## Sustainability Report



For the Air We Live in


Bringing the World Healthy, Comfortable Lifestyles

Daikin is a global manufacturer with close to $80 \%$ of net sales originating from outside of Japan and more than $80 \%$ of the Group's employees working overseas. In our businesses of air conditioning and fluorochemicals, we respond to the needs that arise from the diverse cultures and values of the world's countries and regions by providing products and services that make people and space healthier and more comfortable.

Our Business: Providing Healthy, Comfortable Lifestyles through Air Conditioning and Fluorochemical Technologies



Ratio of Sales (Consolidatedfiscal 2021)


Business Sphere: Daikin Is Active in Over 170 Countries


## Aiming for Sustainable Growth by Resolving Social Issues Related to Air and the Environment



Transforming the Changes Caused by Uncertain Times into Opportunities

In fiscal 2021, despite challenging business conditions, including the COVID-19 pandemic, soaring prices of ecorded net sales that surpassed 3 trillion yen and operating income in the 300 billion yen range for the first time. Living in a time of turbulent change presents opportunities for reform, and we will continue to tackl hallenges and implement new measures.

## Achieving Both Business Growth and Mission of an Air Conditioner Manufacturer

Over the years, Daikin has supplied products and services utilizing environmental technologies as the only company in the world that manufactures both air conditioners and refrigerants. Our core business of environment in hot climate regions, is considered a part of the infrastructure that underpins society. Our products and services have been used to prevent heatstroke and improve air quality, thereby contributing to customers' health and economic development by improving work efficiency.
On the other hand, as worldwide demand for air conditioning is expected to triple by 2050, increased demand for electricity poses serious issues. The Group's social mission is to minimize the impact comfortable air environments that are safe and reliable, which has increased in importance during the COVID-19 pandemic. Daikin is committed to being a company always looking for ways to resolve environmental and social issues while achieving business growth.

Steadfast Efforts Toward Carbon Neutrality
he world has made a sharp and accelerated turn oward carbon neutrality. The Daikin Group has seized this opportunity to establish "Challenge to achieve carbon neutrality" as one of the growth strategy themes of Fusion 25, our strategic management plan running through 2025, based on he Environmental Vision 2050, which aims to achieve net zero greenhouse gas emissions by 2050. We have throughout the entire lifecycle of our products by $50 \%$ or more in 2030 compared to BAU* with fiscal 2019 as the base year. In fiscal 2021, we reduced net emissions by $10 \%$ by expanding the sales of energy efficient products mainly in Asia.
the rising cost of energy, in especially recent years, presents the Daikin Group with an opportunity to spread our products and services with low environmental impact worldwide because of our refrigerants with lower global warming potential. As the transition from gasoline-powered vehicles to ectric vehicles continues, we will make new investments in the European market as we aim to promote the switch from combustion heating to heat-pumps that use heat in the air

With efforts to achieve a decarbonized society being rolled out widely around the world, it is our top priority to further speed up our initiatives to reduce reenhouse gas emissions across the entire lifecyc


Utilizing Diversity in Human Resource as a Source of Our Competitiveness

Daikin Group's greatest strengths are "flat and speedy" management aiming to promote solidarity in organizational management along with closeness management and frontine workers and "diversity management" that seeks to attract diverse abits and harness their individuality and strengths and be organization's strength The diverse valrengths as by the Daikin Groun's 80,000 -strong workforce serves st the source of our competitiveness, which is backed by the cohesiveness and trust between management and employees. Our ability to refine management's capabilities utilizing the diversity of our workforce will make Daikin's sustainable growth a reality

## Continuing to Live Up to the Expectations

 f StakeholdersDaikin has supported the 10 principles of the UN Global Compact since 2008 and endorsed the Global Compact since 2008 and endorsed the recommendations of the Task Force on Climate-related
Financial Disclosures (TCFD) since 2019. We are committed to continuously meeting the expectations of our various stakeholders, including customers, shareholders, investors, suppliers, employees, and local communities as a company that gives back to society as it grows.

resident and CEO Daikin Industries, Lto.

|  | FY2020 | FY2021 | FY2025 target |
| :---: | :---: | :---: | :---: |
| Net sales | $2.49$ | 3.17 trillion yen | $3.6$ <br> trillion yen |
| Reduction rate of net greenhouse gas (GHG) emissions* <br> (compared to BAU with 2019 as base year) |  | $10$ <br> \% reduction | $\text { oren } 30$ |

## Creating New Value and Contributing to Sustainable Development for Society

Daikin pursues management aimed at new value creation from short-, medium-, and long-term perspectives to contribute to solutions to social issues and sustainable growth through its businesses in terms of short- and medium-term perspectives, we use our CSR Action Plan to evaluate the Environmental Vision 2050 after identifying and forecasting risks and opportunities. Fusion Strategic Management Plans are used to establish specific targets as well as plan and execute measures for every five-year period

International Frameworks toward Solving Society's Problems

Social Problems Daikin Can Help Solve

- Intensifying climate change

Increase and concentration of demands for
electricity and other energy foms
Intenifiving atmospheric polution

- Pandemics
- Resource depletion
- Food loss

International Frameworks

- Sustainable Development Goals (SDGs) - Paris Agreement to the UN Framework ion on Climate Change
- Kigali Amendment to the Montreal Protoca

Daikin's Business Characteristics
as Seen from Social Issues
The spread of Daikin's air conditionning, our core business, represents one form of climate impact the environment throughout their lifecycle, as electricity used to power air conditiones impact the environment throughout their lifecycle, as electricity
accounts for roughly $10 \%$ of the world's stotal electricity usage.

- Daikin possesses technologies that benefit society through the added value nature of air,
including addressing the growing demand for air purficication during the COVID-19 pandemic.

- Environmental Vision 2050


## Daikin's Aims for Value Creation

Provide new value that makes people and space healthier and more comfortable while at the same time reducing environmental impact

Value Creation for the Earth Value Creation for Cities Reduce environmental impact through
all business activities and contribute to alleviating climate change - Further raise the environme
performance of products

- Make effective use of resources
- Protect forests and help sustain the inherent functions


Contribute to solving energy-related issues arising from urbanization and contribute to the creation of stainable cities

- Effectively use energy throughout
- Build systems for recycling-bas

Build syste
societies

- Create new types of energy


Value Creation for People Pursue new possibilities for air and contribute to healthy, comfortable
lifestyles lifestyles

- Provide safe and reliable air environments - Improve indoor environments to support
people's healthy and comfortable lifestles - Advance productivity to contribute to economic advancement




## Foundation Underpinning Value Creation

Human Resources
Contribute to the growth of employees and local citizens
ing to gain advanced skills
Job creation
Contribution to local ecoravic developmen
Co-creation (partnerships)
Contribute to solving social issues through
industry-government-academia partnerships
17 minewis - Formation of market value (interational rules and standards
- Creation of new solutions that contribute to improving quality
of life

## Identification of Key Themes for Daikin and

## Society

We analyzed risks and opportunities based on the characteristics of our own business operations, the impacts caused In our business activities, and market forecasts.
In identified key sustainability themes, among which was response to climate change, and we are now working to realize a sustainable society by addressing these themes.

## Emphasis Placed on

 Climate ChangeWe reviewed key sustainability themes at the time of formulating the Fusion 25 Strategic Management Plan and identified the following seven as top priorities shown in the figure below. Climate change is a theme of particular emphasis.

The rapid increase in demand for space cooling predicted mainly in emerging countries represents a major opportunity for Dakin because its core business
is air conditioning. The spread of air conditioning is one way to adapt to climate change and it also responds to the need for air purification which increased during the COVID-19 pandemic. However, risks include rising electricity consumption and greenhouse gas emissions from the use of air conditioning. Currently, air conditioning account for around 10\% of the world's electricity future, the impacts are expected to become larger

Given this, Daikin's mission is to address society's needs for air in the future and to help reduce society's carbon footprint. With our long-term vision to achieve net zero greenhouse gas emissions, we are promoting efforts under the key themes of the Fusion 25 Strategic Management Plan.

## Analysis of Business Environment

The International Energy Agency (IEA) predicts that demand for space cooling will increase sharply by 2050 , which will triple worldwide electricity demand for space cooling.
Worldwide air conditioner stock (number of units) and electricity demand


In addition to demand for space cooling, there is growing interest around the world in indoor air quality due to the COVID-19 pandemic.

Results of Survey on Air Quality at Home
 -Yes Itel more aware IMYes I'I mive aware


## Impact Assessment for Daikin and Society

Our CSR Committee identified the highest priority themes for both Daikin and society after evaluating the impacts our business has on society and narrowing the range of important initiatives.

- Response to climate change
- Provide safe and reliable air environments Increase the valued-added nature of air - Quality and customer satisfaction - Human resource development - Diversity management


## Climate Change Response as a Managem ent Plan

Daikin has established a long-term vision for 2050 and medium- to long-term targets for climate change response,
which positions as a critical CSR theme.
Toward this end, we will implement a number of measures during the course of our five-year strategic management plans.

Environmental Vision 2050

Toward Net Zero Greenhouse Gas Emissions

In 2018, Daikin established Environmental Vision 2050, a plan that lays the groundwork for the company to reach net zero greenhouse gas emissions by 2050 .

Environmental Vision 2050


We will reduce the greenhouse gas emissions generated throughout the entire lifecycle of our products.
Furthermore, we are committed to creating we work with stakeholders to reduce greenhouse gas emissions to net zero Using IoT and Al, and open innovation attempts, we will meet the world's needs for air solutions by providing safe and healthy air environments while at the sam time contributing to solving global environmental problems.

Medium- to Long-Term Environmental Strategy

Targets for Achieving Environmental Vision 2050

Daikin has established a greenhouse gas emissions reduction target after analyzing the future of its business operations in order to reduce these emissions
to net zero while bringing the added value nature of to net zero while bringing the added value nature of air to people around the world.

## Greenhouse Gas Reduction Targets <br> With 2019 as the base year, reduce net more in 2025 and by $50 \%$ or more in 2030 compared to enisisions withou

 FY2021 results: $10 \%$ reduction

Through the power of air

## Image: The power of air


=usion 25 Strategic Management Plan

## Executing Measures within <br> Business Plans

The three themes of the growth strategy for achieving our environmental vision have been incorporated into the nine key hemes of the Fusion 25 Strategic Management Plan. We will now mplement this plan aiming to strike a balance between resolving social issues and business growth.

## Fusion 25

ffer new value for the environment and air to realize both contributions to a sustainable society and Group growth

## Through products

Challenge to Achieve Carbon Neutrality
Reduce emissions of energy-induced $\mathrm{CO}_{2}$ and $\mathrm{HFCS} / \mathrm{PFCS}$ in developmen and production processes

- Global acceleration of conversion to inverter units to lead other companies ducts (energy-saving equipment)
conversion of combustion heaters to as the priority regions to accelerate Various measures connecting to refio heat pump space and water heaters to lead the environmentally conscious society and industsions reduction
- Initiatives toward market expansion and $\mathrm{CO}_{2}$ reduction contributions Resea reuse specific measures to obtain those technologies


## Through solutions

Promotion of Solutions Business Connected with Customers - Solutions for servicerinsspections, value-added proposals during equipment provides customers with experiences
Global business expansion by deploying energy-saving and environmenta

## Through the power of air

## Creating Value with Air

Market creation from opportunities presented by growing $I A Q /$ Ventilatio demand. Creation of new products and services to establish a large-scale
$1 \mathrm{AQ} / \mathrm{Ventilation} \mathrm{business}$ $1 \mathrm{AQ} /$ Ventilation business
Accumulating and analyzing air conditioning data and vital data to create - Accumulating and analyzing air conditioning data and vital data
value with $1 A Q / A E$ for people's physical and mental well-being

## Sustainability Targets and Results

|  |  | Themes |  | Initiatives | Medium-Term Targets | Quantitative Index | Fiscal 2021 Achievements | Explanation of Index |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| y0000000000.0000 | E | Environment <br> Introduce state-of.the-art technologies to <br> the makket in order to address envirommental <br> and energy issue |  | Reduce net greenhouse gas emissions throughout the entire lifecycle in an effort to achieve carbon neutrality by 2050 | - Reduce net greenhouse gas emissions throughout the entire life cycle by $\mathbf{3 0} \%$ or more in fiscal 2025 compared to BAU, with 2019 as the base year <br> - Greenhouse gas emissions from manufacturing (development and production): $\mathbf{1 . 2}$ million tons-CO2 in fiscal 2025 | - Net greenhouse gas emissions from our own business operations <br> - Greenhouse gas emissions from manufacturing | - 10\% reduction <br> - 1.16 million tons-CO2 ( $36 \%$ reduction compared to fiscal 2015 ) | - We measured the extent of reduction in net greenhouse gas emissions from our own business operations <br> - We measured how much we reduced greenhouse gas emissions generated from product manufacturing and other processes |
|  | S | Value with Air We will contribute to healthy and comfortable living using the power of air |  | Focus on businesses that help control air pollution and infectious diseases to provide a safe, reliable, healthy and comfortable air environment | - Net sales of IAQNentilation business: <br> 290 billion yen in fiscal 2023 | - Net sales of IAQNentilation business | - 230 billion yen | - We used net sales to measure the extent to which we provide a safe, reliable, healthy and comfortable air environment |
|  |  | Customer Satisfaction <br> Provide peace of mind and reliability through a focus on customer orientation, experience, performance, and advanced technologies |  | Elevate customer value by connecting with customers and providing detailed proposals in response to the needs of each vertical market | - Net sales of the Air Conditioning Solutions business: $\mathbf{5 6 0}$ billion yen in fiscal 2023 <br> - Establish senvice network covering all regions worldwide | - Net sales of Air Conditioning Solutions business <br> - Customer satisfaction with after-sales services | - 500 billion yen <br> - Japan: 1.14 <br> - China: 1.04 <br> - India: 1.19 <br> - France: 1.02 | - We used net sales to measure the extent to which we provide solutions tailored to needs <br> - We measured customer satisfaction (setting the base year as 1.00) |
|  |  | Human Resources <br> Respect individual personalities and values, <br> and maximize the potential of each employee so that they can benefit Daikin and society as a whole |  | Strengthen human resource capabilities by deepening diversity management | - Maintain and increase the development of global leaders <br> - Ratio of excellent skilled engineers and advanced skilled engineers in strategic engineering positions: $\mathbf{1}$ in $\mathbf{4}$ in fiscal 2025 | - Number of persons participating in executive management and leadership development programs <br> - Ratio of excellent skilled engineers and advanced skilled engineers in strategic engineering positions | - Held in regions around the world including North America and Asia. There were 31 participants in the Group's next-generation leadership development program. <br> - 1 in 6.8 employees | - We measured the number of participants in executive management and leadership development programs as an indicator for measuring the development of executive management and leadership globally <br> - We measured the number of persons developed with advanced engineering skills and knowledge and who can lead manufacturing |
|  |  |  |  | - Increase ratio of female managers <br> - Maintain and increase percentage of overseas <br> bases where local nationals are president | - Number of female managers <br> - Percentage of overseas bases where local nationals are president | - 68 employees (5.7\%) (Daikin Industries, Ltd. only) <br> - $45 \%$ (overseas bases) | - We measured the number of female managers and percentage of overseas bases where local nationals are president as indicators for measuring employee diversity |
|  |  |  |  | - Frequency rate of lost work time acidents: $\mathbf{0}$ | - Frequency rate of lost work time acidents | -1.19 | - We measured whether production bases are operating safely |
|  |  | Co-creation We will combine pe information from create social value create social value | le, knowledge, and und the world to |  | Collaborate partrer, and combine efforts with other companies, universities and research institues to achieve manufacturing and also creating experiences of new value for society | - R\&D expenditure <br> 226 billion yen from 2021 to 2023 - Promotion of industry-industry and industry-academia collaboration | - R\&D expenditure <br> - Number of cases of industry-industry and industry-cademia collaboration | - 81.5 billion yen <br> - 7 industry-industry and 122 industry-academia cases (Daikin Industries, Itd. only) | - We measured the investment amount for value creation <br> - We measured the number of cases of industry-industry and industry-academia collaboration |
| Foundational Themes | S | Respect for Human Rights |  |  | Show respect for basic human rights in accordance with all international norms based on the laws and regulations of each country and region | - Thoroughness of respect for human rights and implementation of human rights due diligence | - Self-assessment implementation rate | -99\% | - We measured how thorough we were in respect for human rights through the implementation rate of self-assessments |
|  |  | Supply Chain Management |  | Build a robust and resilient supply chain that minimizes risk | - Increase Class A CSR procurement achievement rate among all suppliers | - Class A CSR procurement achievementrate | - 72\% | - We measured the ratio of suppliers who satisfied Daikin's Class A in-house standards to total procurement value |
|  |  | Stakeholder Engagement |  | Respond appropriately to society's needs and expectations through two-way communication | - Engage in dialogue with stakeholders and reflect this dialogue into management | - Number of air conditioner forums held, number of outside participants | - Held eight times around the world with a total of 127 people, including university professors and specialists from 17 countries taking part | - We measured the number of dialogue sessions with experts around the world related to our core business of air conditioning |
|  |  | Communities |  | Create strong bonds with communities as a good corporate citizen | - Contribution to environmental conservation, education support, and cooperation with the local community | - Expenditure for social contribution activities | - 1.4 billion yen | - We calculated the monetary amount, through donations, goods, and other ways, that we provided to communities |
|  | G | Corporate Governance | Corporate Governance | Accelerate decision-making and operational execution in response to management tasks and the changing management environment, and raise the level of management transparency and soundness to raise corporate value | - Degree of independence from the company, diversity, and transparency of the Board of Directors <br> - Appointment of female officers from inside the company: 1 or more in fiscal 2025 | - Number of directors who are outside the company, women, and foreign nationals <br> - Number of female officers appointed from inside the company | - 4 extemal directors, 1 female director, 1 foreign national director among the 11 directors (Daikin Industries, Itd. only) <br> - 1 (Daikin Industries, ttd. only | - We measured the diversity of the make-up of directors <br> - We measured the appointment of female officers from inside the company |
|  |  |  | Risk Management | Support the Group's sound development | - Strengthen appropriate and smooth risk management capabilities | - Number of meetings of the Corporate Ethics and Risk Management Committee and regional legal and compliance committees - Self-assessment implementation rate | - Held committee meetings 2 times and 3 times, respectively- 99\% | - We measured the number of meetings as a way to ensure thorough implementation of policies globally <br> - We measured the implementation rate of self-assessment as a way to foster compliance awareness among each and every employee |
|  |  |  | Compliance |  | - Strengthen and upgrade global legal and compliance systems |  |  |  |



## Why strmooromp

Carbon Neutrality will Mitigate the Worldwide Impacts of Global Warming Amid the Sustained Growth in Demand for Air Conditioning
Air conditioners have become vital to peoople's lives around the world, and yet they emit large amounts of $\mathrm{CO}_{2}$ through energy consumption during use and from the impacts of
their refrigerants. As the only manufacturer in the world to produce both air conditioners and refrigerants, Daikin recognizes it has a major social responsibility to the natural environment.

Daikin formulated Environmental Vision 2050 in an effort to achieve net zero greenhouse gas (carbon neutrality) emissions by 2050. Under the Fusion 25 Strategic Management Plan, which targets fiscal 2025, Daikin has positioned "Challenge to achieve carbon neutrality" as one of its growth strategies. The target for
this strategy aims to lower net greenhouse gas emissions this strategy aims to lower net greenhouse gas emission compared to BAU, with 2019 as the base year. Using innovative initiatives reflected in management strategy,

Daikin's Approach
Reducing Greenhouse Gas Emissions to Net Zero Across the Entire Value Chain

Daikin's plan calls for helping achieve a carbon neutra society including across its entire value chain, spanning from not only product development and production, but also during product use. Demand for air conditioning is expected to continue growing around the world in the future, which requires us to find ways to reduce electricity consumption during the use of air conditioners. In emerging countries, where air conditioners are stil efficiency standards in place, many air conditioners th consume large amounts of electricity during operation are sold, becoming a factor for energy issues. Daikin is working alongside governments, international
we will develop a roadmap to net zero greenhouse gases and aim to balance business growth with contributions to the environment (see pp. 11-12),
Targets for Achieving Net Zero Greenhouse
Gas Emissions
Gas Emissions

organizations, industry groups, and research institutes, among others, to create systems and frameworks base on the unique situation and issues of each country.

Daikin's Performance
Helping Mitigate Global Warming Under Strategic Management Plans

Under Fusion 25 , we are focusing not only on reduction of $\mathrm{CO}_{2}$ emissions during manufacturing, but also redoubling efforts for the spread of inverter air and reducing the impacts of refrigerants. By the end of 2025 , we intend to crystallize measures to achieve net zero greenhouse gas emissions.

## Reducing Greenhouse Gas Emissions During

## Minimizing $\mathrm{CO}_{2}$ Emissions from Ou

## Business Operations

Daikin has established a certification system fo environmentally advanced factories based on its own from manufacturing in a coordinated effort with its production bases around the world. For example, we have established a system for visualizing electricity consumption using the loT platform of plants. This has resulted in efficient improvements based on the quicker implementation of the cycle involving current situation understanding, data analysis, improvement, and confirmation of effects. As a result, despite the increase in production volume following the growth in demand for air conditioning, in fiscal 2021, we and production by $36 \%$ compared to fiscal 2015

## Using Energy Efficiency Tung Usage Using Energy Efficiency Technologies Conditioning Usage

ir conditioners with inverters consume electricity than ones without inverters. For this reason, Daikin has for years focused on the spread of verter air conditioners.
lowering energy consumption, particularly in emerging countries, where energy problems are becoming more serious as economies grow. Price, however, has posed a challenge to spreading these models in people's homes. Therefore, Daikin decided to partner with a major Chinese air conditioner manufacturer in 2008. Joint product development has enabled lower cost and higher production efficiency production of inverter air conditioners sold in the marketplace
In ASEAN, countries have introduced industry standards (CSPF*1) for evaluating energy efficiency performance following Daikin's grassroots advocacy
efforts. We will continue with these activities aimed at the introduction of a harmonized system covering the entire region.

In India, Daikin encouraged the introduction of evaluation standards and labeling system. In 2010, the share of inverter air conditioners in the marketplace was nearly zero, but in fiscal 2020, this share had risen

In Brazil, the government revised the country's
ergy efficiency standards for air conditioners in 2020. Daikin participated in this process by providing specialized information and technical support with the cooperation of the Japan International Cooperation Agency (JICA) and universities, among others. Daikin is contributing to building a foundation for
consumers to select energy efficient air conditioners.
In Saudi Arabia and the UAE, we have conducted demonstration testing on inverter air conditioners. To
expand our activities in the Middle East and to Africa, we held discussions with government officials on the need for policy for promoting the spread of energy efficient air conditioners.

Looking ahead, we will continue to propose inverter air conditioners with a focus on regions where market penetration is still low
I CSPF: Cooling Sesosonal Peformanace Factor

Countries and Regions Where Daikin has Partnered with Others to Spread Energy Efficient Air Conditioners (Since 2010)
ASEAN
Supoorting the introduction
$\qquad$ Supporting the introduction
of harmonized evaluation
system

Transitioning Away from Combustion Heating
Using Fossil Fuels
Supplying Heat-Pump Heating to

## Europe and the World

Daikin is working to spread heat-pump heating. Looking at the size of the worldwide space heating market by heat source, heat-pumps account for 0.8 trillion yen ${ }^{* 3}$ compared to 3.3 trillion yen for combustion type heating which burns fossil fuels using gas boilers. This means that inexpensive and prevalent worldwide despite its larger $\mathrm{CO}_{2}$ emissions.

However, in Europe, where heating is widely used, decarbonization is accelerating due to the European Green Deal Policies enacted in 2019. A number of subsidy programs and tax refunds have been announced, leading to the rapid growth of the heat-pump market there. Furthermore, according to the International Energy Agency (IEA), ${ }^{* 4}$ the transition to heat-pumps will be key to social system transformation in terms of not only decarbonization but also securing prices of fossil fuels are soaring while supply has been constrained due to instability

Forecast for the Spread of Heat-Pumps in 2050 | Milion unis) |
| :--- |
| 2,000 |

1.500

1,000
500


Souree. Pepaed by Do
Enequy Sector

Daikin launched Daikin Altherma, a heat-pump space and water heater, in Europe in 2006. Since then space and water heater, in Europe in 206 . Since then, wn the climate and needs of every European country For example, Daikin Altherma 3H HT launched in fisca 2020 for cold regions can supply hot water without use of electric heaters even in outdoor temperature as cold as negative 15 degrees Celsius. It is the only product in the industry that can replace combustion heating with heat pump without modifying an existing home. In fiscal 2021, we launched a smaller capacity mode
and of Altherma have grew 4.5 times since fiscal 2014 thanks to our fine-tuned services including installation and maintenance

Daikin will continue with its proposal activities in egions around the world that still mainly use combustion heating. As part of this, Daikin is stepping up its efforts in North America where there is growing momentum or a shift in environmental policy



## Mitigating the Impacts of Refrigerants <br> Switching to Lower GWP Refrigerants and Building a Refrigerant Eco-Cycle

The $\mathrm{CO}_{2}$ emissions from air conationers are affected by not only electricity consumption but also the fluorocarbons used as refrigerants. Daikin has bee working tirelessly to mitigate the impacts of thes efrigerants

One area of these efforts is switching to efrigerants with lower global warming potential. The selection of next-generation refrigerants requires safety, and cost-effectiveness as well as finding the right refrigerant for each application based on mode

Working with Stakeholders to Promote the Spread of Environmental Technologies
Spreading environmental technologies such as inverters, heat-pumps and effigerants with a lower global warming potential requires market creation by art mect understanding in society. The establishment of rules for properly much a singe cong these new technologies is vial. However, there is only the creation of systems and programs around the world through collaboration and partnerships with governments, international organizations, industry groups, research institutes, and NGOs/NPOS. We will continue working with industry, government, and academia to hold discussions on market creation and rulemaking for a carbon neutral era.
of air conditioner, water heater, or refrigeration unit. Daikin has identified that $R$-32, which has approximately ne-third the global warming potential of conventiona efrigerants, is the right choice for both residential and valuations and reviews taking into account internationa liscussions. For this reason, we have been promoting he spread of R-32 around the world.

Transitioning to new refrigerants from conventiona nes requires the understanding from the market an technologies. This is why Daikin has performed provided technical guidance for the proper handing of $R-32$ in emerging countries such as India, Thailand and Malaysia. We have also helped improve the market environment around the world by raising awarenes and fostering technicians in the field. Moreover, in 2011 we began offering free access to multiple patents elated to the manufacture and sales of air conditioners using R-32, and in July 2021, we added an additiona 23 patents to this list. The ability for manufacturers round the world to manufacture $R$ - 32 air conditioners As of June 2021, when including other
nufacturers, more than 160 million R-32 air onditioners have been sold and the contribution to $\mathrm{CO}_{2}$ emissions reductions is estimated to be 260 million tons- $\mathrm{CO}_{2}$. We will continue working to spread R-32 while also developing new refrigerants with ower global warming potential. In July 2021, we made an equity investment in OCSiAl of Luxembourg oo speed up the development of energy efficient efrigerants used in electric vehicles.

Anriate recovery and the development of an prigerants. At the time of air conditioner and usea pump disposal, most refrigerants are destroyed to prevent their release into the air. Establishment of a circular economy requires the further utilization of recovered and reclaimed refrigerants. In fiscal 2019, Daikin began selling air conditioners in Europe that use reclaimed refrigerants, with sales exceeding 40,000 units as of March 2022. We are now actively working to establish and utilize a refrigerant swell as refrigerant recovery providers and onstruction companies, in order to help build a recovery and reclamation cycle for refrigerants.

Daikin is attempting to develop this system worldwide. For example, in Japan, we established an implementation structure involving both the air conditioning divisions and the chemicals divisions which manage refrigerants. Going forward, we will work alongside governments and other companies to frigerants that have undergone destruction effort to boost the recovery rate of refrigerants which emains at low levels.

Cumulative Total of R-32 Air Conditioners Sold by Daikin (As of December 2021)
over 35 million air conditioners sold in more than 120 countries worldwide


Next Challenge

## Growing Company Leading

## Environmental Initiatives

focused on the reduction of $\mathrm{CO}_{2}$ emissions worldwide, Daikin is tackling the challenges of new usiness and new technology creation from a ong-term view while also increasing the contributions $m$ its existing businesses.
One example is our involvement in Singapore's smart city project of 2020. The project is looking to build a district-level centraized cooling system that is optimized
to control every neighborhood in the city state. Daikin is also promoting the energy creation business with micro-hydroelectricity, with the goal of making the many untapped hydroelectric resources around the world a aseload power source. Furthermore, we are working n co-creation with Doshisha University to explore $\mathrm{CO}_{2}$ ambient temperature decomposition, direct recover
Controlling the emissions of $\mathrm{CO}_{2}$ and fluorocarbons
eply correlated with climate change is a mainstay theme of Daikin's core business. Carbon neutrality both poses a risk and represents an opportunity for Daikin. We will contribute to solutions to environmental nd energy issues by connecting innovative technologies to markets while we grow as a company.

## xpectations of Daikin's Ability to

## Yukar Takamura

| Professor |
| :---: |
| The Unive |

Universty of Tokyo Institute for future Inititives
Daikin's businesses and technologies are garnering attention worldwide as potential solutions to the hallenge of carbon neutrality. I expect that Daikin limate change issues. Particularly, I would like to see Daikin play an even larger role in Asia which accounts for a large share of the world's $\mathrm{CO}_{2}$ emissions.

## Creating an Environment Conducive to Napping for Greater Vitality

## Why is it important?

To Encourage Napping that Benefits the Social Economy and Health
Lowered productivity due to lack of sleep has led to economic losses in the trillions of yen per year in five major countries. While sleepiness during the day can occur even with adequate sleep the night before, napping represents a potential way to counteract this. Napping is being studied for its effect on improving concentration and reducing the risk of cardiovascular diseases, but the key is improving the quality of sleep Daikin believes it can contribute to addressing economi and health issues of today by developing many area conducive to effective napping at any time.
Economic Losses in Each Country due to
Lowered Productivity from Insufficient Slee


Daikin's Approach

## Collaborative Industry-Academia

 Research on the Optimal Thermal Environment for NappingComfortable air conditioning improves bodily comfort and enhances quality of sleep. Based on the knowledge developed through the Good Sleep mode of residentia air conditioners, Daikin has focused its attention on effective short-duration sleep that leads to increase productivity. Since January 2020, we have been conducting research on optimal thermal control for daytime napping in collaboration with a lab at the University of Electro-Communications. We believe that it is essential and meaningful to modern society getting a good sleep at night
Quality sleep requires three elements: falling asleep quickly, stable sleep at a moderate depth, and conditions to prevent drowsiness pre-waking. Given that a short nap of 30 minutes or less is recommended to prevent reduced productivity during daytime sleepiness, the study set out to identify the therma environment that optimizes each of the three stages of pre-sleep, being asleep, and waking within the 30-minute period. Brain waves of test subjects conditioning inside the booth was controlled according to the sleep state, then the acquired data was analyzed.

Daikin's Performance

## Demonstration with Interactive System

 Launched for Future Commercializationin January 2022, we published the results of testing conducted over two years. In a Japanese regular office space with 40 to $60 \%$ humidity, sleep latency can be shortened by making the room temperature 27 degrees Celsius. Once asleep, non-REM sleep suitable or naps can be achieved in 10 minutes by lowering the room temperature to 26 degrees Celsius. Moreover, oom temperature 27 degrees Celsius or higher three minutes prior to waking, which will lead to more refreshing wake-up. This thermal control allows sleepiness to be resolved with 30 minutes of sleep and achieves the effect of improved brain processing speed and memory after waking. Looking ahead to the commercialization of these results, Daikin and the University of Electro-Communications have begun a demonstration test in an office environment.
active napping system at point 0 marunouchi,* a membership-based co-working space that Daikin is a part of. In the testing, vital sensors are used to obtain the sleep log of users, while a post-nap survey is also conducted to receive feedback on the napping space In conjunction with demonstration testing, Daikin is also developing an algorithm to be used in future products to enable comfortable and effective napping

 spatial concepts Dakin has created in collaboration with each partren compmany in order to

Next Challenge

## Bringing Nap Spaces to Various Locations

 Boost Human PerformanceNapping is an effective way to reduce sleepiness. as proven indispensable to those in the professions healthcare, long-distance driving, and so on. With growing recognition of napping as a factor linked working with greater energy, there is an increased number of offices that encourage napping. Daikin is erformance through the power of air by expanding ur products and services which will enhance the quality of sleep such as maximizing the effect of napping spaces

In the future, we will continue to pursue the potential of air and space and strive to create new value hrough our technology and collaboration with partners.

## Commercialization of Technology and Knowledge Through <br> Keiki Takadama <br> Conmuter Enentor intormatics, Cluster I Informatics  <br> 

This research seeks to answer the question that everyone wants to know: what kind of nap increase roductivity? Deep sleep can help eliminate tiredness makes one sleepier. On the other hand, light eep doesn't make one sleepy but does not eliminate ddress this question of trade-off. We are able to expand the possibility of applications of the technology nd knowledge past the confines of the university hrough working collaboratively with businesses. Ou oal is to commercialize the idea to bring useful products to the public.

Thermal Control for Effective Napping



Establishing a More Flexible and Resilient Supply Chain

Why is it important?
A Manufacturer's Responsibility is to Supply Its Products Whenever Needed
Daikin believes it is important to deliver products to customers without delay no matter the circumstances. Our core products of air conditioners often require urgency and experience sharp fluctuations in demand caused by weather, as purchases are often made to counter a heat wave. This requires that our customers have access to a stable supply of air conditioners.

Stable production at our plants, flexible production adjustments, and sourcing raw materials and supplies are vital to this process. There is no way of knowing when a contingency may occur that threatens stable supply, such as natural disasters, accidents, pandemics, or economic disruptions caused by trade friction. With rising risk of supply interruptions caused by a combination of factors, we need to establish a resilient supply chain that can sustain production while avoiding these many risks.

Examples of Risk Factors Standing in the Way of Stable Supply


Daikin's Approach
Establishing Systems to Instantly Cope with Demand Fluctuations Worldwide
To lower the risk of supply interruptions, Daikin has looked to market-localized manufacturing where we produce products in areas where they are in demand. Once a heat wave strikes, demand for air conditioning jumps as a lifeline for people without it. To ensure we can immediately address such sharp fluctuations, we have established a variable model variable volume production system at all of our production bases enabling us to constantly adjust the models being produced and production volume on a daily and weekly basis. For procurement as well, we have established a management approach that combines concentrated purchasing by our procurement divisions in Japan with local production for local consumption where production bases carry out procurement within their own respective areas.

Even with this flexible system in place, however, Daikin had to exert a great deal of effort to avoid the impacts from the Great East Japan Earthquake and the historic flooding that occurred in Thailand. For this reason, Daikin is taking unique steps to reinforce its Business Continuity Plan (BCP) aiming for a truly resilient supply chain.

The secret behind this is close collaboration among Group companies, divisions, and suppliers based on the shared mission to keep production going. For example, in the aftermath of the Great East Japan Earthquake, the development divisions updated product specifications so that substitute components could be used. Based on this experience, we have incorporated a system into our BCP that enables us to swiftly respond products during a contingency.

Optimized Supply Chain Management using Digital Technology


Daikin's Performance
Global Collaboration Shines during the COVID-19 Pandemic's Procurement Crisis

In 2021, there was a worldwide shortage of semiconductors and other electronic components due to lockdowns, travel restrictions, and robust Many manufacturers were forced to reduce production or suspend operations. Despite this, Daikin was able to maintain a stable supply of its products around the world.

We were able to adjust supply globally despite the pandemic because of the collaboration within the Group on a regular basis. Persons in Japan responsible for procurement, production, development, and finance held weekly meetings with the heads of the production divisions at overseas production bases. At these meetings, constantly changing information on risk was shared among each region, and after countermeasures were determined, approval was given on the spot to either develop substitutes for components in short supply or determine how to best to address delayed responses with the resources on hand. Action was then taken and the process carried out over again. Global procurement management functioned as a basis for this quick and timely decision making. Daikin ascertains and centrally manages information on supply in the supply chain and inventory at secondary suppliers and others. Therefore, we were able to secure the necessary components and correctly allocate them around the worid, and swiftly determine
development of substitute components.

In this manner, we were able to supply products to customers in a stable manner despite a challenging situation.

Reaffirmed the Group's Solidarity During Contingencies

Chutharat Achima Supervisor, Procurement Department Daikin Industries (Thailand) Ltd

The tight supply-demand conditions of electronic components turned everything upside down. In response, we sharply increased discussions with other production bases and suppliers, and today the Global Procurement Division members in Japan have become like close friends after working so much together. We were able to supply products to customers without delay thanks to cooperation with members from development, manufacturing, production engineering, and planning as well as IT divisions that developed a highly accurate inventory simulation system for this occasion.

Next Challenge
Honing Our Strengths with Digital Technology
Amid rising uncertainty, such as global supply chain disruptions caused by natural disasters or trade frictions and decoupling on a worldwide scale, Daikin has positioned "Establishing a resilient supply chain" as a key theme of the Fusion 25 Strategic Management Plan. To ensure we continue to provide stable supplies to markets in the future, we will achieve optimal supply chain management Groupwide by centralizing supply chain information using digital technology and having regions take the lead in procurement to conduct local production for local consumption.

## Corporate Data

Net Sales/Operating Income (Consolidated)
4,000 Net sales Operating income


## Number of Employees (Workforce)/Subsidiaries



Environment


| Greenhouse Gas Emissions (Development and Production) |  |  | Verified (JJ) |
| :---: | :---: | :---: | :---: |
| ${ }^{\text {(Thousand tons: }}$ O2) | Substances designated by the Kyoto Protocol Energy-induced $\mathrm{CO}_{2} \square \mathrm{HFCs} \quad$ PFCs |  |  |
|  |  |  |  |  |
| 1,820 |  |  |  |
| 1,500 | 410 |  |  |
|  | 1,320 |  |  |
| 1,000 | -300 | 1,060 | 1,16 |
|  | 160 |  |  |
| 500 |  |  | 110 |
|  |  |  |  |
|  | -860 | -720 | -790 |
| 0 |  |  |  |
| 2015 | 2019 | 2020 | 2021 |

## Water Intake/ per Unit of Production

-Japan Overseas -o- Overall water per wita



| Environmentally Conscious Products* as Perc of Sales Volume (Residential Air Conditioners) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2019 | 202 | 2021 |
| Environmentally Conscious Products | 93 | 97 | 98 | 99 |
| Super Green Products | 51 | 60 | 69 | 71 |
| Green Prodic | 42 | 36 | 29 | 28 |
| Othe r products |  |  |  |  |
| Environmentally conscious products: Name for Super Green Products and Green Products. Products that satisfy all of the conditions below are Super Green Products. Products that satisfy least one of the conditions are Green Products. <br> Consume at least $30 \%$ less electricity than conventional products <br> Example: Air conditioners equipped with inverters. <br> Use refrigerants with at least two-thirds less global warming potential than conventional refrigerants. <br> Example: Air conditioners using R-32, a refrigerant with low global warming potential |  |  |  |  |
|  |  |  |  |  |

Human Resources
The Ratio of Excellent or
Advanced Skilled Engineers ${ }^{\star}$ in Manufacturing
\%) -o- Dakiki Industries, lta. only -©- Entire group
35.01 in 3.2 employees

|  | 2 empl |  | 1 in 3.3 employees |
| :---: | :---: | :---: | :---: |
| 30.0 | - | (30.3) | - |
|  | (31.6 | 1 in 3.3 employ | 30.5 |
| $\approx \quad 1$ in 6.8 employees |  |  |  |
| 15.0 |  |  |  |
| 14.8 |  |  |  |
|  |  | 2019 | 2020 | 2021 |

requency Rate of Lost Work Time Accidents*i

- Dakin Group ous



$\begin{array}{lllll}16.0 \\ 14.0 & (14.0 & 14.0 & 14.0 & 13.5\end{array}$

| $\frac{4.0}{12.0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2.0 |




Supply Chain Management
CSR Procurement Implementation Rate*(\%)
(JG)

|  | 2020 | 2021 |
| :---: | :---: | :---: |
| Japan | 65 | 66 |
| Overseas | 65 | 73 |
| Entire Group | 65 | 72 |


| Materials Used (Thousand tons) |  |  | OJG |
| :--- | ---: | ---: | ---: |
|  | 2019 | 2020 | 2021 |
| Iron | 579 | 528 | 595 |
| Copper | 94 | 86 | 84 |
| Aluminium | 85 | 83 | 73 |
| Other metals | 13 | 4 | $\mathbf{5}$ |
| Plastics | 105 | 101 | $\mathbf{1 1 2}$ |
| Chemical (PRTR-designated) | 292 | 259 | 295 |
| Total | 1,167 | 1,061 | $\mathbf{1 , 1 6 4}$ |

Number and Percentage of Overseas Bases Where (OG
Local Nationals Are President or Executives



\section*{Co-creation <br> Research and Development Expenses <br> | (*)blilion) |
| :--- |
| 100 | <br> }

Communities

| Expenditure for Social Contribution <br> Activities (million yen) <br> ang |  |  |
| :--- | :---: | :---: |
| 2019 | 2020 | 2021 |
| 1,477 | 1,292 | $\mathbf{1 , 3 8 8}$ |

## Honors for Daikin

## overall CSR

Daikin Industries, Ltd.
Chosen for inclusion in the $\quad$ MSCI
MSSG Leaders Indexes
Chosen for inclusion in
-
$\square$ Chosen for inclusion in the MSCI Japan Empowering Women Index (WIN)
Chosen for inclusion in the
FTTEE Blossom Japan Sector
Relative Index Relative Index


Honors for Customer Satisfaction

## Daikin Industries, Ltd.

Received the fiscal 2021 Good Design Award for a total of fou products including MCK70Y
humidifier streamer air purfier

Environmental Honors

## Daikin Industries, Ltd.

## Chosen for the CDP "Climate

 Change A List"" highest evaluationas a worldwide leader in as a worldwide leader in climate change countermeasures Trade and Industry Award for machi Multi" multi-split type air conditioners for commercial buildings
and received recognition in a total and received recognition in a total
of four categories at the fiscal 202 Of forr categories at the fiscal 2021
Energy Conservation Grand Prize

## FicDP ${ }_{2021}$

## CLIMATE

Human Resource Honors

## Daikin Industries, Ltd.

 practices, and received the

## Smart Work



## Editorial Policy of the Report

Daikin has identified key sustainability themes, among them response to climate change, after analyzing risks and opportunities based on the business characteristic of its operations, impacts of its business activities and market forecasts. We have also reviewed our indicators and targets on sustainability based on the Fusion 25 strategic Management Plan formulated in 2021.
This report contains Daikin's basic approach to sustainable growth, fiscal 2021 achievements, and future plans following the five Value Provision theme environment, value of air, customer satisfaction, Foundational themes (corporate governance, respect for human rights, supply chain management, for human rights, supply chain management,
stakeholder engagement, and local communities). It was designed to convey this information to stakeholders in an easy-to-understand manner.
Additionally, our corporate website provides more detailed ESG information (see page 25 of Online Content)


## Third-Party Verification

To ensure reliability of the content of this report, the Daikin Group had a third-party verification conducted for data on greenhouse gas emissions, water use, astewater, waste emissions, and chemical website)

## aikin Organizations Covere

This report covers Daikin Industries, Ltd. and its and subsidiaries. Environmental performance Daikin Industries, Itd four production bases of in Japan, and 58 production subsidiaries overseas.

Daikin as used in this report refers to the Daikin Group, and Daikin Industries and the Company refer to Daikin Industries, Ltd.

## Term Covered

保 2021 (April 1, 2021, to March 31, 2022).

## Publication Date

September 2022 (English edition)
The next publication (Japanese) is planned for July 2023. The next English edition is scheduled for publication in September 2023

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## Referenced Standards and Guideline

- GRI Sustainability Reporting Standards of the Globa

Reporting Initiative (GRI).

- Task Force on Climate-related Financial Disclosures ICD
ISO 26000 Guidance on social responsibility Ministry of the Envorting Guidelines of Japan Ministry of the Environment


## Note

reporting on fiscal 2021 CSR activities, data was discrepancies occurred between actual results and information reported for previous years. Also, because figures are rounded off, totals may not equal the sum of individual figures.
Forecasts, Expectations, and Plans
This report includes forecasts, expectations, and plans, in addition to past and present facts, about Daikin Group. Please be aware that these are assumptions and judgments made based on the information available at the time this report was
written and thus incorporate a degree of uncertaints. Consequently therp is a possibility that occurring in the future may turn out differently from the forecasts, expectations, and plans stated in this report

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## You can also view this report on our website.

## URL https://www.daikin.com/csr/

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## UN Global Compact

Eco First

