

2021 Frost & Sullivan Institute Enlightened Growth Leadership Award

Excellence in Best Practices







FROST & SULLIVAN INSTITUTE

Congratulations!

Frost & Sullivan Institute, in partnership with Frost & Sullivan, is proud to present Cummins Inc. with the Enlightened Growth Leadership Award.

Frost & Sullivan's global team of growth pipeline experts continuously identifies and evaluates growth opportunities across multiple industries, technologies, and regions of the world. As the world emerges into the new norm disrupted and accelerated by the COVID-19 pandemic, it is becoming increasingly important for companies to leverage opportunities to shed old ways of thinking, build value chains that leave no stakeholders behind, and create foundations for stable growth to thrive in these new environments. We identify companies that demonstrate the commitment to embrace emerging technologies and protocols and generate opportunities for all while sustaining continued growth and highlighting best practices for sustainable development. This approach involves deep strategic deliberation around best practices and the development of core analytics across the entire value chain of specific products and services. Against the backdrop of these analytics, Frost & Sullivan Institute, in partnership with Frost & Sullivan, recognizes Cummins Inc. for its valuable achievement.

Frost & Sullivan strictly reserves this recognition to companies at the innovation to zero and growth forefront in their respective industries. These companies demonstrate proactivity in utilizing business practices to 'innovate to zero' and address global priorities while securing sustainable growth over a span of their enduring association with Frost & Sullivan. These companies also uniquely leverage technology and boost their industry partner ecosystem to serve ever-evolving customer needs in a way that facilitates environmental initiatives and supports the planet's well-being. Moreover, by combining business sense with a moral imperative, these companies demonstrate aspirational ideals beyond the simple goal of generating profits. This recognition is also a token of our gratitude towards our clients whom we have accompanied on their journeys towards transformational growth. In this context, Cummins Inc.'s recognition holds an even greater significance in reaffirming its longstanding relationship with Frost & Sullivan.

Moreover, this recognition is the result of many individuals (employees, customers, partners, and investors), making critical decisions every single day to support the organization and meaningfully contribute to its own future in a sustainable and socially responsible way. Frost & Sullivan in partnership with Frost & Sullivan Institute enthusiastically acknowledges and celebrates their contributions.

Once again, congratulations on your accomplishments, and we wish you great success in the future.

Sincerely,

David Frigstad

Chairman

Frost & Sullivan and Frost & Sullivan Institute

Best Practices Criteria for World-Class Performance

Frost & Sullivan Institute leverages Frost & Sullivan's rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria for each nominated company. Cummins Inc excels in multiple criteria.

AWARD CRITERIA

Enlightened Growth Leadership Attributes

'Innovating to Zero' on Global Priorities

Growth Excellence

Customer Value Chain

Integrated Coopetition - Industry Partner Ecosystem

Technology Leverage/Innovation

Introduction

The power industry is a vital component of modern economic development across the world. The industry is fast-paced and has advanced significantly over the last few decades. With growing international awareness of global warming and climate change, governments and businesses are undergoing a clean energy revolution, providing sustainable energy solutions and investing in renewable energy. According to statistics by the International Renewable Energy Agency, by 2030, the share of renewables total final energy consumption for global manufacturing is predicted to grow to about 27 percent, assuming the availability of low-cost, sustainable biomass sources as well as lower capital costs for emerging technologies.¹

'Innovating to Zero' on Global Priorities

¹Renewable Energy in Manufacturing, International Renewable Energy Agency

'Innovating to zero' is a mega vision which brings social innovation of products and technologies to the forefront. The "zero concept" world envisions zero inequalities, zero pollution, and equal access.

With a mission to build a more prosperous world with cleaner air, adequate water supplies, less waste and reduced levels of heat-trapping greenhouse gases, Cummins Inc. strives towards sustainability goals through outstanding initiatives to promote greater social and environmental responsibility. The company promotes renewable energy efforts in solar and wind energy. In 2020, with a peak capacity of 29 megawatts, the company implemented 45 onsite solar photovoltaic projects in 11 countries generating about 5% of the company's global electricity. Additionally, the company's solar installations extend around the world with 16 sites in India; in 2019, the Beijing Foton Cummins Engine Company in

"Frost & Sullivan commends Cummins Inc. for its exceptional effort in promoting greater environmental and social responsibility through its renewable energy ventures and playing an admirable role in 'innovating to zero' inequality by ensuring equal access to opportunity"

- Analyst, Frost & Sullivan

China expanded the largest solar array in the company, adding panels to a second building thus, producing as much power as the original 650,000 square foot array built in 2016. On top of that, the company also entered a virtual power purchase agreement (VPPA) as part of an expansion of the Meadow Lake Wind Farm in northwest Indiana whereby it sent enough renewable energy to the grid to offset all of the electricity from more traditional sources used by their local facilities. The result from

Cummins Inc.'s renewable energy efforts shows that between 2010 and 2019, the company's energy efficiency and renewable energy efforts reduced overall GHG intensity by 42% and the company's GHG emissions decreased by about 56,000 metric tons on an absolute basis in 2019.

Apart from championing successful environmental ventures, the company also upholds social sustainability through Cummins Advocating for Racial Equity (CARE), launched in 2020, CARE plays a leading role in undoing systemic discrimination against the Black community in the U.S through its four key focus areas which are police reform, criminal justice reform, economic empowerment; and social justice reform in healthcare, housing, workforce development and civil rights, including voting rights and education. The initiative is vital to ensure social fairness and justice in the community. Additionally, the company also highly promotes gender equality through 'Cummins Powers Women' an ambitious community initiative that has impacted the lives of more than 100,000 people since its launch in 2018. The initiative has also resulted in eight laws or policies promoting gender equality globally.

Frost & Sullivan commends Cummins Inc. for its outstanding effort to 'innovate to zero' (zero pollution and zero inequality) by being environmentally and socially responsible through its renewable energy ventures, and their admirable role in making strides to ensure equal access regardless of gender or race.

Growth Excellence

Despite challenges in 2020 driven by the severe global impact of the COVID-19 pandemic, Cummins Inc. earned revenues of \$19.8 billion. The company's growth has been built around strategic



FROST & SULLIVAN INSTITUTE

"Frost & Sullivan applauds Cummins Inc. for its innovative effort in diversifying its products to cater to customer needs; aligned with its sustainability goals.."

- Analyst, Frost & Sullivan

partnerships and understanding user preferences. In order to grow at a faster rate as compared to their competitors while supporting their sustainability goals, in 2019, the company continued to invest in a broad range of clean, fuel-efficient and high-performing products and technologies with the acquisition of Hydrogenics

Corp., a developer and manufacturer of hydrogen generation and fuel cell products based on water electrolysis and proton exchange membrane (PEM). In this acquisition, Cummins Inc. holds an 81% stake in the company while Air Liquide, a french industrial gas supplier holds the minority. Additionally, to accelerate the adoption of hydrogen-based technologies, the company also entered a joint venture with NPROXX, a world leader in high pressure hydrogen storage for both stationary and mobile applications to deliver hydrogen storage tank solutions to customers in a variety of on-highway and rail applications. The joint venture also contributes towards fortifying Cummins Inc.'s position against competitors as it emerges as a hydrogen leader with a portfolio of more than 500 electrolyzer installations and 2,000 fuel cell installations worldwide.

Despite of the rapid evolution within the power industry, Cummins Inc. has managed uphold its sustainability vision while maintaining growth excellence as compared to its competitors. With the mission of improving lives by powering a more prosperous world, the company has emerged as a leader in the hydrogen industry through strategic partnerships.

Technology Leverage/Innovation

In response to the COVID-19 pandemic, Cummins Inc. leveraged its filter technology to supply essential materials for N95 respirator masks, which is a crucial component of personal protective equipment for front-line healthcare workers. The company also announced a new partnership with 3M, utilizing equipment used for the production of diesel engine filters to manufacture high-efficiency particulate filters for 3M's powered air purifying respirators (PAPRs). PARPs are used by healthcare professionals to provide protection during healthcare operations where they are more likely to be exposed to aerosolized microorganisms that might cause acute respiratory infections.

The company was selected as a key partner by Alstom, a global leader in providing green and smart transportation to develop and implement hydrogen fuel cell systems for Alstom's iLint, the world's first hydrogen fuel cell train which will commence operations in 2021. Additionally, in 2020, Cummins also provided fuel cell modules to Asko, the largest grocery wholesaler in Norway. The fuel cell modules were incorporated into four Scania trucks. The fuel cell electric truck pilot was a first-of-it-kind market leading solution for Asko to attain resource efficiency, low emissions and sustainability for its extensive distribution network.

Frost & Sullivan applauds Cummins Inc. for providing revolutionary innovative solutions to its customers that are well-aligned with their sustainability goals.

Conclusion

Climate change and environmental degradation are among the greatest challenges faced by governments and companies. Cummins Inc. is a leader in empowering an emission-free future through its renewable energy efforts. Additionally, its outstanding reputation has also allowed the company to secure strategic partnerships with leading companies to deliver innovative solutions and technologies set to transform the market.

For its strong overall performance, Cummins Inc. earns the 2021 Frost & Sullivan Institute Enlightened Growth Leadership Award.



What You Need to Know about the Enlightened Growth Leadership Recognition

Frost & Sullivan Institute's Enlightened Growth Leadership Award recognizes the company that addresses the global priorities as identified by the Institute and demonstrates sustainable growth in the industry.

Best Practices Award Analysis

For the Enlightened Growth Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

'Innovating to Zero' on Global Priorities: The company demonstrates proactivity in 'Innovating to Zero' in terms of one or more of the following global priorities that form the seven pillars of the Frost & Sullivan Institute:

- i) **Environment:** Environmental initiatives can include climate change, vulnerable groups, behavioral change, international governance, waste management, or others.
- ii) **Education:** Education can encompass equal access, gender parity, EdTech, quality education, education resources, vocational training, or others.
- iii) **Infrastructure:** Infrastructure can incorporate infrastructure as a basic right, technology and infrastructure, environment and infrastructure, urban infrastructure, and financing models, among others.
- iv) **Healthcare:** Healthcare can comprise healthcare crisis, mental health, finance, healthcare systems, advanced healthcare, and technology and healthcare, among others.
- v) **Security:** Human security can refer to transnational governance, human security, food security, or others.
- vi) **Human Rights:** Human rights can involve governance, special group rights, justice, or other such elements
- vii) **Economics:** Economics can pertain to inequality, new economic regime, FinTech, behavioral change, or others.

Growth Excellence: The company demonstrates healthy growth over a span of 10 years. It focuses on short-term and long-term growth strategies to maintain a superior industry position. The executive team's vision aligns with the company's growth strategy, effectively translating this vision into growth. The socially responsible organization enforces strategies to increase its share of the customer wallet, successfully differentiating itself from competitors and positively impacting its market share. It also adopts strategies to build upon achieved growth and sustain continued growth while highlighting best practices for sustainable development.

Customer Value Chain: The company pays heed to the planet's well-being and addresses environmental initiatives such as climate change, carbon footprint reduction and elimination, waste management, or clean energy production. Its key value proposition is refined by building on client feedback and

continuously improving products and services. The organization prioritizes its customers' needs and provides significantly greater value for the price. It offers exceptional customer value by providing the best purchase experience to customers, placing importance on providing a high degree of satisfaction amongst existing and potential clients, or ensuring the best and differentiated service experience.

Integrated Coopetition - Industry Partner Ecosystem: The company makes use of unique business models such as corporate partnerships and public-private collaborations to boost the industry partner ecosystem. By combining business sense with a moral imperative, the company demonstrates aspirational ideals beyond the simple goal of generating profits. The organization's efforts to cooperate with competitors reveal its cognizance of a broader vision and endeavors towards positively impacting the overall industry.

Technology Leverage/Innovation: The company incorporates or uniquely leverages technology, standing out among the competition. The technology addresses key future needs and applications and is disruptive to or supersedes existing technologies. The company's technology or technology leverage can be diversely applicable or has created new markets or applications where none existed before. It has introduced creative features and functionality by jumping through hoops to convert its vision into a reality. The organization has a structured process or best practices to incubate new technologies developed internally or through strategic partnerships. The company's innovations or technology incorporation has the potential to become an industry standard.

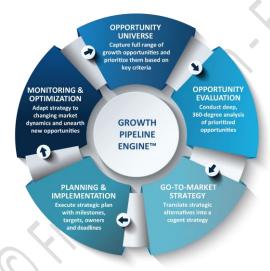
About Frost & Sullivan Institute

Frost & Sullivan Institute (FSI) is a non-profit organization dedicated to utilizing business practices to address global priorities. The genesis of the institute goes back to our vision of either creating, or becoming part of a solution that addresses threats to humanity. Frost & Sullivan Institute has identified strategic imperatives for transformation and believes that by using a Socratic approach, we can truly accelerate innovation to zero. The Institute works in collaboration with leading analyst teams, its internal research team, industry experts, and other partners. It works closely with Frost & Sullivan Inc. to leverage in-house thought leadership in order to identify opportunities for transformation that will arise from innovation, disruptive technologies and overarching mega trends that will alter the world as we know it today. To learn more about FSI, visit https://www.frostandsullivaninstitute.org/.

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

The Growth Pipeline Engine™



Frost & Sullivan's proprietary model to systematically create on-going growth opportunities and strategies for our clients is fuelled by the Innovation Generator™.

Key Impacts:

- Growth Pipeline: Continuous flow of Growth opportunities
- Growth Strategies: Proven Best Practices
- Innovation Culture: Optimized Customer Experience
- ROI & Margin: Implementation Excellence
- Transformational Growth: Industry Leadership

The Innovation Generator™

Our six analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.



Analytical Perspectives:

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- **■** Geographies (GE)

Copyright

This intellectual property (IP), encompassing our research, thought leadership, methodology, analytics, branding, and approach, is fully owned by Frost & Sullivan. No part of this IP may be disclosed to external parties without formal written permission from Frost & Sullivan. Furthermore, no part may be reproduced, stored in a retrieval system, or transmitted in any form or by any means—electronic, mechanical, photocopying, recording or otherwise—without the written permission of Frost & Sullivan.