up 2% from 2015)⁷. Novartis states that it puts a high priority on reducing the overall amount of hazardous waste generated and on increasing the recycling rates on hazardous waste. The company also audits waste contractors on an annual basis to ensure adherence to its disposal standards.

Management Integrity and Ethics

Regarding transparency, Novartis has been publishing corporate social responsibility reports since 2011. In 2013, the company conducted a CSR materiality analysis by interviewing internal and external stakeholders, including patient organizations, NGOs, hospitals and customers. Following the materiality analysis, the company has been focusing CSR efforts on access to healthcare, governance and ethical business practices, and R&D. Novartis has been reporting emissions to the Carbon Disclosure Project (CDP) since 2003, and has been reporting its water usage to the CDP since 2010.

Novartis has 110,000 employees of over 140 nationalities worldwide. Women make up 51% of Novartis company managers and 31% of the Board of Directors (up from 41% and 27%, respectively in 2013).⁸ In 2021, 51% of employees were women. Approximately 42% of non-management employees are represented by a trade union or covered by a collective bargaining agreement. The company's current leader, Dr. Vas Narasimhan, has served as CEO since 2018, and has been working at Novartis since 2005, having served as Global Head of Development

⁷ https://www.novartis.com/sites/novartis_com/files/novartis-hse-data-2019-restated.pdf

⁸ https://www.novartis.com/sites/novartis_com/files/novartis-integrated-report-2021.pdf

and Chief Medical Officer within the company prior to assuming the role of CEO. Under the leadership of Narasihman's predecessor, Joseph Jimenez, (CEO from 2010-2018), Novartis developed one of the largest pipelines of self-developed drugs in the pharmaceutical industry. In the five years since In 2021, Novartis is said to have reached some 766 million patients with its medicines.⁹ Dr. Narasimhan received his medical degree from Harvard Medical School, in addition to earning a master's degree in public policy from Harvard's John F. Kennedy School of Government. Both during and after his medical studies, Dr. Narasimhan focused extensively on public health issues such as HIV/AIDS, malaria, and tuberculosis in India, Africa, and South America. As of 2022, Dr. Narasimhan committed to expanding access to innovative medicines in low-and middle-income countries by at least 200% by 2025¹⁰. In terms of Narasimhan's vision for the company, he has championed culture as a driver of innovation, reputation, and performance at Novartis, and is investing in the development of artificial intelligence-based solutions¹¹ to define a new standard of quality and efficiency in biomedical research and progress in terms of public health outcomes.

Novartis has been working to improve access to healthcare in low and middle-income countries, while taking pressure off of healthcare systems in these countries. In 2001 the company launched the Novartis Malaria Initiative, and has since delivered 750 million treatments of its antimalarial drug, Coartem, without profit. The program has delivered 300 million pediatric antimalarial medicines since 2009. According to the company, the Novartis Malaria Initiative is one of the largest access-to-medicine programs in the world. Novartis is also working to improve corporate ethics and has implemented a training and certification program for its company Code of Conduct. In 2015, a total of 110,638 employees or 90% of the workforce was trained and certified. There were 755 substantiated cases of misconduct in 2015, down 33% from the prior year; approximately half of the allegations related to fraud. Novartis is adjusting the pay structure for its sales staff as a means to improve business ethics. To this end, the company has started to increase the weight of fixed pay in overall compensation, while reducing the variable pay component.

In striving to create new best practices in business ethics and integrity for its corporate culture, the company has addressed corporate blemishes that go back many years. Going back to 2005, Novartis and other pharmaceutical companies were tied up in legal battles relating to off-label marketing of drugs. Novartis was part of an investigation relating to off-label marketing of the drugs Trileptal, Diovan, Exforge, Tektuma, Sandostatin, and Zelnorm. Federal prosecutors accused Novartis of paying illegal kickbacks to healthcare professionals. While physicians can legally prescribe approved drugs for any purpose, pharmaceutical companies are prohibited from promoting them for conditions other than those authorized by the FDA. In 2010, Novartis agreed

⁹ <https://www.novartis.com/about/executive-committee/vasant-narasimhan>

¹⁰ <https://www.novartis.com/about/executive-committee/vasant-narasimhan>

¹¹ <https://www.youtube.com/watch?v=hsgj9CJ61wg>

to pay \$422.5 million in criminal and civil claims and to enter a Corporate Integrity Agreement with the US Office of the Inspector General. Novartis was certainly not alone among large pharmaceutical companies paying significant fines for healthcare fraud. A few examples of large penalties from around the 2010 time:frame include, Pfizer which paid fines of \$2.3 billion; Eli Lilly with \$1.4 billion; Allergan, \$600 million; and AstraZeneca, \$520 million. Also in 2010, Novartis was ordered to pay over \$250 million in punitive damages relating to a class action lawsuit that alleged widespread gender discrimination at the company's US division.

A total of 5,600 employees were involved in the class action lawsuit, which claimed discrimination over pay, promotion, and pregnancy. At the time, it was the largest award in an employment discrimination case in US history. Following the verdict, Novartis said that it had agreed to revise its sexual harassment policies, strengthen its employee complaint process, and hire third-party consultants to identify gender pay disparities at the company. In 2015, a similar lawsuit was filed by two former Alcon employees, seeking \$110 million in damages, claiming that Alcon "fosters a boys' club atmosphere and mentality" and that women make up fewer than 15% of senior management positions at Alcon. A Novartis spokesperson claimed that one of the employees involved in the Alcon lawsuit had been fired for serious violations of the company's Code of Conduct. The litigation is pending and is seeking class action status.

In November 2015, Novartis settled a lawsuit with the Southern District of New York relating to interactions with specialty pharmacies from 2004 to 2013; the settlement involved a total payment of \$390 million. Similar to the other business ethics-related suits, Novartis allegedly gave kickbacks to specialty pharmacies to incentivize them to use the company's drugs. Also in 2015, Novartis' Japanese subsidiary received a business suspension order and a business improvement order from Japanese health authorities regarding the company's failure to promptly report patients experiencing adverse effects while taking Novartis' drugs.

In 2020, Novartis paid \$729 million to settle U.S. kickback charges; \$678 million was paid to "resolve claims it organized tens of thousands of sham educational events where it lavished doctors with exorbitant speaker fees, expensive dinners and alcohol to induce them to prescribe its cardiovascular and diabetes drugs more often"¹² and \$51.25 million was paid to "resolve charges it funneled money through three charitable foundations to cover co-payments of Medicare patients so they would purchase its drugs."¹³ It was reported that the speaker programs and other

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<https://www.reuters.com/article/us-novartis-fraud-settlement/novartis-pays-729-million-to-settle-u-s-kickback-charges-idUSKBN2427J6>

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<https://www.reuters.com/article/us-novartis-fraud-settlement/novartis-pays-729-million-to-settle-u-s-kickback-charges-idUSKBN2427J6>

promotional events occurred from 2002 to 2011, and that the co-payments were issued from 2010 to 2014. In a statement following the settlement, CEO Vas Narasimhan urged, “We are a different company today, with new leadership, a stronger culture, and a more comprehensive commitment to ethics.”¹⁴

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<https://www.reuters.com/article/us-novartis-fraud-settlement/novartis-pays-729-million-to-settle-u-s-kickback-charges-idUSKBN2427J6>

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